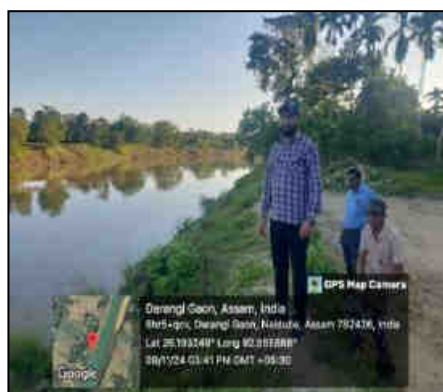
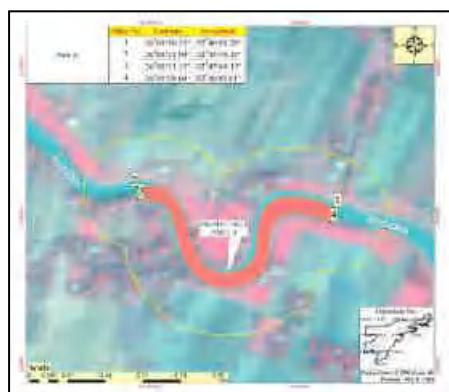
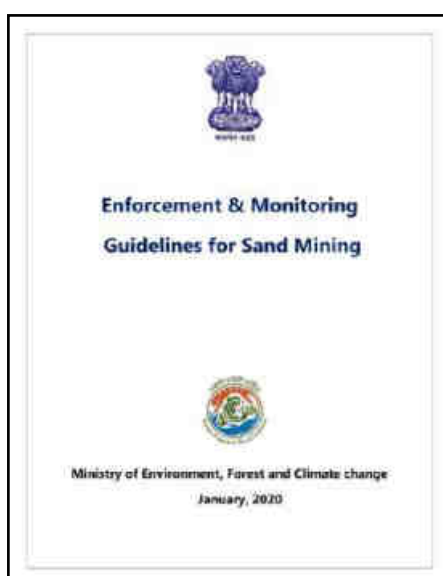


FINAL DISTRICT SURVEY REPORT NAGAON DISTRICT, ASSAM STATE



**For River Bed Mining (Sand) and Minor Minerals
other than River Bed Mining
(Stone and Brick Earth)**

**Submitted by Divisional Forest Officer, Nagaon Division,
Nagaon, Assam
DECEMBER, 2024**

ANNEXURE

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ANNEXURE-1

**Notification No. S.O. 141(E) dated 15th
January, 2016 published by Ministry of
Environment, Forest and Climate
Change**



भारत का राजपत्र The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)

PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं. 125]

नई दिल्ली, शुक्रवार, जनवरी 15, 2016/पौष 25, 1937

No. 125]

NEW DELHI, FRIDAY, JANUARY 15, 2016/ PAUSA 25, 1937

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय**अधिसूचना**

नई दिल्ली, 15 जनवरी, 2016

का. आ. 141(अ).—एक प्ररूप अधिसूचना, पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) की अपेक्षानुसार अधिसूचना, सं. का.आ. 1533 (अ) तारीख 14 सितम्बर, 2006 में कतिपय और संशोधन करने के लिए सं. का.आ. 2588 (अ) तारीख 22 सितम्बर, 2014 द्वारा प्रकाशित की गई थी, उन सभी व्यक्तियों से जिनके उससे प्रभावित होने की संभावना है उक्त अधिसूचना के राजपत्र की प्रतियां जनता को उपलब्ध होने की तारीख से साठ दिन की अवधि के भीतर आक्षेप और सुझाव आमंत्रित किए गए थे;

और उक्त राजपत्र की प्रतियां जनता को 22 सितम्बर, 2015 को उपलब्ध करा दी गई थीं ;

और केन्द्रीय सरकार द्वारा पूर्वोक्त वर्णित प्रारूप अधिसूचना पर प्राप्त सुझावों या आक्षेपों पर सम्यक्तः विचार किया गया है ;

और दीपक कुमार आदि बनाम हरियाणा राज्य और अन्य आदि के मामले में माननीय उच्चतम न्यायालय के 2009 की विशेष अनुमति याचिका (सि) सं. 19628-19629 तारीख 27 फरवरी, 2012 में आई.ए.सं. 12-13, के आदेश के अनुसरण में खनन पट्टे के क्षेत्र पर विचार किए बिना लघु खनिजों के खनन के लिए पूर्व पर्यावरणीय अनापत्ति अब आज्ञापक हो गई है ;

और माननीय उच्चतम न्यायालय के पूर्वोक्त आदेश के अनुसरण में ऐसे मामले जिनके लिए पूर्व पर्यावरणीय अनापत्ति अभिप्राप्त करना अपेक्षित हो गया है, सारवान रूप से बढ़ गए हैं ;

और माननीय राष्ट्रीय हरित अधिकरण ने बालू खनन के मामले में 13 जनवरी, 2015 के अपने आदेश द्वारा समूह में लघु खननों के खनन पट्टे की पर्यावरणीय अनापत्ति के लिए नीति बनाने का निदेश दिया है ;

और राज्य सरकारों ने लघु खनिजों के खनन के लिए पर्यावरणीय अनापत्ति की प्रक्रिया को सुव्यवस्थित बनाने के लिए अभ्यावेदन दिए हैं ;

और पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय ने राज्य सरकारों के साथ परामर्श से भरणीय बालू खनन के लिए मार्गदर्शक सिद्धांत तैयार किए हैं जिसमें क्लस्टर के लिए पर्यावरणीय निकासी के उपबंधों, जिला

पर्यावरण संघात निर्धारण प्राधिकरण के ब्यौरे दिए गए हैं और सूचना प्रौद्योगिकी और सूचना प्रौद्योगिकी समर्थित सेवाओं का स्रोत से गंतव्य तक खनन की गई सामग्रियों को ट्रेक करने में समर्थ होने में उपयोग करने का वर्णन किया गया है ;

अतः, अब, केन्द्रीय सरकार पर्यावरण संरक्षण नियम, 1986 के नियम 5 के उपनियम (3) के खंड (घ) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 3 की उपधारा (2) के खंड (v) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए उक्त अधिसूचना में निम्नलिखित संशोधन करती है, अर्थात् :-

उक्त अधिसूचना में,-

(क) पैरा 2 में, "उक्त अनुसूची में" शब्दों के पश्चात् निम्नलिखित शब्द अंतःस्थापित किए जाएंगे, अर्थात् :-

"और जिला स्तर पर उक्त अनुसूची में लघु खनिजों के खनन के लिए 'ख2' प्रवर्ग के अधीन आने वाले मामलों के लिए जिला पर्यावरण संघात निर्धारण प्राधिकरण (डीईआईए)";

(ख) पैरा 3 के पश्चात् निम्नलिखित पैरा अंतःस्थापित किया जाएगा, अर्थात् :-

"3क. जिला स्तरीय पर्यावरण संघात निर्धारण प्राधिकरण :-

(1) केन्द्रीय सरकार द्वारा पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 3 की उपधारा (3) के अधीन जिला स्तरीय पर्यावरण संघात निर्धारण प्राधिकरण (जिसे इसमें इसके पश्चात् डीईआईए कहा गया है) का गठन किया जाएगा जो चार सदस्यों के मिलकर बनेगा जिसके अंतर्गत अध्यक्ष और सदस्य सचिव है।

(2) जिला मजिस्ट्रेट या जिला कलक्टर डीईआईए का अध्यक्ष होगा।

(3) राज्य के संबंधित जिला मुख्यालय का उप प्रभागीय मजिस्ट्रेट या उप प्रभागीय अधिकारी डीईआईए का सदस्य सचिव होगा।

(4) डीईआईए के अन्य दो सदस्य सबसे ज्येष्ठ प्रभागीय वन अधिकारी और एक विशेषज्ञ होंगे। विशेषज्ञ को, यथास्थिति, प्रभाग के प्रभागीय आयुक्त या मुख्य वन परिरक्षक द्वारा नामनिर्दिष्ट किया जाएगा। पात्रता मानदंड को पूरा करने वाले विशेषज्ञ की पदावधि और अर्हताएं इस अधिसूचना के परिशिष्ट 7 में दी गई हैं।

(5) डीईआईए के ऐसे सदस्य जो संबंधित राज्य सरकार या संघ राज्य क्षेत्र प्रशासन के सेवारत अधिकारी हैं सिवाय विशेषज्ञ सदस्य के पदेन सदस्य होंगे।

(6) जिला स्तरीय विशेषज्ञ निर्धारण समिति जिसे इसमें इसके पश्चात् डीईएसी कहा गया है ग्यारह सदस्यों से मिलकर बनेगी जिसके अंतर्गत एक अध्यक्ष और एक सदस्य सचिव है।

(7) संबंधित राज्य सरकार के जिले या संघ राज्यक्षेत्र प्रशासन में सबसे ज्येष्ठ कार्यपालक इंजीनियर, सिंचाई विभाग डीईएसी का अध्यक्ष होगा।

(8) खनन और भूविज्ञान विभाग में सहायक निदेशक या उप निदेशक या जिले का भूविज्ञानी डीईएसी का उस क्रम में सदस्य सचिव होगा।

(9) राज्य प्रदूषण नियंत्रण बोर्ड या समिति का प्रतिनिधि, जिले में सबसे ज्येष्ठ उप प्रभागीय अधिकारी (वन) सुदूर संवेदन विभाग या भूविज्ञान विभाग या राज्य भूजल विभाग का प्रतिनिधि, एक व्यवसायिक स्वास्थ्य विशेषज्ञ या चिकित्सा अधिकारी को जिला मजिस्ट्रेट या जिला कलक्टर द्वारा नामनिर्दिष्ट किया जाएगा, जिला परिषद् से इंजीनियर और, यथास्थिति, प्रभागीय आयुक्त या मुख्य वन परिरक्षक द्वारा नामनिर्दिष्ट किए जाने वाले तीन विशेषज्ञ सदस्य डीईएसी के अन्य सदस्य होंगे। पात्रता मानदंड को पूरा करने वाले विशेषज्ञ की पदावधि और अर्हताएं इस अधिसूचना के परिशिष्ट 7 में दी गई हैं।

(10) डीईएसी के ऐसे सदस्य जो संबंधित राज्य सरकार या संघ राज्यक्षेत्र प्रशासन के सेवारत अधिकारी हैं सिवाय विशेषज्ञ सदस्य के पदेन सदस्य होंगे।

(11) जिला मजिस्ट्रेट या जिला कलक्टर किसी अभिकरण को डीईआईए के सचिवालय के रूप में कार्य करने के लिए अधिसूचित करेंगे और डीईएसी उनको कानूनी कृत्यों के लिए सभी वित्तीय और लोजिस्टिक सहायता प्रदान करेगी।

(12) डीईआईए और डीईएसी समय-समय पर यथासंशोधित इस अधिसूचना में विनिर्दिष्ट प्रक्रिया का अनुसरण करेंगे और शक्तियों का प्रयोग करेंगे।

(13) डीईएसी सामूहिक उत्तरदायित्व के सिद्धांत पर कार्य करेगी और अध्यक्ष प्रत्येक दशा में एक मत पर पहुंचने का प्रयास करेगा और यदि सहमति नहीं होती है तो बहुमत का मत अभिभावी होगा।";

(ग) पैरा 4 में उप पैरा (iii) के पश्चात् निम्नलिखित उप पैरा अंतःस्थापित किया जाएगा, अर्थात् :-

"(iv) 'ख2' प्रवर्ग की पांच हेक्टेयर से कम या उसके बराबर लघु खनिज के खनन से संबंधित परियोजनाओं के लिए डीईआईए से पूर्व पर्यावरणीय अनापत्ति अपेक्षित होगी। डीईआईए अपने विनिश्चय को इस अधिसूचना के लिए यथागठित डीईएसी की सिफारिशों पर आधारित करेगी।";

(घ) पैरा 5 के स्थान पर निम्नलिखित पैरा रखा जाएगा, अर्थात् :-

"5. स्क्रीनिंग, स्कोपिंग और निर्धारण समितियां :-

केन्द्रीय सरकार में वहीं विशेषज्ञ निर्धारण समितियां (ईएसी) राज्य या संघ राज्य स्तर पर एसईएसी और जिला स्तर पर डीईएसी प्रवर्ग 'क', 'ख1', 'ख2', प्रवर्ग की परियोजनाओं या कार्यकलापों की स्क्रीनिंग, स्कोपिंग और निर्धारण तथा क्रमशः पांच हेक्टेयर से कम या उसके बराबर लघु खनिजों के खनन पट्टे की 'ख2' प्रवर्ग की परियोजनाओं की स्क्रीनिंग, स्कोपिंग और निर्धारण करेगी। ईएसी, एसईएसी और डीईएसी प्रत्येक मास कम से कम एक बार बैठक करेंगी।

(क) ईएसी की संरचना परिशिष्ट 6 में दिए अनुसार होगी। राज्य या संघ राज्य स्तर पर एसईएसी का गठन केन्द्रीय सरकार द्वारा संबंधित राज्य सरकार या संघ राज्यक्षेत्र प्रशासन के परामर्श से उसी प्रकार किया जाएगा। जिला स्तर पर डीईएसी का गठन केन्द्रीय सरकार द्वारा पैरा 3क में दी गई संरचना के अनुसार किया जाएगा।

(ख) केन्द्रीय सरकार संबंधित राज्य सरकारों या संघ राज्यक्षेत्र प्रशासनों की पूर्व सहमति से प्रशासनिक सुविधा और लागत के कारणों से एक से अधिक राज्य या संघ राज्यक्षेत्र के लिए एक एसईएसी का गठन कर सकेगी।

(ग) ईएसी और एसईएसी का प्रत्येक तीन वर्ष के पश्चात् पुनर्गठन किया जाएगा।

(घ) संबंधित ईएसी, एसईएसी और डीईएसी के प्राधिकृत सदस्य उस परियोजना या कार्यकलाप से संबंधित स्थल का जिसके लिए स्क्रीनिंग या स्कोपिंग या निर्धारण के प्रयोजनों के लिए पर्यावरणीय निकासी की ईप्सा की गई है। परियोजना प्रस्तावक जो निरीक्षण के लिए आवश्यक सुविधाएं उपलब्ध कराएगा, को कम से कम सात दिन की पूर्व सूचना देकर निरीक्षण कर सकेंगे।

(ङ) ईएसी, एसईएसी और डीईएसी सामूहिक उत्तरदायित्व के सिद्धांत पर कार्य करेंगे। अध्यक्ष प्रत्येक दशा में एक मत पर पहुंचने का प्रयास करेगा और यदि सहमति नहीं होती है तो बहुमत का मत अभिभावी होगा।";

(ड) पैरा 6 के स्थान पर निम्नलिखित पैरा रखा जाएगा, अर्थात् :-

"(6) पूर्व पर्यावरणीय अनापत्ति (ईसी) के लिए आवेदन :-

कोई संनिर्माण कार्यकलाप करने या भूमि को तैयार करने या परियोजना प्रस्तावक द्वारा स्थल पर खनन करने से पूर्व सभी मामलों में पूर्व पर्यावरणीय अनापत्ति की ईप्सा करने वाला आवेदन परियोजना प्रस्तावक द्वारा परियोजना के लिए प्रस्तावित स्थल (स्थलों) की पहचान या कार्यकलापों जिनसे आवेदन संबंधित है की पहचान करने के पश्चात् इसके साथ उपाबद्ध प्ररूप 1 और अनुपूरक प्ररूप 1क, यदि लागू हों, जैसा परिशिष्ट 2 में दिया गया है, में किया जाएगा और प्रवर्ग 'ख2' परियोजनाओं के अधीन पांच हेक्टेयर तक लघु खनिजों के खनन के लिए प्ररूप1ड में किया जाएगा। परियोजना प्रस्तावक आवेदन के साथ पूर्व साध्यता परियोजना रिपोर्ट की एक प्रति प्ररूप 1, प्ररूप 1क और प्ररूप1ड के साथ प्रस्तुत करेगा; और संनिर्माण परियोजनाओं या कार्यकलापों की दशाओं (अनुसूची की मद 8) अवधारणा योजना की एक प्रति पूर्व साध्यता रिपोर्ट के स्थान पर प्रस्तुत की जाएगी।";

(च) पैरा 7 में,-

(i) उप पैरा (i) में शीर्ष "I प्रक्रम (1)-स्क्रीनिंग : ", विद्यमान उप पैरा को उप पैरा "(क)" के रूप में पुनः अक्षरांकित किया जाएगा और इस प्रकार अक्षरांकित उप पैरा के पश्चात् निम्नलिखित उप पैरा अंतःस्थापित किया जाएगा, अर्थात् :-

"(ख) परिशिष्ट 9 में यथाविनिर्दिष्ट मामलों को पूर्व पर्यावरणीय अनापत्ति से छूट प्रदान की जाएगी।";

(ii) उप पैरा 7(ii) के पश्चात् निम्नलिखित उप पैरा अंतःस्थापित किया जाएगा, अर्थात् :-

"7 (iii) बालू खनन या नदी तट खनन और अन्य लघु खनिजों के खनन के लिए जिला सर्वेक्षण रिपोर्ट तैयार करना :

(क) खनन या नदी तट खनन और अन्य लघु खनिजों के खनन के लिए जिला सर्वेक्षण रिपोर्ट तैयार करने की विहित प्रक्रिया परिशिष्ट 10 में दी गई है।

(ख) लघु खनिजों के खनन जिसके अंतर्गत समूह अवस्थिति भी है, के लिए पर्यावरणीय अनापत्ति की विहित प्रक्रिया परिशिष्ट 11 में दी गई है।";

(छ) पैरा 8 में,-

(i) "ईएसी या एसईएसी" अक्षरों और शब्द के स्थान पर "ईएसी या एसईएसी या डीईएसी" शब्द और अक्षर रखे जाएंगे ;

(ii) "विशेषज्ञ मूल्यांकन समिति या राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति" शब्द जहां-जहां वे आते हैं, के स्थान पर "विशेषज्ञ मूल्यांकन समिति या राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति या जिला स्तरीय विशेषज्ञ मूल्यांकन समिति" शब्द रखे जाएंगे ;

(ज) पैरा 9 में, उप पैरा (i) में, -

"विशेषज्ञ मूल्यांकन समिति या राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति" शब्द जहां-जहां वे आते हैं, के स्थान पर "विशेषज्ञ मूल्यांकन समिति या राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति या जिला स्तरीय विशेषज्ञ मूल्यांकन समिति" शब्द रखे जाएंगे ;

(झ) पैरा 10 में, उप पैरा (iii) के पश्चात् निम्नलिखित उप पैरा अंतःस्थापित किया जाएगा, अर्थात् :-

"(iv) बालू खनन या नदी तट खनन और मानीटरी की विहित प्रक्रिया परिशिष्ट 12 में दी गई है।";

(ञ) पैरा 11 में,-

"विशेषज्ञ मूल्यांकन समिति या राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति" शब्द जहां-जहां वे आते हैं, के स्थान पर "विशेषज्ञ मूल्यांकन समिति या राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति या जिला स्तरीय विशेषज्ञ मूल्यांकन समिति" शब्द रखे जाएंगे ;

(ट) अनुसूची में,-

(i) मद 1(क) और उससे संबंधित प्रविष्टियों के स्थान पर निम्नलिखित मद और प्रविष्टियां रखी जाएगी, अर्थात् :-

(1)	(2)	(3)	(4)	(5)
"1(क)	(i) खनिजों का खनन	गैर कोयला खनन पट्टे के संबंध में ≥ 50 खनन पट्टा क्षेत्र कोयला खनन पट्टे के संबंध में > 150 खनन पट्टा क्षेत्र खनन क्षेत्र तक विचार किए बिना अज़बेस्टो	गैर कोयला खनन पट्टे के संबंध में < 50 खनन पट्टा क्षेत्र कोयला खनन पट्टे के संबंध में ≤ 150 खनन पट्टा क्षेत्र	सिवाय निम्नलिखित के साधारण शर्तें लागू होंगी: (i) प्रवर्ग 'ख2' लघु खनिजों के खनन (25 हेक्टेयर खनन पट्टा क्षेत्र तक) के लिए परियोजना या कार्यकलाप ; (ii) अंतरराज्यीय सीमा के लेखें नदी

		का खनन		तट खनन परियोजनाएं। टिप्पण : (1) खनिज के पूर्वक्षण को छूट दी गई है। ”; (2) लघु खनिजों जिसके अंतर्गत समूह अवस्थिति है, के खनन के लिए पर्यावरणीय अनापत्ति की विहित प्रक्रिया परिशिष्ट 11 में दी गई है। ”; (3) ऐसे खनन पट्टे जिन्होंने पर्यावरण निकासी, पर्यावरण संघात निर्धारण अधिसूचना, 1994 और पर्यावरण संघात निर्धारण अधिसूचना, 2006 के अधीन अभिप्रास की है, के लिए नई पर्यावरणीय अनापत्ति नवीकरण के दौरान प्राप्त करने की अपेक्षा नहीं होगी परंतु यह कि परियोजना के पास विद्यमान्य और विद्यमान पर्यावरणीय अनापत्ति हो।
(ii)	पिच्छल पाइप लाईनें (कोयला लिगनाइट और अन्य अयस्क) जो राष्ट्रीय उद्यानों या अभ्यारण्यों या कोरल रीफ, पारिस्थितिकी संवेदी क्षेत्रों से गुजरती है।	सभी परियोजनाएं।		

(ठ) परिशिष्ट 6 के पश्चात् निम्नलिखित परिशिष्ट अंतःस्थापित किए जाएंगे, अर्थात् :-

"परिशिष्ट 7"

(पैरा 3क देखें)

डीईआईए और डीईएसी में विशेषज्ञों की अर्हताएं और निबंधन

1. **अर्हता** : व्यक्ति के पास कम से कम (i) संबंधित विषय में पांच वर्ष का औपचारिक विश्वविद्यालय प्रशिक्षण होना चाहिए जिसकी परिणीति एम.ए. या एम.एस.सी. डिग्री के रूप में हों या (ii) इंजीनियरी/प्रौद्योगिकी/अभिन्यास विषय की दशा में उस क्षेत्र में विहित व्यवहारिक प्रशिक्षण के साथ चार वर्ष का औपचारिक प्रशिक्षण पाठ्यक्रम जिसकी परिणीति बी.टेक./बी.ई./बी.आर्क. डिग्री के रूप में या (iii) अन्य व्यवसायिक डिग्री (अर्थात् एम.बी.ए. आदि) जिसमें कुल पांच वर्ष का औपचारिक विश्वविद्यालय प्रशिक्षण और विहित व्यवहारिक प्रशिक्षण अंतर्बलित हों या (iv) विहित शिक्षता/आर्टिकल शिप और संबंधित व्यवसायिक संगमों द्वारा संचालित परीक्षा उत्तीर्ण (अर्थात् चार्टर्ड एकाउंटेंसी) या (v) विश्वविद्यालय डिग्री के पश्चात् विश्वविद्यालय या सेवा अकादमी (अर्थात् एम.बी.ए./एम.पी.ए.) आदि के पश्चात् दो वर्ष का औपचारिक प्रशिक्षण। व्यक्ति व्यवसायियों का चयन करते समय उनके द्वारा अपने संबंधित क्षेत्रों में अर्जित अनुभव का ध्यान रखा जाएगा।
2. **विशेषज्ञ** : पूर्वोक्त पात्रता मानदंड को पूरा करने वाला व्यवसायी जिसके पास संबंधित क्षेत्र में कम से कम दस वर्ष का अनुभव हो या कम से कम पांच वर्ष के सुसंगत अनुभव के साथ संबंधित क्षेत्र में उन्नत डिग्री (अर्थात् पी.एच.डी.)।
3. **आयु** : सत्तर वर्ष से कम। तथापि किसी दिए गए क्षेत्र में विशेषज्ञों की अनुपलब्धता या कमी की दशा में अधिकतम आयु को पचहत्तर वर्ष तक अनुज्ञात किया जा सकेगा।
4. **क्षेत्र** : खनन, भूविज्ञान, जल विज्ञान, सुदूर संवेदन पर्यावरण क्वालिटी, पर्यावरण संघात निर्धारण प्रक्रिया, जोखिम निर्धारण, जीव विज्ञान, समुद्र विज्ञान, वाणिकी और वन्य जीवन, पर्यावरण अर्थशास्त्र, जैव विभिन्नता और नदी पारिस्थितिकी।
5. **पदावधि** : विशेषज्ञ सदस्यों की अधिकतम पदावधि दो पदावधियों में तीन वर्ष होगी।
6. विशेषज्ञ सदस्य को उसकी पदावधि की समाप्ति से पूर्व बिना कारण और उचित जांच के नहीं हटाया जाएगा।

परिशिष्ट 8
(पैरा 6 देखें)
प्ररूप 1ड

पांच हेक्टेयर से कम और उसके बराबर प्रवर्ग 'ख2' के अधीन लघु खनिजों के खनन के लिए आवेदन

(I) मूल सूचना

- (i) खनन पट्टा स्थल का नाम :
- (ii) अवस्थिति/स्थल (जीपीएस समन्वयक):
- (iii) खनन पट्टे का आकार (हेक्टेयर):
- (iv) खनन पट्टे की क्षमता (टीपीए):
- (v) खनन पट्टे की कालावधि :
- (vi) परियोजना की अनुमानित लागत:
- (vii) संपर्क सूचना:

पर्यावरण संवेदनशीलता

क्रम सं.	क्षेत्र	किलोमीटर में दूरी / ब्यौरे
1.	निकटतम रेल या संबंधित नदी, उप नदी, नाले आदि के ऊपर पुल से परियोजना की दूरी	

2.	अवसंरचना प्रसुविधा से दूरी रेलवे लाईन राष्ट्रीय राजमार्ग राज्य राजमार्ग प्रमुख जिला सड़क कोई अन्य सड़क वैद्युत पारेषण लाईन खंभा या टावर नहर या चैक बांध या जलाशय या झील या तालाब पेयजल पंप हाउस के लिए अन्तर्ग्रहण सिंचाई नहर पंपों के लिए अन्तर्ग्रहण	
3.	अंतरराष्ट्रीय अभिसमयों, राष्ट्रीय या स्थानीय विधान के अधीन अपनी पारस्थितिकी, भूदृश्य, सांस्कृतिक या अन्य संबंधित मूल्य के लिए संरक्षित क्षेत्र	
4.	ऐसे क्षेत्र जो पारिस्थितिकी कारणों से महत्वपूर्ण या संवेदनशील हैं—आर्द्रभूमि, जलमार्ग या अन्य जल निकाय, तटीय क्षेत्र, जीव मंडल, पर्वत, वन	
5.	प्राणी या वनस्पति प्रजातियों के उनके प्रजनन, घोंसलों, चराई, आराम के लिए सर्दियों में, प्रवास के लिए इस्तेमाल किए जाने वाले संरक्षित, महत्वपूर्ण या संवेदनशील क्षेत्र	
6.	अंतर्देशीय, तटीय, समुद्री या भूगर्भीय जल	
7.	राज्य, राष्ट्रीय सीमाएं	
8.	पब्लिक द्वारा मनोरंजन या अन्य पर्यटन, धार्मिक स्थलों तक पहुंच के लिए उपयोग किए जाने वाले मार्ग या सुविधाएं	
9.	रक्षा संस्थापन	
10.	गहन जनसंख्या या निर्मित क्षेत्र, निकटतम मानव पर्यावास से दूरी	
11.	मानव निर्मित संवेदनशील भू-उपयोग के अधिभोग में क्षेत्र (अस्पताल, स्कूल, पूजास्थल, सामुदायिक सुविधाएं)	
12.	ऐसे क्षेत्र जिनमें महत्वपूर्ण उच्च क्वालिटी या दुर्लभ स्रोत विद्यमान है (भूजल स्रोत, भू-स्रोत, वानिकी, कृषि, मछली उद्योग, पर्यटन, खनिज)	
13.	ऐसे क्षेत्र जिनमें पहले से ही प्रदूषण या पर्यावरण नुकसान हुआ है (ऐसे क्षेत्र जहां विद्यमान विधि पर्यावरणीय मानकों से परे कार्य किया गया है)	
14.	ऐसे क्षेत्र जो प्राकृतिक संकटों के प्रति अति संवेदनशील हैं जिससे परियोजना द्वारा पर्यावरणीय समस्याएं उपस्थित हो सकती हैं (भूकंप, अवतलन, भूस्खलन, अवक्षयन, बाढ़ या अत्यधिक या प्रतिकूल जलवायु परिवर्तन)	
15.	क्या प्रस्तावित खनन स्थल के लिए भूजल रिचार्ज के लिए विदर/ दरार के पास अवस्थित है	
16.	क्या प्रस्ताव में निम्नलिखित विनियमों या अधिनियमों के अधीन अनुमोदन या निकासी अंतर्बलित है, अर्थात्:— (क) वन (परिरक्षण) अधिनियम, 1980;	

	(ख) वन्यजीव (संरक्षण) अधिनियम, 1972; (ग) तटीय विनियमन जोन अधिसूचना, 2011. यदि हां, तो उनके ब्यौरे और परिस्थिति दी जानी है।	
17.	अंतर्वलित वन भूमि (हेक्टेयर)	
18.	क्या परियोजना और/या भूमि जिसमें परियोजना स्थापित किए जाने के लिए प्रस्तावित है, के विरुद्ध कोई मुकद्दमेबाजी लंबित है ? (क) न्यायालय का नाम (ख) वाद संख्या (ग) न्यायालय के आदेश या निदेश, यदि कोई हों और उनकी प्रस्तावित परियोजना के लिए संगतता।	

(नाम और पते के साथ परियोजना
प्रस्तावक के हस्ताक्षर)

परिशिष्ट 9

[पैरा 7 (i)(ख) देखें]

कतिपय मामलों में पर्यावरणीय अनापत्ति की अपेक्षा से छूट

निम्नलिखित मामलों को पूर्व पर्यावरणीय अनापत्ति की अपेक्षा नहीं होगी, अर्थात् :—

1. साधारण मिट्टी या बालू की कुम्हारों द्वारा मिट्टी के घड़े, लैंप, खिलौने आदि बनाने के लिए उनकी प्रथाओं के अनुसार निकासी।
2. मिट्टी की टाइलें बनाने वालों द्वारा जो मिट्टी की टाइलें बनाते हैं, के लिए साधारण मिट्टी या बालू की निकासी।
3. किसानों द्वारा बाढ़ के पश्चात् कृषि भूमि से बालू के जमाव को हटाना।
4. ग्राम पंचायत में अवस्थित स्त्रोतों से बालू और साधारण मिट्टी को वैयक्तिक उपयोग या ग्राम में सामुदायिक कार्य के लिए प्रथा के अनुसार खनन।
5. सामुदायिक कार्य जैसे ग्रामीण तालाबों या टैंकों से गाद हटाना, महात्मा गांधी राष्ट्रीय ग्रामीण रोजगार और गारंटी स्कीमों, अन्य सरकारी प्रायोजित स्कीमों तथा सामुदायिक प्रयासों द्वारा ग्रामीण सड़कों, तालाबों, बांधों का संनिर्माण।
6. बांधों, मेड़ों, बैराजों, नदी और नहरों की उनके अनुरक्षण तथा आपदा प्रबंधन के प्रयोजन के लिए तलमार्जन और गाद निकालना।
7. गुजरात में गुजरात सरकार की तारीख 14 फरवरी, 1990 की अधिसूचना सं.जीयू/90(16)/एमसीआर-2189 (68)/5-सीएचएच द्वारा बंजारा और ओड द्वारा बालू के पारंपरिक उपजीविका कार्य।
8. सिंचाई या पेयजल के लिए कुंओं की खुदाई।
9. ऐसे भवनों की नींव के लिए खुदाई जिनके लिए पूर्व पर्यावरणीय अनापत्ति अपेक्षित नहीं है।
10. जिला कलक्टर या जिला मजिस्ट्रेट के आदेश पर किसी नहर, नाला, ड्रेन, जल निकाय आदि में होने वाली दरार को भरने के लिए साधारण मिट्टी या बालू का उत्खनन ताकि किसी आपदा या बाढ़ जैसी स्थिति से निपटा जा सके।
11. ऐसे कार्यकलाप जिन्हें राज्य सरकार द्वारा विधान या नियमों के अधीन पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, भारत सरकारी की सहमति से गैर खननकारी कार्यकलाप घोषित किया है।

परिशिष्ट - 10**[पैरा 7 (iii) (क) देखें]****जिला सर्वेक्षण रिपोर्ट तैयार करने के लिए प्रक्रिया**

जिला सर्वेक्षण रिपोर्ट तैयार करने का मुख्य उद्देश्य निम्नलिखित का सुनिश्चय करना है :

भूमिवृद्धि या जमाव के क्षेत्रों की पहचान जहां खनन को अनुज्ञात किया जा सकता है ; और अपक्षरण के क्षेत्रों की पहचान तथा उसकी अवसंरचना, ढांचों और संस्थापनों से निकटता जहां खनन को प्रतिषिद्ध किया जाना चाहिए तथा फिर से भराव की वार्षिक दर की संगणना तथा क्षेत्र में खनन के पश्चात् भराव के लिए अनुज्ञात समय ।

रिपोर्ट का निम्नलिखित ढांचा होगा :

1. प्राक्कथन
2. जिले में खनन कार्यकलापों पर विहंगम दृष्टि
3. अवस्थिति, क्षेत्र और विधिमान्यता का कालावधि के साथ जिले में खनन पट्टों की सूची
4. पिछले तीन वर्षों के दौरान प्राप्त स्वामिस्व या राजस्व के ब्यौरे
5. पिछले तीन वर्षों के दौरान बालू या बजरी के उत्पादन के ब्यौरे
6. जिले की नदियों में तलछटों के जमाव की प्रक्रिया
7. जिले का सामान्य प्रोफाइल
8. जिले में भूमि के उपयोग का पैटर्न : वन, कृषि, उद्यान कृषि, खनन आदि
9. जिले की भू-भौगोलिकी
10. वर्षा : मास-वार
11. जियोलोजी और खनिज संपदा

उपरोक्त के अतिरिक्त, रिपोर्ट में निम्नलिखित अंतर्विष्ट होगा :

(क) नदी या धाराओं का जिलावार ब्यौरा और बालू के अन्य स्रोत ।

(ख) जिलावार बालू या पत्थरों की उपलब्धता या समग्र संसाधन ।

(ग) जिलावार बालू के विद्यमान खनन पट्टों के ब्यौरे तथा समग्र ।

डीईआईएए द्वारा जिले में जियोलोजी विभाग या सिंचाई विभाग या वन विभाग या लोक निर्माण विभाग या भूजल बोर्ड या सुदूर संवेदन विभाग या खनन विभाग आदि की सहायता से एक सर्वेक्षण किया जाएगा ।

मुख्य नदियों के विवरण सहित निकासी प्रणाली

क्रम सं.	नदी का नाम	निकासी क्षेत्र (वर्ग कि.मी.)	जिले में निकासी किया गया % क्षेत्र

महत्वपूर्ण नदियों और धाराओं की मुख्य विशेषताएं :

क्रम सं.	नदी या धारा का नाम	जिले में कुल दूरी (कि.मी. में)	उद्गम का स्थान	उद्गम पर ऊंचाई

खनिज छूट के लिए सिफारिश किया गया नदी या धारा का भाग	खनिज छूट के लिए सिफारिश किए गए क्षेत्र की लंबाई (कि.मी. में)	खनिज छूट के लिए सिफारिश किए गए क्षेत्र की औसत चौड़ाई (मीटर में)	खनिज छूट के लिए सिफारिश किया गया क्षेत्र (वर्ग मीटर में)	खनन योग्य खनिज संभावना (मीट्रिक टन में) (कुल खनिज संभावना का 60%)

खनिज संभावना

बोल्डर (एमटी)	बजरी (एमटी)	बालू (एमटी)	कुल खनन योग्य खनिज संभावना (एमटी)

वार्षिक जमाव

क्रम सं.	नदी या धारा	खनिज छूट के लिए सिफारिश किया गया नदी या धारा का भाग	खनिज छूट के लिए सिफारिश किए गए क्षेत्र की लंबाई (कि.मी. में)	खनिज छूट के लिए सिफारिश किए गए क्षेत्र की औसत चौड़ाई (मीटर में)	खनिज छूट के लिए सिफारिश किया गया क्षेत्र (वर्ग मीटर में)	खनन योग्य खनिज संभावना (मीट्रिक टन में) (कुल खनिज संभावना का 60%)
जिले के लिए योग						

उप प्रभागीय मजिस्ट्रेट सिंचाई विभाग से अधिकारियों, राज्य प्रदूषण नियंत्रण बोर्ड या समिति, वन विभाग जियोलोजी या खनन अधिकारी से मिलकर बनने वाली उप प्रभागीय समिति ऐसे प्रत्येक स्थल का भ्रमण करेगी जिसके लिए पर्यावरणीय अनापत्ति के लिए आवेदन किया गया है और खनन के लिए या खनन का प्रतिषेध करने के लिए स्थल की उपयोगिता पर सिफारिश करेगी।

खनिज संभावना की संगणना के लिए अंगीकृत विधि :

खनिज संभावना की संगणना क्षेत्र की जांच और नदी या धाराओं के आवाह क्षेत्र की जियोलोजी के आधार पर की जाती है। स्थल की स्थिति और अवस्थिति के अनुसार खनन योग्य खनिजों की गहराई को परिभाषित किया जाता है। किसी नदी या धारा में खनिजों को हटाने के क्षेत्र का विनिश्चय जियो-मोर्फोलोजी और अन्य कारकों पर निर्भर करता है। यह किसी विशिष्ट नदी या धारा में क्षेत्र का पचास प्रतिशत से साठ प्रतिशत तक हो सकता है। उदाहरण के लिए कुछ पहाड़ी राज्यों में खनिज संघटक जैसे बोल्डर, नदी से बजरी, बालू को एक मीटर की गहराई तक स्रोत खनिज माना जा सकता है। अन्य संघटक जैसे कले और गाद को किसी विशिष्ट नदी या धारा की खनिज संभावना की संगणना करते समय अपशिष्ट के रूप में अपवर्जित किया जाता है।

जिले में प्रत्येक लघु खनिज के लिए जिला सर्वेक्षण रिपोर्ट पृथक् रूप से तैयार की जाएगी और इसके प्रारूप को कोलेक्टोरेट में इसकी प्रति को रखते हुए पब्लिक डोमेन में रखा जाएगा तथा इसे जिले की वेबसाइट पर इक्कीस दिन के लिए पोस्ट किया जाएगा। प्राप्त की गई टिप्पणियों पर विचार किया जाएगा और उपयुक्त पाए जाने पर उन्हें डीईआईएए द्वारा छः मास के भीतर अंतिम रूप दी जाने वाली अंतिम रिपोर्ट में शामिल किया जाएगा।

जिला सर्वेक्षण रिपोर्ट पर्यावरणीय अनापत्ति रिपोर्टों को तैयार करने और परियोजनाओं के मूल्यांकन के लिए आवेदन का आधार होगी। रिपोर्ट को प्रत्येक पांच वर्ष में अद्यतन किया जाएगा।

परिशिष्ट - 11

[पैरा 7 (iii) (ख) देखें]

समूह सहित लघु खनिजों के खनन के लिए पर्यावरणीय अनापत्ति की प्रक्रिया

समूह अवस्थिति सहित लघु खनिजों के खनन के लिए पर्यावरणीय अनापत्ति के लिए निम्नलिखित नीति का अनुसरण किया जाएगा :-

- (1). राज्यों (वर्णीय बालू खनन मार्गदर्शक सिद्धांत) द्वारा उपलब्ध कराया गया डाटा उपदर्शित करता है कि लघु खनिजों के लिए अधिकांश खनन पट्टे पांच हेक्टेयर से कम पट्टा क्षेत्र के लिए है। यह भी रिपोर्ट किया गया है कि पहाड़ी राज्यों में पांच हेक्टेयर से अधिक नदी के भाग को प्राप्त करना बहुत असामान्य है। इसलिए लघु खनिजों के लिए पट्टे का आकार जिसके अंतर्गत नदी बालू खनन है, का अवधारण राज्यों द्वारा उनकी परिस्थितियों के आधार पर किया जाएगा।
- (2). लघु खनिजों का अधिकांशतः खनन समूहों में है। पर्यावरण संघात निर्धारण या पर्यावरण प्रबंधन योजना को समस्त समूह के लिए तैयार करने की आवश्यकता है ताकि सभी संभावित बाह्यताओं को लिया जा सके। इन रिपोर्टों में समूह की वहन क्षमता, परिवहन और संबंधित मुद्दे पुनः भराव और रिचार्ज मुद्दों, समूह क्षेत्र का भूजलीय अध्ययन शामिल होगा। पर्यावरणीय संघात निर्धारण या पर्यावरणीय प्रबंधन योजना को राज्य या राज्य द्वारा नामनिर्दिष्ट अभिकरण या परियोजना प्रस्तावकों द्वारा समूह में या समूह के समर्थकों द्वारा तैयार किया जाएगा।
- (3). संपूर्ण समूह के लिए एक लोक परामर्श होगा जिसके पश्चात् समूह के लिए अंतिम अंतिम पर्यावरण संघात निर्धारण या पर्यावरण प्रबंधन योजना रिपोर्ट तैयार की जाएगी।
- (4). पर्यावरण अनापत्ति के लिए आवेदन किया जाएगा और उसे व्यक्ति परियोजना प्रस्तावक को जारी किया जाएगा। समूह में व्यक्ति पट्टा धारक उसी पर्यावरण संघात निर्धारण या पर्यावरण प्रबंधन योजना का पर्यावरणीय अनापत्ति के लिए आवेदन करने में उपयोग कर सकते हैं। समूह पर्यावरण संघात निर्धारण या पर्यावरण प्रबंधन योजना को आवश्यकता के अनुसार महत्वपूर्ण परिवर्तनों को ध्यान में रखते हुए अद्यतन किया जाएगा।
- (5). पर्यावरण संघात निर्धारण या पर्यावरण प्रबंधन योजना को उस समूह में प्रत्येक पर्यावरण अनापत्ति में उपदर्शित किया जाएगा और डीईआईसी, एसईआईसी और ईआईसी यह सुनिश्चित करेंगे कि पर्यावरण संघात निर्धारण या पर्यावरण प्रबंधन योजना से न्यूनीकरण उपाय अध्ययन को व्यक्ति परियोजना प्रस्तावकों की उस समूह में पर्यावरणीय अनापत्ति में उपदर्शित किया जाए।
- (6). किसी समूह का तब निर्माण किया जाएगा जब किसी पट्टे की सीमाओं के बीच दूरी किसी अन्य पट्टे की सीमा से किसी एक समान खनिज क्षेत्र में 500 मीटर से कम हो।
- (7). प्ररूप 1ड, पूर्व साध्यता रिपोर्ट और लघु खनिजों के खनन के लिए प्रवर्ग 'ख2' परियोजना प्रवर्ग के लिए खनन योजना को रजिस्ट्रीकृत अर्हित व्यक्ति या भारत की क्वालिटी परिषद् के प्रत्ययित सलाहकारों, राष्ट्रीय शिक्षा और प्रशिक्षण प्रत्यय बोर्ड द्वारा तैयार किया जाएगा। प्रवर्ग 'क' और प्रवर्ग 'ख1' परियोजनाओं के लिए पर्यावरण संघात निर्धारण या पर्यावरण प्रबंधन योजना को भारत की क्वालिटी परिषद् के प्रत्ययित सलाहकारों, राष्ट्रीय शिक्षा और प्रशिक्षण प्रत्यय बोर्ड द्वारा तैयार किया जाएगा।
- (8). एसईआईएए के पास डीईआईएए पर पर्यवेक्षणीय आधिकारिता होगी और डीईआईएए के विनिश्चयों की एसईआईएए द्वारा किसी विद्यमान विधि के उपबंधों पर प्रतिकूल प्रभाव डाले बिना समीक्षा की जाएगी।

लघु खनिजों जिसके अंतर्गत समूह स्थिति है की पर्यावरणीय निकासी के लिए अपेक्षाओं का स्कीमटाइज्ड प्रस्तुतीकरण

पट्टे का क्षेत्र (हेक्टेयर)	परियोजना का प्रवर्ग	ईआईए / ईएमपी की अपेक्षा	लोक सुनवाई की अपेक्षा	ईसी की अपेक्षा	जो ईआईए / ईएमपी तैयार कर सकता है	ईसी के लिए कौन आवेदन करेगा	ईसी का मूल्यांकन/ अनुदत्त करने के लिए प्राधिकारी	ईसी की अनुपालना की मानीटरी करने के लिए प्राधिकारी
व्यष्टिक खनन पट्टे के आधार पर बालू खनन और अन्य लघु खनिजों के खनन के लिए ईसी प्रस्ताव								
0 – 5ha	‘ख2’	प्ररूप – 1एम, पीएफआर और अनुमोदित खनन योजना	नहीं	हां	परियोजना प्रस्तावक	परियोजना प्रस्तावक	डीईएसी/ डीईआईएए	डीईआईएए एसआईएए एसपीसीबी सीपीसीबी एमओईएफसीसी एमओईएफएफ द्वारा नामनिर्देशित अभिकरण
> 5 ha और < 25 ha	‘ख2’	प्ररूप –I, पीएफआर और अनुमोदित खनन योजना तथा ईएमपी	नहीं	हां	परियोजना प्रस्तावक	परियोजना प्रस्तावक	सीईएसी / एसआईएए	
≥ 25ha और < 50ha	‘ख1’	हां	हां	हां	परियोजना प्रस्तावक	परियोजना प्रस्तावक	सीईएसी/ सीआईएए	
≥ 50 ha	‘क’	हां	हां	हां	परियोजना प्रस्तावक	परियोजना प्रस्तावक	ईएसी/ एमओईएफसीसी	
समूह स्थिति में बालू, खनन और अन्य लघु खनिज खनन के लिए ईसी प्रस्ताव								
5 ha तक खनन पट्टे का समूह क्षेत्र	‘ख2’	प्ररूप –I, पीएफआर और अनुमोदित खनन योजना तथा ईएमपी	नहीं	हां	राज्य, राज्य अभिकरण, परियोजना प्रस्तावकों का समूह, परियोजना प्रस्तावक	परियोजना प्रस्तावक	डीईएसी/ डीईआईएए/	एमओईएफसीसी द्वारा नामनिर्दिष्ट डीईआईएए एसआईएए एसपीसीबी सीपीसीबी अभिकरण
> 5 ha तक खनन पट्टे का	‘ख2’	प्ररूप –I, पीएफआर और	नहीं	हां	राज्य, राज्य अभिकरण, परियोजना	परियोजना प्रस्तावक	डीईएसी/ डीईआईएए/	

समूह क्षेत्र और < 25 ha बिना किसी व्यष्टिक पट्टे के > 5 ha		अनुमोदित खनन योजना तथा समूह में सभी पट्टों के लिए एक ईएमपी			प्रस्तावकों का समूह, परियोजना प्रस्तावक			
व्यष्टिक पट्टा आकार < 50ha हेक्टेयर के साथ ≥ 25 से खनन पट्टे का समूह	'ख1'	हां	हां	हां	राज्य, राज्य अभिकरण, परियोजना प्रस्तावकों का समूह, परियोजना प्रस्तावक	परियोजना प्रस्तावक	सीईएसी/ एसईआईए	
≥ 50ha से किसी व्यष्टिक पट्टे के आकार का कोई समूह	'क'	हां	हां	हां	राज्य, राज्य अभिकरण, परियोजना प्रस्तावकों का समूह, परियोजना प्रस्तावक	परियोजना प्रस्तावक	ईएसी/ एमओईएफसीसी	

परिशिष्ट - XII

[पैरा 10 (iv) देखें]

बालू खनन या नदी तट खनन की मानीटरी की प्रक्रिया

1. परिवहन अनुज्ञा पत्र के सुरक्षा अभिलक्षण नीचे दिए अनुसार है :

- (क) भारतीय बैंक संगम द्वारा अनुमोदित चुंबकीय स्याही अक्षर पहचान (एमआईसीआर) कोड पेपर पर मुद्रित
- (ख) विशिष्ट बारकोड
- (ग) विशिष्ट त्वरित प्रतिक्रिया (क्यूआर) कोड
- (घ) फ्यूजिटिव इंक पृष्ठभूमि
- (ङ) अदृश्य इंक चिन्ह
- (च) वायर्ड पॉटओग्राफ
- (छ) वॉटरमार्क

2. खनन पट्टा स्थल पर अपेक्षा :

- (क) छोटे आकार का प्लाट (5 हेक्टेयर तक): एंडरायड आधारित स्मार्ट फोन
- (ख) बड़े आकार के प्लाट (5 हेक्टेयर से अधिक): सीसीटीवी कैमरा, पर्सनल कंप्यूटर (पीसी), इंटरनेट कनेक्शन, पावर बैंकअप
- (ग) खनन पट्टा स्थल का पहुंच नियंत्रण
- (घ) इस्तेमाल किए गए वाहन के ट्रेलर के आयतन के आधार पर खनन किए गए खनिज के भार को तोलने के लिए प्रबंध या अनुमानित भार।

3. परिवहन अनुज्ञापत्र या रसीद की स्कैनिंग और उसे सर्वर पर अपलोड करना :

- (क) वेबसाइट: खनन स्थल पर रसीद की स्कैनिंग, बारकोड स्कैनर और कंप्यूटर के माध्यम से सॉफ्टवेयर का इस्तेमाल करके की जा सकती है ;
- (ख) एंडरायड अनुप्रयोग : खनन स्थल पर स्कैनिंग, स्मार्ट फोन का उपयोग करके एंडरायड अनुप्रयोग द्वारा की जा सकती है। इसके लिए सिमकार्ड पर इंटरनेट की उपलब्धता की अपेक्षा होगी ;
- (ग) एसएमएस : सर्वर पर परिवहन अनुज्ञापत्रों या रसीद को मोबाइल फोन के माध्यम से एसएमएस भेजकर अपलोड किया जाएगा। एक बार परिवहन अनुज्ञापत्र या रसीद को अपलोड करने पर अपनी विधिमान्यता की अवधि के साथ एक विशिष्ट बीजक कोड सृजित हो जाता है।

4. प्रणाली का प्रस्तावित कार्यकरण :

राज्य खनन विभाग को परिवहन अनुज्ञापत्र या रसीद को ऊपर पैरा 1 में उपदर्शित सुरक्षा अभिलक्षणों के साथ मुद्रित करना चाहिए और उन्हें जिला कलक्टर के माध्यम से पट्टा धारक को जारी किया जाएगा। एक बार इन परिवहन अनुज्ञापत्रों या रसीदों को जारी करने के पश्चात् उन्हें खनन पट्टा क्षेत्र के विरुद्ध सर्वर पर अपलोड किया जाएगा। प्रत्येक रसीद अधिमानतः पूर्व नियत मात्रा के साथ होनी चाहिए ताकि जारी की गई रसीदों के लिए कुल मात्रा का अवधारण किया जा सके।

जब परिवहन अनुज्ञापत्र या रसीद का बारकोड स्कैन हो जाता है और बीजक का सृजन कर दिया जाता है जिससे विशिष्ट बारकोड का इस्तेमाल होता है और उसकी विधिमान्यता के समय को सर्वर पर अभिलिखित कर दिया जाता है। ताकि खनन की गई सामग्री के परिवहन के सभी ब्यौरों को सर्वर पर रखा जा सकें और परिवहन अनुज्ञापत्र या रसीद का पुनः इस्तेमाल नहीं किया जा सके।

5. मार्ग पर जांच :

खनन किए गए खनिजों को ले जाने वाले यानों की जांच करने के प्रयोजन के लिए तैनात कर्मचारिवृंद को परिवहन अनुज्ञापत्र या रसीद की वेबसाइट, एंडरायड अनुप्रयोग और एसएमएस का उपयोग करके उन्हें स्कैन करने की स्थिति में होना चाहिए।

6. यानों का खराब हो जाना :

यान के खराब होने की दशा में परिवहन अनुज्ञापत्र या रसीद की विधिमान्यता का चालक द्वारा यान के खराब हो जाने की रिपोर्ट करने के लिए विशिष्ट फॉरमेट में एसएमएस भेजकर विस्तार किया जाएगा। सर्वर इस सूचना को रजिस्टर करेगा और खराब होने को रजिस्टर करेगा। राज्य एक काल सेंटर की भी स्थापना कर

सकता है जो ऐसे यानों के खराब होने को रजिस्टर कर सकता है तथा वैधता की अवधि का विस्तार कर सकता है। यान के पश्चात्त्वर्ती ठीक होने की भी इसी प्रकार सर्वर या काल सेंटर में रिपोर्ट की जानी चाहिए।

7. यानों की ट्रैकिंग :

यान के स्रोत से गंतव्य तक के मार्ग को जांच बिंदुओं, आरएफआईडी टैगों और जीपीएस ट्रैकिंग के माध्यम से ट्रैक किया जा सकता है।

8. चौकसी या रिपोर्ट सृजन और कार्रवाई समीक्षा :

प्रणाली दैनिक उठाई रिपोर्ट, यान लोग या इतिहास, आबंटन के विरुद्ध उठाई और कुल उठाई जैसे विभिन्न पैरामीटरों पर प्राधिकारियों को आवधिक रिपोर्ट विकसित करने में समर्थ करेगी। प्रणाली का उपयोग आटोमेल या एसएमएस सृजित करने के लिए किया जा सकता है। इससे जिला कलक्टर या जिला मजिस्ट्रेट सभी सुसंगत ब्यौरे प्राप्त करने में समर्थ होंगे और इससे प्राधिकारी किसी अनियमितता में लिप्त पाए गए किसी स्थल से स्कैनिंग सुविधा को रोकने में समर्थ होंगे। जब भी कोई प्राधिकारी अवैध बालू का परिवहन करने वाले किसी यान को अंतररुद्ध करता है तो वह सर्वर पर रजिस्ट्रीकृत हो जाएगा और अधिकारी के लिए की गई कार्रवाई पर रिपोर्ट करना आज्ञापक होगा। प्रत्येक अंतररुद्ध किए गए यान को ट्रैक किया जाएगा।

खनन किए गए खनिज, पर्यावरणीय अनापत्त शर्तों और पर्यावरण प्रबंधन योजना के प्रवर्तन की मानीटरी का डीईआईए, एसईआईए और राज्य प्रदूषण नियंत्रण बोर्ड या समिति द्वारा सुनिश्चित किया जाएगा। ऊपर परकल्पित मानीटरी इंतजामों को तीन मास से पूर्व लागू किया जाएगा। पर्यावरणीय अनापत्ति शर्तों के प्रवर्तन की मानीटरी केन्द्रीय प्रदूषण नियंत्रण बोर्ड, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय तथा इस प्रयोजन के लिए मंत्रालय द्वारा नामनिर्दिष्ट अभिकरण द्वारा किया जाएगा।”।

[सं. जेड-11013/98/2014-आईए-II (एम)]

मनोज कुमार सिंह, संयुक्त सचिव

टिप्पण : मूल नियम भारत के राजपत्र, असाधारण, भाग II, खंड 3, उपखंड (ii) में का.आ. सं. 1533 (अ), तारीख 14 सितंबर, 2006 द्वारा प्रकाशित किए गए थे और उनका पश्चात्त्वर्ती संशोधन निम्नलिखित संख्याओं द्वारा किया गया :-

1. का.आ. 1737(अ) तारीख 11 अक्टूबर 2007;
2. का.आ. 3067(अ) तारीख 1 दिसंबर 2009;
3. का.आ. 695(अ) तारीख 4 अप्रैल 2011;
4. का.आ. 2896(अ) तारीख 13 दिसम्बर 2012;
5. का.आ. 674(अ) तारीख 13 मार्च 2013;
6. का.आ. 2204(अ) तारीख 19 जुलाई 2013;
7. का.आ. 2555(अ) तारीख 21 अगस्त 2013;
8. का.आ. 2559(अ) तारीख 22 अगस्त 2013;
9. का.आ. 2731(अ) तारीख 9 सितंबर 2013;

- 10 का.आ. 562(अ) तारीख 26 फ़रवरी 2014;
11. का.आ. 637(अ) तारीख 28 फ़रवरी 2014;
12. का.आ. 1599(अ) तारीख 25 जून 2014;
13. का.आ. 2601(अ) तारीख 7 अक्टूबर 2014;
14. का.आ. 2600(अ) तारीख 9 अक्टूबर 2014
15. का.आ. 3252(अ) तारीख 22 दिसम्बर 2014;
16. का.आ. 382(अ) तारीख 3 फरवरी, 2015;
17. का.आ. 811(अ) तारीख 23 मार्च, 2015;
18. का.आ. 996(अ) तारीख 10 अप्रैल 2015;
19. का.आ. 1142(अ) तारीख 17 अप्रैल 2015;
20. का.आ. 1141(अ) तारीख 29 अप्रैल 2015;
21. का.आ. 1834(अ) तारीख 6 जुलाई 2015;

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 15th January, 2016

S.O. 141(E).—Whereas in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986), a draft notification for making certain amendments in the Environment Impact Assessment Notification, 2006, issued *vide* number S.O. 1533(E), dated the 14th September 2006, was published under sub-rule (3) of rule (5) of the Environment (Protection) Rules, 1986, vide number S.O. 2588(E), dated 22nd September, 2015, inviting objections and suggestions from all persons likely to be affected thereby, within a period of sixty days from the date of publication on which copies of Gazette containing the said notification were available to the public;

And whereas, copies of said notification were made available to the public on 22nd September 2015;

And whereas, all objections and suggestions received in response to the above mentioned draft notification have been duly considered by the Central Government;

And whereas, in pursuance to the order of Hon'ble Supreme Court dated the 27th February, 2012 in I.A. No.12-13 of 2011 in Special Leave Petition (C) No.19628-19629 of 2009, in the matter of Deepak Kumar etc. Vs. State of Haryana and Others etc., prior environmental clearance has now become mandatory for mining of minor minerals irrespective of the area of mining lease;

And whereas, as a result of the above said Order of Hon'ble Supreme Court, the number of cases which are now required to obtain prior environmental clearance has increased substantially;

And whereas, the Hon'ble National Green Tribunal, *vide* its order dated the 13th January, 2015 in the matter regarding sand mining has directed for making a policy on environmental clearance for mining leases in cluster for minor minerals;

And whereas, the State Governments have represented for streamlining the process of environmental clearance for mining of minor mineral;

And whereas, the Ministry of Environment, Forest and Climate Change in consultation with State Governments has prepared Guidelines on Sustainable Sand Mining detailing the provisions on environmental clearance for cluster, creation of District Environment Impact Assessment Authority and proper monitoring of sand mining using information technology and information technology enabled services to track the mined out material from source to destination;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following amendments in the said notification, namely:-

In the said notification,-

(a) in paragraph 2, after the words “in the said Schedule”, the following words shall be inserted, namely:-
“and at District level, the District Environment Impact Assessment Authority (DEIAA) for matters falling under Category ‘B2’ for mining of minor minerals in the said Schedule”;

(b) after paragraph 3, the following paragraph shall be inserted, namely:-

“3 A. District Level Environment Impact Assessment Authority:-

- (1) A District Level Environment Impact Assessment Authority hereinafter referred to as the DEIAA shall be constituted by the Central Government under sub-section (3) of section 3 of the Environment (Protection) Act, 1986 comprising of four members including a Chairperson and a Member-Secretary.
- (2) The District Magistrate or District Collector shall be the Chairperson of the DEIAA.
- (3) The Sub-Divisional Magistrate or Sub-Divisional Officer of the district head quarter of the concerned district of the State shall be the Member-Secretary of the DEIAA.
- (4) The other two members of the DEIAA shall be the senior most Divisional Forest Officer and one expert. The expert shall be nominated by the Divisional Commissioner of the Division or Chief Conservator of Forest, as the case may be. The term and qualifications of the expert fulfilling the eligibility criteria are given in Appendix VII to this notification.
- (5) The members of the DEIAA who are serving officers of the concerned State Government or the Union territory Administration shall be *ex-officio* members except the expert member.
- (6) The District Level Expert Appraisal Committee hereinafter referred to as the DEAC shall comprise of eleven members, including a Chairman and a Member-Secretary.
- (7) The senior most Executive Engineer, Irrigation Department in the district of respective State Governments or Union territory Administration shall be the Chairperson of the DEAC.
- (8) The Assistant Director or Deputy Director of the Department of Mines and Geology or District Mines Officer or Geologist of the district shall be the Member-Secretary of the DEAC in that order.
- (9) A representative of the State Pollution Control Board or Committee, senior most Sub-Divisional Officer (Forest) in the district, representative of Remote Sensing Department or Geology Department or State Ground Water Department, one occupational health expert or Medical Officer to be nominated by the District Magistrate or District Collector, Engineer from Zila Parishad, and three expert members to be nominated by the Divisional Commissioner or Chief Conservator of Forest, as the case may be, shall be the other members of the DEAC. The term and qualifications of the experts fulfilling the eligibility criteria are given in Appendix VII to this notification.
- (10) The members of the DEAC who are serving officers of the concerned State Government or the Union territory Administration shall be *ex-officio* members except the expert members.
- (11) The District Magistrate or District Collector shall notify an agency to act as Secretariat for the DEIAA and the DEAC and shall provide all financial and logistic support for their statutory functions.
- (12) The DEIAA and DEAC shall exercise the powers and follow the procedure as specified in the said notification, as amended from time to time.
- (13) The DEAC shall function on the principle of collective responsibility and the Chairman shall endeavor to reach a consensus in each case and if consensus cannot be reached, the view of the majority shall prevail.”;
- (c) in paragraph 4, after sub-paragraph (iii), the following sub-paragraph shall be inserted, namely:-
“(iv) The ‘B2’ Category projects pertaining to mining of minor mineral of lease area less than or equal to five hectare shall require prior environmental clearance from DEIAA. The DEIAA shall base its decision on the recommendations of DEAC, as constituted for this notification.”;
- (d) for paragraph 5, the following paragraph shall be substituted, namely:-

“5. Screening, Scoping and Appraisal Committees:-

The same Expert Appraisal Committees (EACs) at the Central Government, SEACs at the State or Union territory level and DEAC at the district level shall screen, scope and appraise projects or activity in category ‘A’, ‘B1 and B2’ and ‘B2’ projects for mining of minor minerals of lease area less than and equal to five hectare respectively. EAC, SEACs and DEACs shall meet at least once every month.

(a) The composition of the EAC shall be as given in Appendix VI. The SEAC at the State or the Union territory level shall be constituted by the Central Government in consultation with the concerned State Government or the Union

territory Administration with identical composition. DEAC at the district level shall be constituted by the Central Government as per the composition given in paragraph 3 A.

(b) The Central Government may with the prior concurrence of the concerned State Governments or the Union territory Administration constitute one SEAC for more than one State or Union territory for reasons of administrative convenience and cost.

(c) The EAC and SEAC shall be reconstituted after every three years.

(d) The authorised members of the EAC, SEACs and DEACs concerned, may inspect any site connected with the project or activity in respect of which the prior environmental clearance is sought for the purpose of screening or scoping or appraisal with prior notice of at least seven days to the project proponent who shall provide necessary facilities for the inspection.

(e) The EAC, SEACs and DEACs shall function on the principle of collective responsibility. The Chairperson shall endeavor to reach a consensus in each case and if consensus cannot be reached the view of the majority shall prevail.”;

(e) for paragraph 6, the following paragraph shall be substituted, namely:-

“6. Application for Prior Environmental Clearance (EC):-

An application seeking prior environmental clearance in all cases shall be made by the project proponent in the prescribed Form 1 annexed herewith and Supplementary Form 1A, if applicable, as given in Appendix II after the identification of prospective site (s) for the project and/or activities to which the application relates; and in Form 1M for mining of minor minerals up to five hectare under Category ‘B2’ projects, as given in Appendix VIII, before commencing any construction activity, or preparation of land, or mining at the site by the project proponent. The project proponent shall furnish along with the application, a copy of the pre-feasibility project report, in addition to Form 1, Form 1A, and Form 1M; and in case of construction projects or activities (item 8 of the Schedule), a copy of the conceptual plan shall be provided instead of pre-feasibility report.”;

(f) in paragraph 7,-

(i) in sub-paragraph (i), under the heading “I. Stage (1)- Screening:”, the existing sub-paragraph shall be lettered as sub-paragraph “(A)” and after sub-paragraph as so lettered, the following sub-paragraph shall be inserted, namely:-

“(B) The cases as specified in Appendix IX shall be exempted from prior environmental clearance.” ;

(ii) after sub-paragraph 7 (ii), the following sub-paragraph shall be inserted, namely:-

“7 (iii) Preparation of District Survey Report for Sand Mining or River Bed Mining and Mining of other Minor Minerals:

(a) The prescribed procedure for preparation of District Survey Report for sand mining or river bed mining and mining of other minor minerals is given in Appendix X.

(b) The prescribed procedure for environmental clearance for mining of minor minerals including cluster situation is given in Appendix XI.”;

(g) in paragraph 8,-

(i) for the letters and word “EAC or SEAC”, the words and letters “EAC or SEAC or DEAC” shall be substituted;

(ii) for the words “Expert Appraisal Committee or State Level Expert Appraisal Committee” wherever they occur, the words “Expert Appraisal Committee or State Level Expert Appraisal Committee or District Level Expert Appraisal Committee” shall be substituted;

(h) in paragraph 9, in sub-paragraph (i),-

for the words “Expert Appraisal Committee or State Level Expert Appraisal Committee”, the words “Expert Appraisal Committee or State Level Expert Appraisal Committee or District Level Expert Appraisal Committee” shall be substituted;

(i) in paragraph 10, after sub-paragraph (iii), the following sub-paragraph shall be inserted, namely:-

“(iv) The prescribed procedure for sand mining or river bed mining and monitoring is given in Appendix XII.”;

(j) in paragraph 11, -

for the words “Expert Appraisal Committee or State Level Expert Appraisal Committee”, the words “Expert Appraisal Committee or State Level Expert Appraisal Committee or District Level Expert Appraisal Committee” shall be substituted;

(k) in the Schedule,-

(i) for item 1 (a) and the entries relating thereto, the following item and entries shall be substituted, namely:-

(1)	(2)	(3)	(4)	(5)
“1(a)	(i) Mining of minerals	≥50 ha of mining lease area in respect of non-coal mine lease >150 ha of mining lease area in respect of coal mine lease Asbestos mining	<50 ha of mining lease area in respect of non-coal mine lease ≤150 ha of mining lease area in respect of coal mine lease	General Conditions shall apply except: (i) for project or activity of mining of minor minerals of Category ‘B2’ (up to 25 ha of mining lease area); (ii) River bed mining projects on account of inter-state boundary.

		irrespective of mining area		Note: (1) Mineral prospecting is exempted. ”; (2) The prescribed procedure for environmental clearance for mining of minor minerals including cluster situation is given in Appendix XI.”; (3) The mining leases which have obtained environmental clearance under Environment Impact Assessment Notification, 1994 and Environment Impact Assessment Notification, 2006 shall not require fresh environmental clearance during renewal provided the project has valid and subsisting environmental clearance.
	(ii) Slurry pipelines (coal lignite and other ores) passing through national parks or sanctuaries or coral reefs, ecologically sensitive areas.	All projects.		

(I) after Appendix VI, the following appendices shall be inserted, namely:-

“APPENDIX VII

(See paragraph 3 A)

Qualifications and terms for the Experts in DEIAA and DEAC

1. **Qualification:** The person should have at least (i) 5 years of formal University training in the concerned discipline leading to a MA or M Sc Degree or (ii) in case of Engineering/ Technology/ Architectural discipline, 4 years formal training course together with prescribed practical training in the field leading to a B. Tech/ B.E./ B. Arch. Degree, or (iii) Other professional degree (e.g. MBA etc.) involving a total of 5 years of formal University training and prescribed practical training, or (iv) Prescribed apprenticeship/ article ship and pass examinations conducted by the concerned professional associations (e.g. Chartered Accountancy) or (v) a University degree, followed by two years of formal training in a University or Service Academy (e.g. MBA/MPA etc.). In selecting the individual professionals, experience gained by them in their respective fields will be taken note of.
2. **Expert:** A professional fulfilling the above eligibility criteria with at least 10 years of relevant experience in the field or with an advanced degree (e.g. Ph. D) in a concerned field with at least 5 years of relevant experience.
3. **Age:** Below 70 years. However, in the event of non-availability of paucity of experts in a given field, the maximum age of a member may be allowed up to 75 years.
4. **Fields:** Experts in Mining, Geology, Hydrology, Remote Sensing, Environment Quality, Environment Impact Assessment Process, Risk Assessment, Life Sciences, Marine Sciences, Forestry and Wildlife, Environmental Economics, Bio-diversity, and River Ecology.

5. **Tenure:** The maximum tenure of expert members shall be for two terms of three years each.
6. The Expert Members may not be removed prior to expiry of the tenure without cause and proper enquiry.

APPENDIX VIII

(See paragraph 6)

FORM 1 M

APPLICATION FOR MINING OF MINOR MINERALS UNDER CATEGORY 'B2' FOR LESS THAN AND EQUAL TO FIVE HECTARE

(II) Basic Information

- (viii) Name of the Mining Lease site:
- (ix) Location / site (GPS Co-ordinates):
- (x) Size of the Mining Lease (Hectare):
- (xi) Capacity of Mining Lease (TPA):
- (xii) Period of Mining Lease:
- (xiii) Expected cost of the Project:
- (xiv) Contact Information:

Environmental Sensitivity

Sl. No.	Areas	Distance in kilometer / Details
1.	Distance of project site from nearest rail or road bridge over the concerned River, Rivulet, Nallah etc.	
2.	Distance from infrastructural facilities Railway line National Highway State Highway Major District Road Any Other Road Electric transmission line pole or tower Canal or check dam or reservoirs or lake or ponds In-take for drinking water pump house Intake for Irrigation canal pumps	
3.	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	
4.	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	
5.	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	
6.	Inland, coastal, marine or underground waters	
7.	State, National boundaries	
8.	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	
9.	Defence installations	
10.	Densely populated or built-up area, distance from nearest human habitation	
11.	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	
12.	Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)	
13.	Areas already subjected to pollution or environmental damage. (those where existing legal environmental standards are exceeded)	
14.	Areas susceptible to natural hazard which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)	

15.	Is proposed mining site located over or near fissure / fracture for ground water recharge	
16.	Whether the proposal involves approval or clearance under the following Regulations or Acts, namely:- (a) The Forest (Conservation) Act, 1980; (b) The Wildlife (Protection) Act, 1972; (c) The Coastal Regulation Zone Notification, 2011. If yes, details of the same and their status to be given.	
17.	Forest land involved (hectares)	
18.	Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? (a) Name of the Court (b) Case No. (c) Orders or directions of the Court, if any, and its relevance with the proposed project.	

(Signature of Project Proponent
Along with name and address)

APPENDIX – IX

[See paragraph 7(i) (B)]

EXEMPTION OF CERTAIN CASES FROM REQUIREMENT OF ENVIRONMENTAL CLEARANCE

The following cases shall not require prior environmental clearance, namely:-

1. Extraction of ordinary clay or sand, manually, by the Kumhars (Potter) to prepare earthen pots, lamp, toys, etc. as per their customs.
2. Extraction of ordinary clay or sand, manually, by earthen tile makers who prepare earthen tiles.
3. Removal of sand deposits on agricultural field after flood by farmers.
4. Customary extraction of sand and ordinary earth from sources situated in Gram Panchayat for personal use or community work in village.
5. Community works like de-silting of village ponds or tanks, construction of village roads, ponds, bunds undertaken in Mahatama Gandhi National Rural Employment and Guarantee Schemes, other Government sponsored schemes, and community efforts.
6. Dredging and de-silting of dams, reservoirs, weirs, barrages, river, and canals for the purpose of their maintenance, upkeep and disaster management.
7. Traditional occupational work of sand by Vanjara and Oads in Gujarat *vide* notification number GU/90(16)/MCR-2189(68)/5-CHH, dated the 14th February, 1990 of the Government of Gujarat.
8. Digging of well for irrigation or drinking water.
9. Digging of foundation for buildings not requiring prior environmental clearance.
10. Excavation of ordinary earth or clay for plugging of any breach caused in canal, nala, drain, water body, etc., to deal with any disaster or flood like situation upon orders of District Collector or District Magistrate.
11. Activities declared by State Government under legislations or rules as non-mining activity with concurrence of the Ministry of Environment, Forest and Climate Change, Government of India.

APPENDIX - X

[See paragraph 7 (iii) (a)]

PROCEDURE FOR PREPARATION OF DISTRICT SURVEY REPORT

The main objective of the preparation of District Survey Report (as per the Sustainable Sand Mining Guideline) is to ensure the following:

Identification of areas of aggradations or deposition where mining can be allowed; and identification of areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited and calculation of annual rate of replenishment and allowing time for replenishment after mining in that area.

The report shall have the following structure:

1. Introduction
2. Overview of Mining Activity in the District
3. The List of Mining Leases in the District with location, area and period of validity
4. Details of Royalty or Revenue received in last three years
5. Detail of Production of Sand or Bajari or minor mineral in last three years
6. Process of Deposition of Sediments in the rivers of the District
7. General Profile of the District
8. Land Utilization Pattern in the district: Forest, Agriculture, Horticulture, Mining etc.

9. Physiography of the District
10. Rainfall: month-wise
11. Geology and Mineral Wealth

In addition to the above, the report shall contain the following:

- (a) District wise detail of river or stream and other sand source.
- (b) District wise availability of sand or gravel or aggregate resources.
- (c) District wise detail of existing mining leases of sand and aggregates.

A survey shall be carried out by the DEIAA with the assistance of Geology Department or Irrigation Department or Forest Department or Public Works Department or Ground Water Boards or Remote Sensing Department or Mining Department etc. in the district.

Drainage system with description of main rivers

S. No.	Name of the River	Area drained (Sq. Km)	% Area drained in the District

Salient Features of Important Rivers and Streams:

S. No.	Name of the River or Stream	Total Length in the District (in Km)	Place of origin	Altitude at Origin

Portion of the River or Stream Recommended for Mineral Concession	Length of area recommended for mineral concession (in kilometer)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable mineral potential (in metric tonne) (60% of total mineral potential)

Mineral Potential

Boulder (MT)	Bajari (MT)	Sand (MT)	Total Mineable Mineral Potential (MT)

Annual Deposition

S. No.	River or Stream	Portion of the river or stream recommended for mineral concession	Length of area recommended for mineral concession (in kilometer)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable mineral potential (in metric tonne) (60% of total mineral potential)
Total for the District						

A Sub-Divisional Committee comprising of Sub-Divisional Magistrate, Officers from Irrigation department, State Pollution Control Board or Committee, Forest department, Geology or mining officer shall visit each site for which environmental clearance has been applied for and make recommendation on suitability of site for mining or prohibition thereof.

Methodology adopted for calculation of Mineral Potential:

The mineral potential is calculated based on field investigation and geology of the catchment area of the river or streams. As per the site conditions and location, depth of minable mineral is defined. The area for removal of the mineral in a river or stream can be decided depending on geo-morphology and other factors, it can be 50 % to 60 % of the area of a particular river or stream. For example in some hill States mineral constituents like boulders, river born Bajri, sand up

to a depth of one meter are considered as resource mineral. Other constituents like clay and silt are excluded as waste while calculating the mineral potential of particular river or stream.

The District Survey Report shall be prepared for each minor mineral in the district separately and its draft shall be placed in the public domain by keeping its copy in Collectorate and posting it on district's website for twenty one days. The comments received shall be considered and if found fit, shall be incorporated in the final Report to be finalised within six months by the DEIAA.

The District Survey Report shall form the basis for application for environmental clearance, preparation of reports and appraisal of projects. The Report shall be updated once every five years.

APPENDIX - XI

[See paragraph 7 (iii) (b)]

PROCEDURE FOR ENVIRONMENTAL CLEARANCE FOR MINING OF MINOR MINERALS INCLUDING CLUSTER

The following policy shall be followed for environmental clearance of mining of minor minerals including cluster situation:-

- (1). The data provided by the States (Sustainable Sand Mining Guidelines) shows that most of the mining leases for minor minerals are of lease area less than 5 hectare. It is also reported that in hill States getting a stretch in river with area more than 5 hectare is very uncommon. So the size of lease for minor minerals including river sand mining will be determined by the States as per their circumstances.
- (2). The mining of minor minerals is mostly in clusters. The Environment Impact Assessment or Environment Management Plan are required to be prepared for the entire cluster in order to capture all the possible externalities. These reports shall capture carrying capacity of the cluster, transportation and related issues, replenishment and recharge issues, geo-hydrological study of the cluster area. The Environment Impact Assessment or Environment Management Plan shall be prepared by the State or State nominated Agency or group of project proponents in the Cluster or the project proponent in the cluster.
- (3). There shall be one public consultation for entire cluster after which the final Environment Impact Assessment or Environment Management Plan report for the cluster shall be prepared.
- (4). Environmental clearance shall be applied for and issued to the individual project proponent. The individual lease holders in cluster can use the same Environment Impact Assessment or Environment Management Plan for application for environmental clearance. The cluster Environment Impact Assessment or Environment Management Plan shall be updated as per need keeping in view any significant change.
- (5). The details of cluster Environment Impact Assessment or Environment Management Plan shall be reflected in each environmental clearance in that cluster and DEAC, SEAC, and EAC shall ensure that the mitigative measures emanating from the Environment Impact Assessment or Environment Management Plan study are fully reflected as environmental clearance conditions in the environmental clearance's of individual project proponents in that cluster.
- (6). A cluster shall be formed when the distance between the peripheries of one lease is less than 500 meters from the periphery of other lease in a homogeneous mineral area.
- (7). Form 1M, Pre-Feasibility Report and mine plan for Category 'B2' projects for mining of minor minerals shall be prepared by the Registered Qualified Person or Accredited Consultants of Quality Council of India, National Accreditation Board for Education and Training. The Environment Impact Assessment or Environment Management Plan for Category 'A' and Category 'B1' projects shall be prepared by the accredited consultants of Quality Council of India, National Accreditation Board for Education and Training.
- (8). The SEIAAs shall have supervisory jurisdiction over the DEIAAs and decisions of DEIAA shall be reviewed by the SEIAA without prejudice to any provisions under any existing law.

Schematic Presentation of Requirements on Environmental Clearance of Minor Minerals including cluster situation

Area of Lease (Hectare)	Category of Project	Requirement of EIA / EMP	Requirement of Public Hearing	Requirement of EC	Who can prepare EIA/ EMP	Who will apply for EC	Authority to appraise/ grant EC	Authority to monitor EC compliance
EC Proposal of Sand Mining and other Minor Mineral Mining on the basis of individual mine lease								
0 – 5ha	'B2'	Form –1M, PFR and Approved Mine Plan	No	Yes	Project Proponent	Project Proponent	DEAC/ DEIAA	DEIAA SEIAA SPCB CPCB MoEFCC Agency

> 5 ha and < 25 ha	‘B2’	Form –I, PFR and Approved Mine Plan and EMP	No	Yes	Project Proponent	Project Proponent	SEAC / SEIAA	nominated by MoEFCC
≥ 25ha and < 50ha	‘B1’	Yes	Yes	Yes	Project Proponent	Project Proponent	SEAC/ SEIAA	
≥ 50 ha	‘A’	Yes	Yes	Yes	Project Proponent	Project Proponent	EAC/ MoEFCC	
EC Proposal of Sand Mining and other Minor Mineral Mining in cluster situation								
Cluster area of mine leases up to 5 ha	‘B2’	Form –IM, PFR and Approved Mine Plan	No	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	DEAC/ DEIAA/	DEIAA SEIAA SPCB CPCB MoEFCC Agency nominated by MoEFCC
Cluster area of Mine leases > 5 ha and < 25 ha with no individual lease > 5 ha	‘B2’	Form –I, PFR and Approved Mine Plan and one EMP for all leases in the Cluster	No	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	DEAC/ DEIAA/	
Cluster of mine leases of area ≥ 25 hectares with individual lease size < 50ha	‘B1’	Yes	Yes	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	SEAC/ SEIAA	
Cluster of any size with any of the individual lease ≥ 50ha	‘A’	Yes	Yes	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	EAC/ MoEFCC	

APPENDIX - XII

[See paragraph 10 (iv)]

PROCEDURE FOR MONITORING OF SAND MINING OR RIVER BED MINING

1. The security feature of Transport Permit shall be as under:

- (a) Printed on Indian Banks’ Association (IBA) approved Magnetic Ink Character Recognition (MICR) Code paper.
- (b) Unique Barcode.
- (c) Unique Quick Response (QR) code.
- (d) Fugitive Ink Background.
- (e) Invisible Ink Mark.
- (f) Void Pantograph.
- (g) Watermark.

2. Requirement at Mine Lease Site:

- (a) Small Size Plot (Up to 5 hectare): Android Based Smart Phone.

- (b) Large Size Plots (More than 5 hectare): CCTV camera, Personal Computer (PC), Internet Connection, Power Back up.
 - (c) Access control of mine lease site.
 - (d) Arrangement for weight or approximation of weight of mined out mineral on basis of volume of the trailer of vehicle used.
3. Scanning of Transport Permit or Receipt and Uploading on Server:
- (a) Website: Scanning of receipt on mining site can be done through barcode scanner and computer using the software;
 - (b) Android Application: Scanning on mining site can be done using Android Application using smart phone. It will require internet availability on SIM card;
 - (c) SMS: Transport Permit or Receipt shall be uploaded on server even by sending SMS through mobile. Once Transport Permit or Receipt get uploaded, an unique invoice code gets generated with its validity period.
4. Proposed working of the system:
- The State Mining Department should print the Transport Permit or Receipt with security features enumerated at Paragraph 1 above and issue them to the mine lease holder through the District Collector. Once these Transport Permits or Receipts are issued, they would be uploaded on the server against that mine lease area. Each receipt should be preferably with pre-fixed quantity, so the total quantity gets determined for the receipts issued.
- When the Transport Permit or Receipt barcode gets scanned and invoice is generated, that particular barcode gets used and its validity time is recorded on the server. So all the details of transporting of mined out material can be captured on the server and the Transport Permit or Receipt cannot be reused.
5. Checking On Route:
- The staff deployed for the purpose of checking of vehicles carrying mined mineral should be in a position to check the validity of Transport Permit or Receipt by scanning them using website, Android Application and SMS.
6. Breakdown of Vehicle:
- In case the Vehicle breakdown, the validity of Transport Permit or Receipt shall be extended by sending SMS by driver in specific format to report breakdown of vehicle. The server will register this information and register the breakdown. The State can also establish a call centre, which can register breakdowns of such vehicles and extend the validity period. The subsequent restart of the vehicle also should be similarly reported to the server or call centre.
7. Tracking of Vehicles:
- The route of vehicle from source to destination can be tracked through the system using check points, RFID Tags, and GPS tracking.
8. Alerts or Report Generation and Action Review:
- The system will enable the authorities to develop periodic report on different parameters like daily lifting report, vehicle log or history, lifting against allocation, and total lifting. The system can be used to generate auto mails or SMS. This will enable the District Collector or District Magistrate to get all the relevant details and shall enable the authority to block the scanning facility of any site found to be indulged in irregularity. Whenever any authority intercepts any vehicle transporting illegal sand, it shall get registered on the server and shall be mandatory for the officer to fill in the report on action taken. Every intercepted vehicle shall be tracked.
- The monitoring of mined out mineral, environmental clearance conditions and enforcement of Environment Management Plan will be ensured by the DEIAA, SEIAA and the State Pollution Control Board or Committee. The monitoring arrangements envisaged above shall be put in place not later than three months. The monitoring of enforcement of environmental clearance conditions shall be done by the Central Pollution Control Board, Ministry of Environment, Forest and Climate Change and the agency nominated by the Ministry for the purpose.”.

[No. Z-11013/98/2014-IA-II (M)]

MANOJ KUMAR SINGH, Jt. Secy.

Note: The principal rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) *vide* number S.O. 1533 (E), dated the 14th September, 2006 and subsequently amended *vide* the following numbers :-

1. S.O. 1737 (E) dated the 11th October, 2007;
2. S.O. 3067 (E) dated the 1st December, 2009;
3. S.O. 695 (E) dated the 4th April, 2011;
4. S.O. 2896 (E) dated the 13th December, 2012;
5. S.O. 674 (E) dated the 13th March, 2013;
6. S.O. 2204 (E) dated the 19th July 2013;
7. S.O. 2555 (E) dated the 21st August, 2013;
8. S.O. 2559 (E) dated the 22nd August, 2013;
9. S.O. 2731 (E) dated the 9th September, 2013;
10. S.O. 562 (E) dated the 26th February, 2014;
11. S.O. 637 (E) dated the 28th February, 2014;
12. S.O. 1599 (E) dated the 25th June, 2014;
13. S.O. 2601 (E) dated the 7th October, 2014;
14. S.O. 2600 (E) dated the 9th October, 2014
15. S.O. 3252 (E) dated the 22nd December, 2014;
16. S.O. 382 (E) dated the 3rd. February, 2015;
17. S.O. 811 (E) dated the 23rd March, 2015;
18. S.O. 996 (E) dated the 10th April, 2015;
19. S.O. 1142 (E) dated the 17th April, 2015;
20. S.O. 1141 (E) dated the 29th April, 2015;
21. S.O. 1834 (E) dated the 6th July, 2015.

Printed by the Manager, Government of India Press, Ring Road, Mayapuri, New Delhi-110064
and Published by the Controller of Publications, Delhi-110054.

ANNEXURE-2

**Notification No. S.O. 3611(E) dated 25th
July, 2018 published by Ministry of
Environment, Forest and Climate
Change**



भारत का राजपत्र The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)

PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं. 2827]

नई दिल्ली, बुधवार, जुलाई 25, 2018/श्रावण 3, 1940

No. 2827]

NEW DELHI, WEDNESDAY, JULY 25, 2018/SHRAVANA 3, 1940

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 25 जुलाई, 2018

का.आ. 3611(अ).—भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की अधिसूचना सं. का.आ. 1533(अ) तारीख 14 सितंबर, 2006, भारत के राजपत्र, असाधारण, भाग II, खंड 3, उपखंड (ii) में (जिसे इसमें इसके पश्चात् उक्त अधिसूचना कहा गया है) प्रकाशित की गई थी, जिसके द्वारा पूर्व पर्यावरण निकासी के संबंध में निदेश जारी किए गए हैं ;

और पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय में उक्त अधिसूचना को का.आ. 141(अ) तारीख 15 जनवरी, 2016 द्वारा संशोधित किया है, जिसमें गौण खनिजों के लिए जिला सर्वेक्षण रिपोर्ट तैयार करने की प्रक्रिया को विहित किया गया है ;

और रांची स्थित माननीय झारखंड उच्च न्यायालय ने 2015 की रिट याचिका (पीआईएल) संख्या 1806, स्वप्रेरणा बनाम झारखंड राज्य एवं अन्य के मामले में रिट याचिका (पीआईएल) सं. 2013 की 290, हेमंत कुमार शिल्कारवर बनाम झारखंड राज्य एवं अन्य के मामले में, अन्य बातों के साथ, तारीख 11 अप्रैल, 2018 और 19 जून, 2018 के आदेश में बालू और रेत से भिन्न गौण खनिजों के लिए जिला सर्वेक्षण रिपोर्ट तैयार करने या बालू और रेत से भिन्न गौण खनिजों की जिला सर्वेक्षण रिपोर्ट तैयार करने के लिए शक्तियों का प्रत्यायोजन करने के लिए राज्य सरकार और/या जिला पर्यावरण संघात निर्धारण प्राधिकरण और जिला विशेषज्ञ मूल्यांकन समिति को निदेश दिया है ;

और केंद्रीय सरकार लोक हित में पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) के खंड (क) के अधीन सूचना देने की अपेक्षा से अभिमुक्ति प्रदान करती है ;

और केंद्रीय सरकार, पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (4) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उपधारा (1) और उपधारा (2) के खंड (v) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की अधिसूचना सं. का.आ. 1533(अ) तारीख 14 सितंबर, 2006 में निम्नलिखित और संशोधन करती है, अर्थात् :-

उक्त अधिसूचना में परिशिष्ट 10 के स्थान पर निम्नलिखित रखा जाएगा, अर्थात् :--

“परिशिष्ट 10

[पैरा 7 (iii) (क) देखें]

1. बालू खनन या नदी तल खनन के लिए जिला सर्वेक्षण रिपोर्ट तैयार करने के लिए प्रक्रिया

जिला सर्वेक्षण रिपोर्ट तैयार करने का मुख्य उद्देश्य (भरणीय बालू खनन के लिए मार्गदर्शक सिद्धांतों के अनुसार) निम्नलिखित को सुनिश्चित करना है :--

उच्चयन या जमाव के क्षेत्रों की पहचान, जहां खनन को अनुज्ञात किया जा सकता है ; और भूक्षयण के क्षेत्रों की पहचान तथा अवसंरचना ढांचों और प्रतिष्ठापनों से निकटतम जहां खनन को प्रतिषिद्ध किया जाना चाहिए और भराई की वार्षिक दर की गणना तथा उस क्षेत्र में खनन के पश्चात् भराई के लिए समय को अनुज्ञात करना ।

रिपोर्ट के निम्नलिखित संघटक होंगे :

- (1) प्रस्तावना ;
- (2) जिले में खनन कार्यकलापों का विहंगावलोकन ;
- (3) अवस्थिति क्षेत्र और वैधता की अवधि सहित जिले में खनन पट्टों की सूची ;
- (4) पिछले तीन वर्ष में प्राप्त स्वामित्व या राजस्व के ब्यौरे ;
- (5) पिछले तीन वर्ष के दौरान बालू या रेत या गौण खनिज के उत्पादन के ब्यौरे ;
- (6) जिले की नदियों में तलछट के जमा होने की प्रक्रिया ;
- (7) जिले का साधारण प्रोफाइल ;
- (8) जिले में भू उपयोग का पैटर्न : वन, कृषि, उद्यान कृषि, खनन आदि ;
- (9) जिले की भूगर्भीय स्थिति ;
- (10) मासवार वर्षा ;
- (11) भूगर्भ और खनीज संपदा ।

पूर्वोक्त के अतिरिक्त रिपोर्ट में निम्नलिखित अंतर्विष्ट होंगे :

- (क) जिलावार नदी या धारा और अन्य रेत के स्रोत के ब्यौरे ;
- (ख) जिलावार रेत या कंकड़ या समग्र संसाधनों की उपलब्धता ;
- (ग) जिलावार विद्यमान रेत के खनन पट्टों के ब्यौरे और समग्र ।

जिला पर्यावरण संघात निर्धारण प्राधिकरण द्वारा भूविज्ञान विभाग या सिंचाई विभाग या वन विभाग या लोक निर्माण विभाग या भू-जल बोर्ड या सुदूर संवेदन विभाग या खनन विभाग आदि की सहायता से जिले में सर्वेक्षण किया जाएगा ।

मुख्य नदियों के विवरण सहित निकासी प्रणाली

क्रम सं.	नदी का नाम	निष्कासन क्षेत्र (वर्ग किलोमीटर)	जिले में प्रतिशत निष्कासित क्षेत्र
(1)			
(2)			

महत्वपूर्ण नदियों और धाराओं की मुख्य विशेषताएं :

क्रम सं.	नदी या धारा का नाम	जिले में कुल लंबाई (किलोमीटर में)	उद्भव का स्थान	उद्भव के स्थान पर ऊंचाई
(1)				
(2)				

खनिज छूट के लिए सिफारिश किया गया नदी या धारा का भाग	खनिज छूट के लिए सिफारिश किए गए क्षेत्र की लंबाई (किलोमीटर में)	खनिज छूट के लिए सिफारिश किए गए क्षेत्र की औसत चौड़ाई (मीटर में)	खनिज छूट के लिए सिफारिश किया गया क्षेत्र (वर्ग मीटर में)	खनन योग्य खनिज क्षमता (मीट्रिक टन में) (कुल खनिज क्षमता का 60 प्रतिशत)

खनिज क्षमता

बोल्डर (मीट्रिक टन)	रेत (मीट्रिक टन)	बालू (मीट्रिक टन)	कुल खनन योग्य खनिज क्षमता (मीट्रिक टन)

वार्षिक जमाव

क्रम सं.	नदी या धारा	खनिज छूट के लिए सिफारिश किया गया नदी या धारा का भाग	खनिज छूट के लिए सिफारिश किए गए क्षेत्र की लंबाई (किलोमीटर में)	खनिज छूट के लिए सिफारिश किए गए क्षेत्र की औसत चौड़ाई (मीटर में)	खनिज छूट के लिए सिफारिश किया गया क्षेत्र (वर्ग मीटर में)	खनन योग्य खनिज क्षमता (मीट्रिक टन में) (कुल खनिज क्षमता का 60 प्रतिशत)
(1)						
(2)						
जिले के लिए योग						

उप प्रभागीय समिति, जो (i) उप प्रभागीय मजिस्ट्रेट (ii) निम्नलिखित विभागों के अधिकारियों (क) सिंचाई विभाग (ख) राज्य प्रदूषण नियंत्रण बोर्ड या समिति (ग) वन विभाग (घ) भू-विज्ञान या खनन अधिकारी से मिलकर बनेगी, खनन के लिए उपयुक्तता या खनन को प्रतिषिद्ध करने के लिए प्रत्येक स्थान का, जिसके लिए पर्यावरण निकासी का आवेदन किया गया है, भ्रमण करेगी।

खनन क्षमता की संगणना करने के लिए अंगीकृत विधि :

खनन क्षमता की संगणना स्थान की जांच और नदी या धारा के आवाह क्षेत्र के भू-विज्ञान के आधार पर की जाएगी। स्थल स्थिति और अवस्थिति, खनन योग्य खनिजों को परिभाषित किया जाएगा। किसी नदी या धारा में खनिजों के खनन का विनिश्चय भू-आकृति विज्ञान और अन्य कारकों के आधार पर किया जा सकता है, यह किसी विशिष्ट नदी या धारा के क्षेत्र का 50 से 60 प्रतिशत हो सकता है। उदाहरणार्थ कुछ पहाड़ी राज्यों में खनिज संघटक, जैसे बोल्डर, नदी से उत्पन्न रेत, बालू को एक मीटर तक संसाधन खनिज माना जाता है। अन्य संघटक जैसे कले और तलछट को किसी विशिष्ट नदी या धारा की खनिज क्षमता की संगणना करते समय अपशिष्ट माना जाता है।

जिला सर्वेक्षण रिपोर्ट जिले में तैयार की जाएगी और उसके प्रारूप को पब्लिक डोमेन में कलेक्टर के कार्यालय में

उसकी एक प्रति रखकर रखा जाएगा तथा उसे 21 दिन के लिए जिले की वेबसाइट पर भी पोस्ट किया जाएगा। प्राप्त टिप्पणियों पर विचार किया जाएगा तथा यदि सही पाया जाता है तो जिला पर्यावरण संघात निर्धारण प्राधिकरण द्वारा छह मास के भीतर तैयार की जाने वाली अंतिम रिपोर्ट में उसे सम्मिलित किया जाएगा।

जिला सर्वेक्षण रिपोर्ट पर्यावरण निकासी, रिपोर्टों और मूल्यांकन परियोजनाओं को तैयार करने का आधार बनेगी। रिपोर्ट को प्रत्येक पांच वर्ष में एक बार अद्यतन किया जाएगा।

II. बालू खनन या नदी तल खनन से भिन्न गौण खनिजों के लिए जिला सर्वेक्षण रिपोर्ट तैयार करने की प्रक्रिया

जिला सर्वेक्षण रिपोर्ट को जिले में प्रत्येक गौण खनिज के लिए पृथक् रूप से तैयार किया जाएगा और उसके ड्राफ्ट को पब्लिक डोमेन में कलेक्टर के कार्यालय में उसकी एक प्रति रखकर रखा जाएगा तथा उसे 21 दिन के लिए जिले की वेबसाइट पर भी पोस्ट किया जाएगा। प्राप्त टिप्पणियों पर विचार किया जाएगा तथा यदि सही पाया जाता है तो जिला पर्यावरण संघात निर्धारण प्राधिकरण द्वारा छह मास के भीतर तैयार की जाने वाली अंतिम रिपोर्ट में उसे सम्मिलित किया जाएगा।

बालू खनन या नदी तल खनन से भिन्न गौण खनिजों के लिए जिला सर्वेक्षण रिपोर्ट नीचे वर्णित संघटकों के अनुसार होगी :--

बालू खनन या नदी तल खनन से भिन्न गौण खनिजों के लिए जिला सर्वेक्षण रिपोर्ट तैयार करने का प्रारूप

- (1) प्रस्तावना ;
- (2) जिले में खनन कार्यकलापों का विहंगावलोकन ;
- (3) जिले का साधारण प्रोफाइल ;
- (4) जिले की भूगर्भीय स्थिति ;
- (5) सिंचाई निष्कासन पैटर्न ;
- (6) जिले में भू उपयोग का पैटर्न : वन, कृषि, उद्यान कृषि, खनन आदि ;
- (7) जिले में सतह जल और भूमिगत जल का परिदृश्य ;
- (8) जिले में वर्षा वृत्ति और जलवायु स्थिति ;
- (9) निम्नलिखित प्रारूप के अनुसार जिले में खनन पट्टों के ब्यौरे :--

क्रम सं.	खनिज का नाम	पट्टेदार का नाम	पट्टेदार का नाम और संपर्क संख्या	खनन पट्टा अनुदान आदेश संख्या एवं तारीख	खनन पट्टे का क्षेत्र (हेक्टेयर में)	खनन पट्टे की अवधि (प्रारंभिक)		खनन पट्टे की अवधि (पहला/दूसरा नवीकरण)	
						से	तक	से	तक
1	2	3	4	5	6	7	8	9	10

खनन प्रचालन के प्रारंभ होने की तारीख	प्रास्थिति (कार्यशील/गैर-कार्यशील पारेषण आदि के लिए स्थायी रूप से कार्यशील)	कैप्टिव/गैर-कैप्टिव	पर्यावरणीय निकासी अभिप्राप्त (हां/नहीं) यदि हां तो पर्यावरण निकासी अनुदत्त करने की तारीख सहित पत्र संख्या	खनन पट्टे की अवस्थिति (अक्षांश देशांतर) एवं	खनन की विधि (खुली/भूमिगत)
11	12	13	14	15	16

- (10) पिछले तीन वर्ष के दौरान प्राप्त स्वामिस्व या राजस्व
 (11) पिछले तीन वर्ष के दौरान उत्पादन किए गए गौण खनिज के व्यौरे
 (12) जिले का खनिज मानचित्र
 (13) निम्नलिखित प्ररूप के अनुसार जिले में आशय पत्र के धारकों की उसकी वैधता सहित सूची :--

क्रम सं.	खनिज का नाम	पट्टेदार का नाम	आशय पत्र धारक का पता एवं संपर्क संख्या	आशय पत्र आदेश की संख्या एवं तारीख	आबंटित किए जाने वाले खनन पट्टे का क्षेत्र	आशय पत्र की वैधता	उपयोग (कैप्टिव/ गैर-कैप्टिव)	खनन पट्टे की अवस्थिति (अक्षांश एवं देशांतर)
1	2	3	4	5	6	7	8	9

- (14) जिले में उपलब्ध कुल खनिज भंडार ;
 (15) जिले में उपलब्ध खनिज की क्वालिटी / ग्रेड ;
 (16) खनिज का उपयोग ;
 (17) पिछले तीन वर्षों के दौरान खनिज की मांग और पूर्ति ;
 (18) जिले के मानचित्र पर चिह्नांकित खनिज पट्टे ;
 (19) उस क्षेत्र के व्यौरे, जहां खनिज पट्टों का समूह है, अर्थात् खनिज पट्टों की संख्या, अवस्थिति (अक्षांश और देशांतर) ;
 (20) जिले में पारिस्थितिकी संवेदनशील क्षेत्र, यदि कोई हो ;
 (21) पर्यावरण (वायु, जल, ध्वनि, मृदा, वनस्पति और प्राणी, भू-उपयोग, कृषि, वन आदि) पर खनन कार्यकलाप का संघात ;
 (22) पर्यावरण पर खनन संघात को कम करने के लिए उपचारात्मक उपाय ;
 (23) खनन किए गए क्षेत्र को पुनः प्राप्त करना (जिले में नियमों और विनियम, प्रस्तावित पुनः प्राप्ति योजना के अनुसार) सर्वोत्तम व्यवहार को पहले ही कार्यान्वित किया गया है ;
 (24) जोखिम निर्धारण एवं आपदा प्रबंधन योजना ;
 (25) जिले में व्यवसायिक सुरक्षा मुद्दों के व्यौरे (सिलिकोसिस एवं तपेदिक के रोगियों के पिछले पांच वर्ष के डाटा को प्रस्तुत करने की आवश्यकता है) ;
 (26) जिले में पहले ही अनुदत्त पट्टों के संबंध में पौधा रोपण और हरित पट्टी विकास ;
 (27) कोई अन्य सूचना ।

जिला पर्यावरण संघात निर्धारण प्राधिकरण (डीईआईए) जिले में गौण खनिज की किस्म की प्रकृति के आधार पर संबंधित राज्य सरकार के खनिज और भू-विज्ञान विभाग के परामर्श से जिला सर्वेक्षण रिपोर्ट में अतिरिक्त मानकों को सम्मिलित कर सकेगी ।

जिला सर्वेक्षण रिपोर्ट पर्यावरणीय निकासी, रिपोर्टों को तैयार करने और परियोजनाओं के मूल्यांकन के लिए आधार होगी । रिपोर्ट को प्रत्येक पांच वर्ष में एक बार अद्यतन किया जाएगा ।”

[फा. सं. एल-11011/26/2018-आईए-II(एम)]

ज्ञानेश भारती, संयुक्त सचिव

टिप्पण : मूल अधिसूचना भारत के राजपत्र, असाधारण, भाग II, खंड 3, उप-खंड (ii) में सं. का.आ. 1533(अ) तारीख 14 सितंबर 2006 द्वारा प्रकाशित की गई थी और तत्पश्चात् उसे निम्नानुसार संशोधित किया गया :--

1. का. आ. 1949 (अ), तारीख 13 नवंबर, 2006;
2. का. आ. 1737 (अ), तारीख 11 अक्टूबर, 2007;
3. का. आ. 3067 (अ), तारीख 1 दिसंबर, 2009;
4. का. आ. 695 (अ), तारीख 4 अप्रैल, 2011;
5. का. आ. 156 (अ), तारीख 25 जनवरी, 2012;
6. का. आ. 2896 (अ), तारीख 13 दिसंबर, 2012;
7. का. आ. 674 (अ), तारीख 13 मार्च, 2013;
8. का. आ. 2204 (अ), तारीख 19 जुलाई 2013;
9. का. आ. 2555 (अ), तारीख 21 अगस्त, 2013 ;
10. का. आ. 2559 (अ), तारीख 22 अगस्त, 2013;
11. का. आ. 2731 (अ), तारीख 9 सितंबर, 2013;
12. का. आ. 562 (अ), तारीख 26 फरवरी, 2014;
13. का. आ. 637 (अ), तारीख 28 फरवरी, 2014;
14. का. आ. 1599 (अ), तारीख 25 जून, 2014;
15. का. आ. 2601 (अ), तारीख 7 अक्टूबर, 2014;
16. का. आ. 2600 (अ), तारीख 9 अक्टूबर, 2014;
17. का. आ. 3252 (अ), तारीख 22 दिसंबर, 2014;
18. का. आ. 382 (अ), तारीख 3 फरवरी, 2015;
19. का. आ. 811 (अ), तारीख 23 मार्च, 2015;
20. का. आ. 996 (अ), तारीख 10 अप्रैल, 2015;
21. का. आ. 1142 (अ), तारीख 17 अप्रैल, 2015;
22. का. आ. 1141 (अ), तारीख 29 अप्रैल, 2015;
23. का. आ. 1834 (अ), तारीख 6 जुलाई, 2015;
24. का. आ. 2571 (अ), तारीख 31 अगस्त, 2015;
25. का. आ. 2572 (अ), तारीख 14 सितंबर, 2015;
26. का. आ. 141 (अ), तारीख 15 जनवरी, 2016;
27. का. आ. 648 (अ), तारीख 3 मार्च, 2016;
28. का. आ. 2269 (अ) तारीख 1 जुलाई, 2016;
29. का. आ. 2944 (अ), तारीख 14 सितंबर, 2016;
30. का. आ. 3518 (अ) तारीख 23 नवंबर 2016;
31. का. आ. 3999 दिसंबर (अ) तारीख 9 दिसंबर, 2016; और
32. का. आ. 4241 (अ) तारीख 30 दिसंबर, 2016

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE**NOTIFICATION**

New Delhi, the 25th July, 2018

S.O. 3611(E).—Whereas by notification of the Government of India in the erstwhile Ministry of Environment and Forest issued *vide* number S.O. 1533(E), dated the 14th September, 2006 published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) (hereinafter referred to as the said notification) directions have been given regarding the prior environmental clearance;

And whereas, the Ministry of Environment, Forest and Climate Change has amended the said Notification *vide* S.O. 141 (E) dated 15th January, 2016 wherein the procedure for preparation of District Survey Report for minor mineral has been prescribed;

And whereas, the Hon'ble High Court of Jharkhand at Ranchi in its orders dated the 11th April, 2018 and 19th June, 2018 in W.P. (PIL) No. 1806 of 2015, in the matter of Court on its Own Motion Versus the State of Jharkhand & Others with W.P. (PIL) No. 290 of 2013, in the matter of Hemant Kumar Shilkarwar Versus the State of Jharkhand & Others, has *inter-alia* directed the preparation of District Survey Report for minor minerals other than Sand and Bajri or delegation of the powers for preparation of format of District Survey Report of minor minerals other than sand and bajri to the State Government and/or District Environment Impact Assessment Authority and District Expert Appraisal Committee;

And whereas, the Central Government hereby in the public interest dispense with the requirement of notice under clause (a) of sub-rule (3) of rule 5 of the Environment Protection Rules, 1986,

Now, therefore in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with sub-rule (4) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following further amendments to the notification of the Government of India, in the erstwhile Ministry of Environment and Forests *vide* number S.O. 1533(E), dated the 14th September, 2006, namely: –

In the said notification, for Appendix X, the following shall be substituted, namely: -

“APPENDIX - X**[See paragraph 7 (iii) (a)]**

**I. PROCEDURE FOR PREPARATION OF DISTRICT SURVEY REPORT FOR SAND
MINING OR RIVER BED MINING**

The main objective of the preparation of District Survey Report (as per the Sustainable Sand Mining Guideline) is to ensure the following: -

Identification of areas of aggradations or deposition where mining can be allowed; and identification of areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited and calculation of annual rate of replenishment and allowing time for replenishment after mining in that area.

The report shall have the following structure:

- (1) Introduction;
- (2) overview of Mining Activity in the District;
- (3) the List of Mining Leases in the District with location, area and period of validity;
- (4) details of Royalty or Revenue received in last three years;
- (5) detail of Production of Sand or Bajri or minor mineral in last three years;
- (6) process of Deposition of Sediments in the rivers of the District;
- (7) general Profile of the District;
- (8) land Utilization Pattern in the district: Forest, Agriculture, Horticulture, Mining etc.;
- (9) physiography of the District;

- (10) rainfall: month-wise;
- (11) geology and Mineral Wealth.

In addition to the above, the report shall contain the following:

- (a) District wise detail of river or stream and other sand source;
- (b) District wise availability of sand or gravel or aggregate resources;
- (c) District wise detail of existing mining leases of sand and aggregates.

A survey shall be carried out by the District Environment Impact Assessment Authority with the assistance of Geology Department or Irrigation Department or Forest Department or Public Works Department or Ground Water Boards or Remote Sensing Department or Mining Department etc. in the district.

Drainage system with description of main rivers

S. No.	Name of the River	Area drained (Sq. Km)	% Area drained in the District
(1)			
(2)			

Salient Features of Important Rivers and Streams:

S. No.	Name of the River or Stream	Total Length in the District (in Km)	Place of origin	Altitude at Origin
(1)				
(2)				

Portion of the River or Stream Recommended for Mineral Concession	Length of area recommended for mineral concession (in kilometer)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable mineral potential (in metric tonne) (60% of total mineral potential)

Mineral Potential

Boulder (MT)	Bajari (MT)	Sand (MT)	Total Mineable Mineral Potential (MT)

Annual Deposition

S. No.	River or Stream	Portion of the river or stream recommended for mineral concession	Length of area recommended for mineral concession (in kilometer)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable mineral potential (in metric tonne) (60% of total mineral potential)
(1)						
(2)						
Total for the District						

A Sub-Divisional Committee comprising of (i) Sub-Divisional Magistrate, (ii) Officers from (a) Irrigation department, (b) State Pollution Control Board or Committee, (c) Forest department, (d) Geology or mining officer shall visit each site for which environmental clearance has been applied for and make recommendation on suitability of site for mining or prohibition thereof.

Methodology adopted for calculation of Mineral Potential:

The mineral potential is calculated based on field investigation and geology of the catchment area of the river or streams. As per the site conditions and location, depth of minable mineral is defined. The area for removal of the mineral in a river or stream can be decided depending on geo-morphology and other factors, it can be 50 % to 60 % of the area of a particular river or stream. For Example, in some hill States mineral constituents like boulders, river born Bajri, sand up to a depth of one meter are considered as resource mineral. Other constituents like clay and silt are excluded as waste while calculating the mineral potential of particular river or stream.

The District Survey Report shall be prepared in the district and its draft shall be placed in the public domain by keeping its copy in Collectorate and posting it on the district's website for twenty-one days. The comments received shall be considered and if found correct, shall be incorporated in the final Report to be finalised within six months by the District Environment Impact Assessment Authority.

The District Survey Report shall form the basis for application for environmental clearance, preparation of reports and appraisal of projects. The Report shall be updated once every five years.

II. PROCEDURE FOR PREPARATION OF DISTRICT SURVEY REPORT OF MINOR MINERALS OTHER THAN SAND MINING OR RIVER BED MINING

The District Survey Report shall be prepared for each minor mineral in the district separately and its draft shall be placed in the public domain by keeping its copy in Collectorate and posting it on district's website for twenty-one days. The comments received shall be considered and if found fit, shall be incorporated in the final Report to be finalised within six months by the DEIAA.

The District Survey Report for minor minerals other than sand mining or River bed mining shall be as per structure mentioned below: -

FORMAT FOR PREPARATION OF DISTRICT SURVEY REPORT FOR MINOR MINERALS OTHER THAN SAND MINING OR RIVER BED MINING

- (1) Introduction;
- (2) overview of Mining Activity in the District;
- (3) general Profile of the District;
- (4) geology of the District;
- (5) drainage of Irrigation pattern;
- (6) land Utilisation Pattern in the District: Forest, Agricultural, Horticultural, Mining etc.;
- (7) surface Water and Ground Water scenario of the district;

(8) rainfall of the district and climatic condition;

(9) details of the mining leases in the District as per the following format: -

Sl. No.	Name of the Mineral	Name of the Lessee	Address & Contact No. of Lessee	Mining lease Grant Order No. & date	Area of Mining lease (ha)	Period of Mining lease (Initial)		Period of Mining lease (1 st /2 nd ...renewal)	
						From	To	Form	To
1	2	3	4	5	6	7	8	9	10

Date of commencement of Mining Operation	Status (Working/Non-Working/Temp. Working for dispatch etc.)	Captive/ Non-Captive	Obtained Environmental Clearance (Yes/No), If Yes Letter No with date of grant of EC.	Location of the Mining lease (Latitude & Longitude)	Method of Mining (Opencast/Underground)
11	12	13	14	15	16

(10) details of Royalty or Revenue received in last three years;

(11) details of Production of Minor Mineral in last three years;

(12) mineral Map of the District;

(13) list of Letter of Intent (LOI) Holders in the District along with its validity as per the following format :-

(14) total Mineral Reserve available in the District;

Sl. No.	Name of the Mineral	Name of the Lessee	Address & Contact No. of Letter of Intent Holder	Letter of Intent Grant Order No. & date	Area of Mining lease to be allotted	Validity of LoI	Use (Captive/ Non-Captive)	Location of the Mining lease (Latitude & Longitude)
1	2	3	4	5	6	7	8	9

(15) quality /Grade of Mineral available in the District;

(16) use of Mineral;

(17) demand and Supply of the Mineral in the last three years;

(18) mining leases marked on the map of the district;

(19) details of the area of where there is a cluster of mining leases viz. number of mining leases, location (latitude and longitude);

(20) details of Eco-Sensitive Area, if any, in the District;

- (21) impact on the Environment (Air, Water, Noise, Soil, Flora & Fauna, land use, agriculture, forest etc.) due to mining activity;
- (22) remedial Measures to mitigate the impact of mining on the Environment;
- (23) reclamation of Mined out area (best practice already implemented in the district, requirement as per rules and regulation, proposed reclamation plan);
- (24) risk Assessment & Disaster Management Plan;
- (25) details of the Occupational Health issues in the District. (Last five-year data of number of patients of Silicosis & Tuberculosis is also needs to be submitted);
- (26) plantation and Green Belt development in respect of leases already granted in the District;
- (27) any other information.

The District Environment Impact Assessment Authority (DEIAA) based on the nature and type of minor mineral in the District may include the additional parameters in the District Survey Report in consultation with the Department of Mines and Geology of the concerned State Government.

The District Survey Report shall form the basis for application for environmental clearance, preparation of reports and appraisal of projects. The Report shall be updated once every five years”;

[F.No. L-11011/26/2018-IA-II (M)]

GYANESH BHARTI, Jt. Secy.

Note : The principal notification was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) *vide* number S.O. 1533 (E), dated the 14th September, 2006 and subsequently amended by :-

1. S.O. 1949 (E), dated the 13th November, 2006;
2. S.O. 1737 (E), dated the 11th October, 2007;
3. S.O. 3067 (E), dated the 1st December, 2009;
4. S.O. 695 (E), dated the 4th April, 2011;
5. S.O. 156 (E), dated the 25th January, 2012;
6. S.O. 2896 (E), dated the 13th December, 2012;
7. S.O. 674 (E), dated the 13th March, 2013;
8. S.O. 2204 (E), dated the 19th July 2013;
9. S.O. 2555 (E), dated the 21st August, 2013;
10. S.O. 2559 (E), dated the 22nd August, 2013;
11. S.O. 2731 (E), dated the 9th September, 2013;
12. S.O. 562 (E), dated the 26th February, 2014;
13. S.O. 637 (E), dated the 28th February, 2014;
14. S.O. 1599 (E), dated the 25th June, 2014;
15. S.O. 2601 (E), dated the 7th October, 2014;
16. S.O. 2600 (E), dated the 9th October, 2014;
17. S.O. 3252 (E), dated the 22nd December, 2014;
18. S.O. 382 (E), dated the 3rd February, 2015;
19. S.O. 811 (E), dated the 23rd March, 2015;
20. S.O. 996 (E), dated the 10th April, 2015;

21. S.O. 1142 (E), dated the 17th April, 2015;
22. S.O. 1141 (E), dated the 29th April, 2015;
23. S.O. 1834 (E), dated the 6th July, 2015;
24. S.O. 2571 (E), dated the 31st August, 2015;
25. S.O. 2572 (E), dated the 14th September, 2015;
26. S.O.141 (E), dated the 15th January, 2016;
27. S.O.648 (E), dated the 3rd March, 2016;
28. S.O. 2269 (E) dated the 1st July, 2016;
29. S.O. 2944 (E) dated the 14th September, 2016;
30. S.O. 3518 (E) dated the 23rd November 2016;
31. S.O. 3999 (E) dated the 9th December, 2016; and
32. S.O. 4241 (E) dated the 30th December, 2016.

ANNEXURE-3

Sustainable Sand Mining Management Guidelines – 2016 published by Ministry of Environment, Forest and Climate Change



SUSTAINABLE SAND MINING MANAGEMENT GUIDELINES 2016



पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय

इंदिरा पर्यावरण भवन, जोर बाग रोड, नई दिल्ली-110 003

Ministry of Environment, Forest and Climate Change

Indira Paryavaran Bhavan, Jor Bagh Road, New Delhi - 110 003

www.moef.nic.in

Acknowledgment

The Sustainable Sand Mining Management Guidelines 2016, has been prepared after extensive consultation with the States and stakeholders over a period of last one year. The Guideline assimilates the knowledge and experience of stakeholder. The main objective of the Guidelines is to ensure sustainable sand mining and environment friendly management practices in order to restore and maintain the ecology of river and other sand sources. The team of the officers of Ministry of Environment, Forest and Climate Change who have worked for preparing these Guidelines comprised of following:

1. Shri Manoj Kumar Singh, Joint Secretary
2. Dr. U. Sridharan, Scientist 'F'
3. Dr. R.B. Lal, Scientist 'D'
4. Dr. Sonu Singh, Scientist 'D'



SUSTAINABLE SAND MINING MANAGEMENT GUIDELINES

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प्रकाश जावडेकर
Prakash Javadekar



सत्यमेव जयते

राज्य मंत्री (स्वतंत्र प्रभार)
MINISTER OF STATE (INDEPENDENT CHARGE)
पर्यावरण, वन एवं जलवायु परिवर्तन
ENVIRONMENT, FOREST & CLIMATE CHANGE
भारत सरकार / GOVERNMENT OF INDIA



FOREWORD

Environmental Protection and Sustainable Development have been the cornerstones of the policies and procedures governing the industrial and other developmental activities in India. The Ministry of Environment, Forest and Climate Change has taken several policy initiatives and enacted environmental and pollution control legislations to prevent indiscriminate exploitation of natural resources and to promote integration of environmental concerns in developmental projects. One such initiative is the Notification on Environmental Impact Assessment (EIA) of developmental projects issued on 14th September, 2006 under the provisions of Environment (Protection) Act, 1986, making EIA mandatory for certain categories of developmental projects.

Another landmark decision has been taken with the new notifications dated 15.01.2016 and 20.01.2016 on mining of minor minerals and constitution of District Level Environment Impact Assessment Authority and District Level Environment Appraisal Committee. This will ensure environmentally sustainable mining especially for sand and gravel under close supervision of district authorities. Use of information technology and information technology enabled services for scientific monitoring of mining and transportation of mined out material is another important feature of above notification.

Sand and gravel are one of the most important construction materials. Ensuring their availability is vital for the development of the infrastructure in the country. There are different sources of sand and gravel, the most important among them is the river. As the requirement of these construction materials is on rise, they also are very vital for the health, physical character of the river and the different important functions of the river. The extraction of sand and gravel from the river bodies has to be regulated and done with adoption of required environmental safeguards.

In view of evolving scenario in industry and development sector, My Ministry has prepared a "Sustainable Sand Mining Management Guidelines". The Guidelines inter-alia focus on preparation of District Survey Report; Management Plan; Marine Sand Mining and Impact on Marine Biodiversity; Issues and Management of Mining in Cluster; Management of Sand Deposited after Flood on Agricultural Field of Farmers; Mining of Sand from Agricultural Field; Monitoring System for Sustainable Sand Mining using Information Technology System; Creation of District Level Environment Impact Assessment Authority (DEIAA) and District Level Expert Appraisal Committee (DEAC) for granting Environment Clearance for Mining of Minor Minerals; Exemption of certain cases for requirement of Environment Clearance and Standard Environmental Conditions for Sustainable Sand Mining.

The Guidelines will help the Departments of Mines and Geology, State Pollution Control Boards/Committees, Industries, Regulatory Authorities and various Stakeholders to ensure environmentally sustainable mining in the Country.


(Prakash Javadekar)

Paryavaran Bhawan, Jor Bagh Road, New Delhi-110 003
Tel.: 011-24695136, 24695132, Fax : 011-24695329

 www.youtube.com/prakashjavadekar  www.facebook.com/prakashjavadekar
 www.twitter.com/prakashjavadekar e-mail : mefcc@gov.in
website : www.prakashjavadekar.com





अशोक लवासा
ASHOK LAVASA, IAS



सचिव
भारत सरकार
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Secretary
Government of India
Ministry of Environment, Forest and Climate Change



PREFACE

Sand is naturally occurring granular material composed of finely divided rock and mineral particles. Sand and gravel together known as aggregate, represent the highest volume of raw material used on earth. The mining of aggregate has been continuing for many years. Now the mining of aggregates has reached a level threatening the environment and ecosystem besides also reaching a level of scarcity that would threaten the economy. It is recommended that sand and aggregate mining, and quarrying should be done only after sound scientific assessment and adopting best practices to limit the impact on the environment.

The main objectives of the Guidelines, inter-alia, includes to ensure that sand and gravel mining is done in environmentally sustainable and socially responsible manner; availability of adequate quantity of aggregate in sustainable manner; improve the effectiveness of monitoring of mining and transportation of mined out material; conservation of the river equilibrium and its natural environment by protection and restoration of the ecological system; avoid aggradation at the downstream reach especially those with hydraulic structures such as jetties, water intakes etc.; to ensure the rivers are protected from bank and bed erosion beyond its stable profile; no obstruction to the river flow, water transport and restoring the riparian rights and in-stream habitats; to avoid pollution of river water leading to water quality deterioration; to prevent depletion of ground water reserves due to excessive draining out of ground water; and streamlining the process for grant of environmental clearance (EC) for sustainable mining.

The recommendations for management of sustainable sand extraction are the key objectives of the Guidelines. Emphasis is given to the setting up of monitoring plans that will provide data on profile changes and sediment transport capacity to enable the authorities to evaluate the long-term effect of the mining activities both upstream and downstream of sand extraction sites. Special emphasis is given on monitoring of the mined out material, which is key to the success of environment management plan. So use of IT and IT enabled services for effective monitoring of the quantity of mined out material and transportation along with process reengineering has been made a part of the Guideline. The Guidelines propose delegation of responsibility and authority to the cutting edge level i.e. the District Environment Impact Assessment Authority along with streamlining the process of impact assessment, environment management plan and environment clearance in cluster situation.



New Delhi
Date: 15-03-2016

Ashok Lavasa
(Ashok Lavasa)

इंदिरा पर्यावरण भवन, जोर बाग रोड, नई दिल्ली-110 003 फोन : (011) 24695262, 24695265, फैक्स : (011) 24695270
INDIRA PARYAVARAN BHAWAN, JOR BAGH ROAD, NEW DELHI-110 003 Ph. : (011) 24695262, 24695265, Fax : (011) 24695270
E-mail : secy-moef@nic.in, alavasa@nic.in, Website : moef.gov.in





EXECUTIVE SUMMARY

The sand and gravel are one of the most important construction materials. Ensuring their availability is vital for the development of the infrastructure in the country. There are different sources of sand and gravel, the most important among them is the river. As the requirement of these construction materials is on rise, they also are very vital for the health, physical character of the river and the different important functions of the river. The extraction of sand and gravel from the river bodies has to be regulated and done with adoption of required environmental safeguards.

For making available these resources, a mapping of these resources at the district level, identification of appropriate sites for extraction, appraisal of the extraction process, putting in place the required environmental safeguards, and rigorous monitoring of the volume of extracted material is required to ensure sustainability of the entire process.

The district is the unit of administration which is best placed to do the mapping of these resources, adopt the best environmental practices for extraction of these materials and monitor its extraction and movement. The large number of leases which are awarded, the scattered geographical location of the availability of these materials and decentralized requirement and usage of the sand and aggregates also places districts in a unique position to play a vital role in adoption of environmental safeguards needed for sustainable extraction of river sand and gravel.

Recommendations for management of sustainable sand extraction are the key objective of the Guidelines. Emphasis is given to the setting up of monitoring plans that will provide data on profile changes and sediment transport capacity to enable the authorities to evaluate the long-term effect of the mining activities both upstream and downstream of sand extraction sites.

Special emphasis is given on monitoring of the mined out material, which is key to the success of environment management plan. So use of IT and IT enabled services for effective monitoring of the quantity of mined out material and transportation along with process reengineering has been made a part of the Guideliness. The Guidelines proposes delegation of responsibility and authority to the cutting edge level i.e. the District Environment Impact Assessment Authority along with streamlining the process of impact assessment, environment management plan and environment clearance in cluster situation.

Promotion of manufactured sand, artificial sand and alternative technologies in construction materials and processes are also required for reducing the dependence and demand on naturally occurring sand and gravel. Development of slag sand, sand from stone chips and there certification under BIS is an important step in this direction.



INTRODUCTION

Sustainable Development is built on three pillars - environmental, social and economic. Sustainable development cannot be achieved if the environment is protected but poverty is prevalent in a significant part of the population. Similarly, sustainable development cannot be achieved through inappropriate economic growth, if it undermines the environment in which people and businesses exist. These Guidelines support that fundamental concept, promoting environmental protection, limiting negative physiological, hydrological and social impacts underpinning sustainable economic growth.

Sand and gravel have long been used as aggregate for construction of roads and building. Today, the demand for these materials continues to rise. In India, the main sources of sand are river flood plain, coastal sand, paleo channel sand, and sand from agricultural fields.

River sand mining is a common practice as habitation concentrates along the rivers and the mining locations are preferred near the markets or along the transportation route, for reducing the transportation cost. River sand mining can damage private and public properties as well as aquatic habitats. Excessive removal of sand may significantly distort the natural equilibrium of a stream channel.

Removing sediment from the active channel bed in river interrupts the continuity of sediment transport through the river system, disrupting the sediment mass balance in the river downstream and induces channel adjustments (usually incision) extending considerable distances (commonly one kilometer or more) beyond the extraction site.

The magnitude of the impact basically depends on the magnitudes of the extraction relative to bed load sediment supply and transport through the reach. Implementation of the principles and processes outlined in this Guidelines will limit the negative externalities of sand and gravel mining.



NEED FOR POLICY GUIDELINES

Sand is naturally occurring granular material composed of finely divided rock and mineral particles between 150 micron to 4.75 mm in diameter (IS 383-1970). Sand is formed due to weathering of rocks due to mechanical forces. In the process the weathered rocks forms gravel and then sand.

Sand and gravel together known as aggregate, represent the highest volume of raw material used on earth after water. The mining of aggregate has been continuing for many years. Now the mining of aggregates has reached a level threatening the environment and ecosystem besides also reaching a level of scarcity that would threaten the economy. It is recommended that sand & aggregate mining, and quarrying should be done only after sound scientific assessment and adopting best practices to limit the impact on the environment.

It is also felt that the greater use of substitute material (Manufactured Sand, artificial sand etc.) & construction technology, and sustainable use of the resource could drastically reduce adverse impact of mining on the environment.

OBJECTIVE OF THE GUIDELINES

The Guideliness has been based on the following principles:

- Uncontrolled sand mining is not sustainable.
- Compliance with present and future legislation and regulations on the subject is mandatory and not voluntary.
- Each lease holder should be given the opportunity to self-regulate to the extent that it can demonstrate compliance with legislation and regulations.
- Where self- regulation fails to deliver compliance with legislation and regulations, increased formal enforcement and monitoring should be implemented with punitive measures applied in line with the legal framework.
- There is a need to protect the environment and the right of the population to live in clean and safe surroundings, with the need to use natural resources in a way that will make a positive and sustainable contribution to the economy.

The main objectives of the Guidelines

- To ensure that sand and gravel mining is done in environmentally sustainable and socially responsible manner.
- To ensure availability of adequate quantity of aggregate in sustainable manner.
- To improve the effectiveness of monitoring of mining and transportation of mined out material.



- Ensure conservation of the river equilibrium and its natural environment by protection and restoration of the ecological system.
- Avoid aggradation at the downstream reach especially those with hydraulic structures such as jetties, water intakes etc.
- Ensure that the rivers are protected from bank and bed erosion beyond its stable profile.
- No obstruction to the river flow, water transport and restoring the riparian rights and in-stream habitats.
- Avoid pollution of river water leading to water quality deterioration.
- To prevent depletion of ground water reserves due to excessive draining out of ground water.
- To prevent ground water pollution by prohibiting sand mining on fissures where it works as filter prior to ground water recharge.
- To maintain the river equilibrium with the application of sediment transport principles in determining the locations, period and quantity to be extracted.
- Streamlining and simplifying the process for grant of environmental clearance (EC) for sustainable mining.



THE EFFECT OF SAND AND GRAVEL MINING

Mining within or near riverbed has a direct impact on the stream's physical characteristics, such as channel geometry, bed elevation, substratum composition and stability, in-stream roughness of the bed, flow velocity, discharge capacity, sediment transport capacity, turbidity, temperature etc. Alteration or modification of the above attributes may cause hazardous impact on ecological equilibrium of riverine regime. This may also cause adverse impact on in-stream biota and riparian habitats. This disturbance may also cause changes in channel configuration and flow-paths.

The effects of sand and gravel mining are as follows:

- a) Extraction of bed material in excess of replenishment by transport from upstream causes the bed to lower (degrade) upstream and downstream of the site of removal.
- b) In-stream habitat is impacted by increase in river gradient, suspended load, sediment transport and sediment deposition. Excessive sediment deposition for replenishment increases turbidity which prevents penetration of light required for photosynthesis and reduces food availability of aquatic fauna.
- c) Riparian habitat including vegetative cover on and adjacent to the river banks it controls erosion, provide nutrient inputs into the stream and prevents intrusion of pollutants in the stream through runoff. Bank erosion and change of morphology of the river can destroy the riparian vegetative cover.
- d) Bed degradation are responsible for channel shifting, causing loss of properties and degradation of landscape, it can also undermine bridge supports, pipe lines or other structures.
- e) Degradation may change the morphology of the river bed, which constitutes one aspect of the aquatic habitat.
- f) Degradation can deplete the entire depth of gravelly bed material, exposing other substrates that may underlie the gravel, which could in turn affect the quality of aquatic habitat. Lowering of ground water table in the flood plain because of lowering of riverbed level as well as river water level takes place because of extraction and draining out of excessive ground water from the adjacent areas. So, if a floodplain aquifer drains to the stream, groundwater levels can be lowered as a result of bed degradation.
- g) Lowering of the water table can destroy riparian vegetation.
- h) Excessive pumping of ground water in the process of mining in abandoned channels depletes ground water causing scarcity of irrigation and drinking water. In extreme cases it may create ground fissures and subsidence in adjacent areas.
- i) Flooding is reduced as bed elevations and flood heights decrease, reducing hazard for human occupancy of floodplains and the possibility of damage to engineering works.
- j) The supply of overbank sediments to floodplains is reduced as flood heights decrease.
- k) An un-scientific and unregulated sand and gravel mining tends to increase channel bank



scouring and erosion. This causes a large degree of meandering of rivers and sometimes it could be in kms.

- l) Rapid bed degradation may induce bank collapse and erosion by increasing the heights of banks.
- m) Polluting ground water by reducing the thickness of the filter material especially if mining is taking place at top of recharge fissures.
- n) Choking of sand layer which acts as filter for ingress of ground water from river by dumping of finer material, compaction of filter zone due to movement of heavy vehicles. It also reduces the permeability and porosity of the filter material.
- o) Removal of gravel from bars may cause downstream bars to erode if they subsequently receive less bed material than is carried downstream from them by fluvial transport.
- p) Ecological effects on bird nesting, fish migration, angling, etc.
- q) Indiscrete mining activities lead to increased concentration of suspended sediment in the river which in turn causes siltation of water resources projects.
- r) Un-scientific and unregulated sand and gravel mining leads to the severe health hazards like air quality degradation and dust fog.
- s) Direct destruction from heavy equipment operation; discharges from equipment and refueling.
- t) Biosecurity and pest risks.
- u) Impacts on coastal processes.

The other deleterious impacts of indiscrete mining include

Loss of riparian habitat resulting from direct removal of vegetation along the stream bank to facilitate the use of a dragline or through the process of lowering the water table, bank undercutting, and channel incision. The physical composition and stability of substrates are altered as a result of in-stream mining and most of these physical effects may exacerbate sediment entrainment in the channel. Furthermore, the process of in-stream mining and gravel washing produces fine sediments under all flow conditions, resulting in a deposition of fine sediment in riffles as well as other habitats at low discharge. Excess sediment is considered the greatest pollutant in waters and constitutes one of the major environmental factors in the degradation of stream fisheries.

However, in-stream mining may contribute additional sediment to downstream reaches due to the disruption of substrate stability. Once sediment enters the stream, it is best to let natural geomorphological and hydrological processes reach a dynamic equilibrium, rather than further exacerbating the situation by additional disturbance.

**All other things being equal:**

- a) Extracting gravel from an excavation that does not penetrate the water table and is located away from an active stream channel should cause little or no change to the natural hydrological processes unless the stream captures the pit during periods of flooding.
- b) In-stream extraction of gravel from below the water level of a stream generally causes more changes to the natural hydrologic processes than limiting extraction to a reference point above the water level.
- c) In-stream extraction of gravel below the deepest part of the channel (the thalweg) generally causes more changes to the natural hydrological processes than limiting extraction to a reference point above the thalweg.
- d) Excavating sand and gravel from a small straight channel with a narrow floodplain generally will have a greater impact on the natural hydrological processes than excavations on a braided channel with a wide floodplain.
- e) Extracting sand and gravel from a large river or stream will generally create less impact than extracting the same amount of material from a smaller river or stream.
- f) Over-extraction of gravel can destabilise channels and banks, and/or affect the ecologic functioning of rivers particularly if undertaken at the wrong time, or in the wrong place, or in a way that damages the river bed or margins.



GENERAL APPROACH TO SUSTAINABLE SAND AND GRAVEL MINING

Following considerations should be kept in mind for sand / gravel mining:

- a) Parts of the river reach that experience deposition or aggradation shall be identified first. The Lease holder/ Environmental Clearance holder may be allowed to extract the sand and gravel deposit in these locations to manage aggradation problem.
- b) The distance between sites for sand and gravel mining shall depend on the replenishment rate of the river. Sediment rating curve for the potential sites shall be developed and checked against the extracted volumes of sand and gravel.
- c) Sand and gravel may be extracted across the entire active channel during the dry season.
- d) Abandoned stream channels on terrace and inactive floodplains be preferred rather than active channels and their deltas and flood plains. Stream should not be diverted to form inactive channel.
- e) Layers of sand and gravel which could be removed from the river bed shall depend on the width of the river and replenishment rate of the river.
- f) Sand and gravel shall not be allowed to be extracted where erosion may occur, such as at the concave bank.
- g) Segments of braided river system should be used preferably falling within the lateral migration area of the river regime that enhances the feasibility of sediment replenishment.
- h) Sand and gravel shall not be extracted within 200 to 500 meter from any crucial hydraulic structure such as pumping station, water intakes, and bridges. The exact distance should be ascertained by the local authorities based on local situation. The cross-section survey should cover a minimum distance of 1.0 km upstream and 1.0 km downstream of the potential reach for extraction. The sediment sampling should include the bed material and bed material load before, during and after extraction period. Develop a sediment rating curve at the upstream end of the potential reach using the surveyed cross- section. Using the historical or gauged flow rating curve, determine the suitable period of high flow that can replenish the extracted volume. Calculate the extraction volume based on the sediment rating curve and high flow period after determining the allowable mining depth.
- i) Sand and gravel could be extracted from the downstream of the sand bar at river bends. Retaining the upstream one to two thirds of the bar and riparian vegetation is accepted as a method to promote channel stability.



- j) Flood discharge capacity of the river could be maintained in areas where there are significant flood hazard to existing structures or infrastructure. Sand and gravel mining may be allowed to maintain the natural flow capacity based on surveyed cross- section history.
- k) Alternatively, off-channel or floodplain extraction is recommended to allow rivers to replenish the quantity taken out during mining.
- l) The Piedmont Zone (Bhabhar area) particularly in the Himalayan foothills, where riverbed material is mined, this sandy-gravelly track constitutes excellent conduits and holds the greater potential for ground water recharge. Mining in such areas should be preferred in locations selected away from the channel bank stretches.
- m) Mining depth should be restricted to 3 meter and distance from the bank should be 3 meter or 10 percent of the river width whichever less.
- n) The borrow area should preferably be located on the river side of the proposed embankment, because they get silted up in course of time. For low embankment less than 6 m in height, borrow area should not be selected within 25 m from the toe/heel of the embankment. In case of higher embankment the distance should not be less than 50 m. In order to obviate development of flow parallel to embankment, cross bars of width eight times the depth of borrow pits spaced 50 to 60 meters centre-to-centre should be left in the borrow pits.
- o) Demarcation of mining area with pillars and geo-referencing should be done prior to start of mining.



THE WORLD SCENARIO

Sand and gravel are mined world-wide and account for the largest volume of solid material extracted globally. Formed by erosive processes over thousands of years, they are now being extracted at a rate far greater than their renewal. Furthermore, the volume being extracted is having a major impact on rivers, deltas and coastal and marine ecosystems, resulting in loss of land through river or coastal erosion, lowering of the water table and decrease in the amount of sediment supply. Despite the colossal quantities of sand and gravel being used, increasing dependence on them and the significant impact that their extraction has on the environment, this issue needs far better attention and awareness.

Globally, between 47 and 59 billion tonnes of material is mined every year of which sand and gravel, known as aggregates, account for both the largest share (from 68% to 85%) and the fastest growth in extraction increase. Although more sand and gravel are mined than any other material, reliable data on their extraction is not available. The absence of global data on aggregates mining makes environmental assessment very difficult and has contributed to the lack of awareness about this issue. One way to estimate the global use of aggregates indirectly is through the production of cement for concrete (concrete is made with cement, water, sand and gravel). The production of cement is reported by 150 countries and it reached 3.7 billion tonnes in 2012 (USGS, 2013a). For each tonne of cement, the building industry needs about six to seven times more tonnes of sand and gravel (USGS, 2013b). Thus, the world's use of aggregates for concrete can be estimated at 25.9 billion tonnes a year for 2012 alone.

Added to this are all the aggregates used in land reclamation, shoreline developments and road embankments (for which the global statistics are unavailable), added to this is the 180 million tonnes of sand used in industry (USGS, 2012). Aggregates also contribute to 90% of asphalt pavements and 80% of concrete roads (Robinson and Brown, 2002). Taking all these estimates into account, a conservative estimate for the world consumption of aggregates exceeds 40 billion tonnes a year.

This large quantity of material cannot be extracted and used without a significant impact on the environment. Extraction has an impact on biodiversity, water turbidity, water table levels and landscape and on climate through carbon dioxide emissions from transportation. There are also socio-economic, cultural and even political consequences. In some extreme cases, the mining of marine aggregates has changed international boundaries, such as through the disappearance of sand islands in Indonesia (New York Times, 2010; Guerin, 2003).

The impacts of sand mining can be mainly categorized as follows:



IMPACTS ON	DESCRIPTION
Biodiversity	Impacts on related ecosystems (for example; fisheries)
Land losses	Both inland and coastal through erosion
Hydrological functions	Change in water flows, flood regulation and marine currents
Water supply	Through lowering of the water table and pollution
Infrastructures	Damage to bridges, river embankments and coastal infrastructures
Climate	Directly through transport emissions
Landscape	Coastal erosion, changes in deltaic structures, quarries, pollution of rivers
Extreme events	Decline of protection against extreme events (flood, drought, storm surge)

World over sand was until recently extracted in land quarries and riverbeds; however, a shift to marine and coastal aggregates mining has occurred due to the decline of inland resources. River and marine aggregates remain the main sources for building and land reclamation. For concrete, in-stream gravel requires less processing and produces high-quality material while marine aggregate needs to be thoroughly washed to remove salt. If the chloride is not removed from marine aggregate, a structure built with it might collapse after few decades due to corrosion of steel reinforced structures. Most sand from deserts cannot be used for concrete and land reclaiming, as the wind erosion process forms round grains that do not bind well.



INDIAN SCENARIO

The data on consumption of sand and aggregate in country is not available with any source. It can be derived indirectly from the usage of cement, construction of roads and stowing of mines. The trend for aggregates extraction can be estimated using cement production as a proxy.

Cement production has multiplied three-fold in the last 20 years from 1.37 billion tonnes of cement in 1994 to 3.7 billion tonnes in 2012 (USGS, 2013a) mainly as a result of rapid economic growth in Asia (UNEP and CSIRO, 2011). Five countries: China (58%), India (6.75%), the United States (2%), Brazil and Turkey - produce 70% of the world's cement (USGS, 2013c). The consumption of cement is expected to reach 324 million tonnes, which equates to use of 2.2 billion tonnes of aggregates. This is in addition to sand and aggregates used in stowing of mines, industry and other allied usage.

In India the main sources of sand are:

- (a) River (riverbed and flood plain).
- (b) Lakes and reservoirs.
- (c) Agricultural fields (Haryana).
- (d) Coastal / marine sand.
- (e) Palaeo-channels (Bikaner in Rajasthan).



THE PRICE ELASTICITY FOR DEMAND OF SAND

As the price elasticity of demand for sand is inelastic (-0.88), any increase in price in absence of marketable alternative will not have any significant impact on demand. Use of crushed stones or other substitute material should be promoted. The regional context of aggregate resources, market demand, and the environmental impacts of various alternatives must be understood before any site-specific proposal for aggregate extraction can be reviewed.

Evaluation of aggregate supply and demand should be undertaken on the basis of production-consumption regions, encompassing the market for aggregate and all potential sources of aggregate within an economical transport distance. The finite nature of high-quality alluvial gravel resources must be recognized, and high-quality PCC-grade aggregates should be reserved only for the uses demanding this quality material (such as concrete). Alternative sources should be used in less demanding applications (such as road sub-base). Part replacement with fly ash in roads and embankments be promoted in place of sand and aggregates.

The environmental costs of sand mining should be incorporated into the price of the product so that alternative sources that require more processing but have less environmental impact become more attractive.

PROCESS OF SEDIMENT TRANSPORT

The loose boundary (consisting of movable material) of an alluvial channel deforms under the action of flowing water and the deformed bed with its changing roughness (bed forms) interacts with the flow. The resulting movement of the bed material (sediment) in the direction of flow is called sediment transport and a critical bed shear stress must be exceeded to start the particle movement.

Such a critical shear stress is referred as incipient (threshold) motion condition, below which the particles will be at rest and the flow is similar to that on a rigid boundary. Some sediment particles roll or slide along the bed intermittently and some others saltate (hopping or bouncing along the bed). The material transported in one or both of these modes is called 'bed load'.

Finer particles (with low fall velocities) are entrained in suspension by the fluid turbulence and transported along the channel in suspension. This mode of transport is called 'suspended load'. Sometimes finer particles from upland catchment (sizes which are not present in the bed material), called 'wash load', are also transported in suspension. The combined bed material and wash load is called 'total load'.



Bed load ranges from a few percent of total load in lowland rivers to perhaps 15% in Mountain Rivers to over 60% in some arid catchments. Although a relatively small part of the total sediment load, the arrangement of bed load sediment constitutes the architecture of sand, and gravel-bed channels.

The rate of sediment transport typically increases as a power function of flow; that is, a doubling of flow typically produces more than a doubling in sediment transport and most sediment transport occurs during floods. The environmental impacts from in-stream mining can be avoided, if the annual bed load is calculated and aggregate extraction is restricted to that value or some portion of it. To accurately limit extraction to some portion of bed load, the amount of sediment that passes the in-stream mining site during a given period of time must be calculated.

There is a large amount of uncertainty in the process of calculating annual rates of bed load transport. How much coarse material is moved, how long it remains in motion as also how far it moves depends on the size, shape & packing of the material and the characteristics of the river flow.

Downstream movement commonly occurs as irregular bursts of short-distance movement separated by longer periods, when the particles remain at rest. Because bed load changes from hour-to-hour, day-to-day, and year-to-year, estimating annual bed load rates is a dynamic process involving careful examination.

Constant variations in the flow of the river make the channel floor and riverbanks a dynamic interface, where some materials are being eroded while others are being deposited. The net balance of this activity, on a short- term basis, is referred to as scour or fill.

On a long-term basis, continued scour results in erosion (degradation), while continued fill results in deposition (aggradation).

A general indicator of the stability of a stream relates to the amount of vegetation present. Gravel bars that are vegetated or where the gravel is tightly packed, generally indicate streams, where the gravel supply is in balance. Streams with excessive gravel generally have gravel bars with little or no vegetation, and are surfaced with loosely packed gravel.



SUSTAINABLE SAND AND GRAVEL MINING GUIDELINES

The broad principle on which any sustainable sand mining Guidelines / policy can be based is that river/ natural resources must be utilized for the benefit of the present and future generation, so river resources should be prudently managed and developed. The preparation of District Survey Report is an important initial step.

The Processes under the Guidelines:

- (a) Identification of areas of aggradation / deposition where mining can be allowed; and identification of areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited. Use of satellite imagery for identifying areas of sand deposit and quantity be done.
- (b) Calculation of annual rate of replenishment and allowing time for replenishment after mining in area.
- (c) Identifying ways of scientific and systematic mining.
- (d) Identifying measures for protection of environment and ecology.
- (e) Determining measures for protection of bank erosion.
- (f) A bench mark (BM) with respect to mean sea level (MSL) should be made essential to in-mining channel reaches (MCR). Below which no mining shall be allowed.
- (g) Identifying steps for conservation of mineral.
- (h) Permanent gauging facilities (for discharge and sediment both) should be made compulsory for the sites having excessive mining in consultation with Central Water Commission or any competent State Agency.
- (i) Implementing safeguards for checking illegal and indiscrete mining.

Following the above processes, to begin with it is important to prepare a survey document mapping the status of sand sources in a district. This survey should be conducted and report be prepared for each district. Though it is an acceptable fact that rivers cut across districts and States and every river is an ecosystem in itself. But, keeping in view the fact that the district is the most established unit of administration at which this kind of survey, planning and monitoring can be ensured effectively, it is proposed that every district will prepare this document taking the river stretch in that district as an ecological unit and inventorising other sources of sand in the district.

Besides, the production of aggregate in a particular area is a function of availability of natural resources, the size of the population, the economy of the area and various developmental and infrastructural works being undertaken in the area.



The natural resources must be utilized in environment friendly manner in scientific and systematic way and with the objective of sustainable development the policy on the subject should have provisions for protection of environment & ecology. These factors can be accounted for in a most efficient manner at district level.

The sustainable mining plan needs to be dynamic. A survey should be carried out by the District Environment Impact Assessment Authority (DEIAA) with the assistance of Geology Department, Irrigation Department, Forest Department, Public Works Department, Ground Water Boards, Remote Sensing Department and Mining Department etc. in the district at regular intervals.

The survey shall contain:

1. District wise detail of river or stream and other sand source.
2. District wise availability of sand or gravel or aggregate resources.
3. District wise detail of existing mining leases of sand and aggregates.

Based on this survey document, the action plan shall divide the river/ stream/ other sources of the District into the following categories:

1. River / Stream beds sections / other sources suitable for extraction of sand and aggregates.
2. River / Stream beds sections / other sources prohibited for extraction of sand and aggregates.

The river/ streams/ other sources of sand and aggregate are studied on following parameters:

a) Geomorphological studies

- i) Place of origin
- ii) Catchment area.
- iii) General profile of river stream.
- iv) Annual deposition factor.
- v) Replenishment.
- vi) Total potential of minor mineral in the river bed.

b) Geological studies

- i) Lithology of catchment area.
- ii) Tectonics and structural behavior of rocks.

c) Climatic Factors

- i) Intensity of rainfall.
- ii) Climate Zone.
- iii) Temperature variation



The following points to be considered while selecting the river / stream for mining besides the above parameters:

- i) A stable river is able to constantly transport the flow of sediments produced by watershed such that it's dimensions (width and depth) pattern and vertical profile are maintained without aggrading (building up) or degrading (scouring down).
- ii) The amount of boulders, cobbles, pebbles, and sand deposited in river bed equals to the amount delivered to the river from catchment area and from bank erosion minus amount transported downstream each year.
- iii) It is compulsive nature of river to meander in their beds and therefore they will have to be provided with adequate corridor for meandering without hindrance. Any attempt to diminish the width of the corridor (floodway) and curb the freedom to meander would prove counterproductive.
- iv) Erosion and deposition is law of nature. The river stream has to complete its geomorphological cycles from youth, mature to old age.
- v) River capturing is unavoidable.
- vi) Fundamentally the lowest point of any stream is fixed by sea level.

This survey document should be prepared in the district based on direct and indirect benefits of mining and identification of the potential threats to the river / stream beds in the district.

Besides, calculating the carrying capacity of the river / stream beds / other sources to find out maximum quantity available to be allowed for removal each year from the sources, it should also provide various measures to regulate sand and aggregate mining in a systemic way.

It has to provide for environmentally safe depth of mining and safeguards of banks by prescribing safe distance from banks. It is required that there should be a Sub-Divisional Committee which should visit each site and make recommendation. The Committee should comprise of Sub-Divisional Magistrate, Officers from Irrigation department, State Pollution Control Board or Committee, Forest department, Geology or mining officer shall visit each site for which environmental clearance has been applied for and make recommendation on suitability of site for mining or prohibition thereof.



THE STRUCTURE OF DISTRICT SURVEY REPORT

The report can have following structure:

1. Introduction
2. Overview of Mining Activity in the District
3. The List of Mining Leases in the District with location, area and period of validity
4. Details of Royalty or Revenue received in last three years
5. Detail of Production of Sand or Bajari or minor mineral in last three years
6. Process of Deposition of Sediments in the rivers of the District
7. General Profile of the District
8. Land Utilization Pattern in the district: Forest, Agriculture, Horticulture, Mining etc.
9. Physiography of the District
10. Rainfall: month-wise
11. Geology and Mineral Wealth

12. Drainage System with description of main rivers.

Sl.No.	NAME OF RIVER	AREA DRAINED (Sq. Km)	% AREA DRAINED

13. Salient Features of Important Rivers and Streams:

Sl.No.	Name of the River / Stream	Total Length in the District (in Km)	Place of origin	Altitude at Origin

14. Methodology Adopted for Calculating of Mineral Potential

The mineral potential is calculated based on field investigation and geology of the catchment area of the river/ streams. As per the policy of the State and location, depth of minable mineral is defined. The area for removal of mineral in a river or stream can be decided depending on geo-morphology



and other factors, it can be 50% to 60% of the area of a particular river/stream, e.g. in Himachal Pradesh mineral constituents like boulders, river born bajari, sand up to a depth of one meter are considered as resource mineral. Other constituents like clay and silt are excluded as waste while calculating the mineral potential of particular river/ stream.

The specific gravity of each mineral constituent is different. While calculating the mineral potential, the average specific gravity is taken as 2.25. The percent of mineral constituent like boulder, river bajari, sand also varies for different river and streams. While calculating the mineral potential the percentage of each mineral constituent is taken as, Boulders 35-40%, Bajari - 30-35%, Sand 25-30% and 5-10% for silt and clay.

The quantum of deposition varies from stream to stream depending upon factors like catchment lithology, discharge, river profile and geomorphology of the river course. There are certain geomorphological features developed in the river beds such as channel bar, point bar etc. where annual deposition is more even two to three meters.

For illustration one example of Yamuna River in Sirmaour district of Himachal Pradesh is given below:

Portion of the River / Stream Recommended for Mineral Concession	Length of area recommended for mineral concession (in kilometer)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable mineral potential (in metric tonne) (60% of total mineral potential)
From Downstream of confluence with Tons River to Behral near Haryana and Uttar Pradesh border	31	478	14818000	16803612

Note: Considering the density of river bed material to be **1.89 g/cm³**

Present Status of Mining

This gives the detail of mining leases already in operation in this stretch, area and production in last three years from these leases is calculated.



Mineral Potential is calculated in following way:

Mineral Potential

Boulder (MT)	Bajari (MT)	Sand (MT)	Total Mineable Mineral Potential (MT)
5601204	6801462	4400946	16803612

Annual Deposition

336072	408088	264057	1008217

Recommendation:

From the above it is clear that about 16803612 metric tonnes of mineral is available up to depth of one meter in the river bed of Yamuna in Sirmour district.

The annual deposition is 1008217 MT.

The average annual production is 80000 MT.

So, 16723612 MT of mineral can be safely removed.

In similar manner it should be calculated for each river and stream in the district and compiled in following format:

Sl.No.	River/ Stream	Portion of the river / stream recommended for mineral concession	Length of the recommended area for mineral concession (in kilometer)	Average width of the recommended area for mineral concession (in meters)	Area recommended for mineral concession (in sq.mtrs.)	Mineable mineral potential (in metric tonne) (60% of total mineral potential)
Total for the District						

About the size of the mining leases for the aggregates it should be borne in mind that a river / stream can be divided into two zones, which in-turn is dynamic i.e. the zone of erosion and



zone of deposition. These zones of deposition and erosion are extended in different patches in the river.

Any mining lease granted in larger tract can cover both the zones, and mining activity in zone of erosion can further aggravate the problem of erosion and as such the mining activity can be allowed only in the zone of the deposition. The mining leases of larger areas in rivers are neither in interest of environment nor in the interest of mineral conservation.

In Himalayan states the rivers and wasteland has been mostly classed as forest land and mining on that requires diversion of forest land and payment of compensatory afforestation and NPV etc. The land in river beds in hilly tracts and many small rivers at any one site seldom exceed 5 hectare, so not allowing sand mining leases less than 5 hectare on river beds further aggravates the situation. So the size of mining lease for river sand mining should be determined by the State as per the local situation.



MANAGEMENT PLAN

1. River Bed Mining Recommendations:

a) Permit Mining Volume Based on Measured Annual Replenishment

In the first year following adoption of the management plan, a volume equal to the estimated annual replenishment could be extracted from the reach of channel. Replenishment (up to the elevation of the selected channel configuration) would need to occur before subsequent extraction could take place. The concept of annual replenishment accounts for the episodic nature of sediment transport. For example, during wet periods with high stream flows, and a high contribution of sediment from hill slopes and tributaries, monitoring data would show that sand and gravel bars are replenished quickly. During drought periods with low stream flow, and little sediment supply or transport, monitoring data would likely show that bars were replenished at a slower rate.

The use of monitoring data is essential in measuring when actual replenishment occurs. The use of the concept of annual replenishment protects long-term channel stability as well as aquatic and riparian habitat by extracting a volume sustainable by watershed processes.

b) Establish an Absolute Elevation below Which No Extraction May Occur (Minimum Enveloped Level or Redline).

The absolute elevation below which no mining could occur or "redline" would be surveyed on a site-specific basis in order to avoid impacts to structures such as bridges and to avoid vegetation impacts associated with down-cutting due to excessive removal of sediment. An extraction site can be determined after setting the deposition level at 1 m above natural channel thalweg elevation, as determined by the survey approved by mine plan approving authority.

c) Limit River Bed Extraction Methods to Bar Skimming

If mining is limited to the downstream end of the bar with a riparian buffer on both the channel and hill slope (or floodplain) side, bar skimming would minimise impacts. Other methods such as excavation of trenches or pools in the low flow channel lower the local base level, and maximise upstream (head cutting and incision) and downstream (widening and braiding) impacts. In addition, direct disturbance of the substrate in the low flow channel should be avoided. Trenching on bars may be beneficial in the future if the river becomes severely aggraded, flat, shallow and braided. Trenching of bars may initially impact a smaller area of riparian habitat than skimming - as a result of excavating deeper rather than shallow skimming of a large area. However, over the



long-term, the upstream and downstream effects of a trench on the bar or in the channel may offset any short-term benefit derived from this method.

d) Extract Sand and Gravel from the Downstream Portion of the Bar:

Retaining the upstream one to two thirds of the bar and riparian vegetation while excavating from the downstream one to two third of the bar is accepted as a method to promote channel stability and protect the narrow width of the low flow channel necessary for aquatic life. Sand and gravel would be re-deposited in the excavated downstream one to two thirds of the bar (or downstream of the widest point of the bar) where an eddy would form during sediment transporting flows. In contrast, if excavation occurs on the entire bar after removing existing riparian vegetation, there is a greater potential for widening and braiding of the low flow channel.

e) Concentrate Activities to Minimise Disturbance:

River bed extraction activities should be concentrated or localised to a few bars rather than spread out over many bars. This localisation of extraction will minimise the area of disturbance of upstream and downstream effects. Skimming decreases habitat and species diversity - these effects should not be expanded over a large portion of the area.

f) Review Cumulative Effects of Sand and Gravel Extraction:

The cumulative impact of all mining proposals should be reviewed on an annual basis to determine if cumulative riverine effects or effects to the estuary are likely.

g) Maintain Flood Capacity:

Flood capacity in the river should be maintained in areas where there are significant flood hazards to existing structures or infrastructure.

h) Establish a Long-term Monitoring Program:

Monitoring of changes in bed elevation and channel morphology, and aquatic and riparian habitat upstream and downstream of the extraction would identify any impacts of sand and gravel extraction to biologic resources. Long-term data collected over a period of decades as sand and gravel extraction occurs will provide data to use in determining trends.

i) Minimise Activities That Release Fine Sediment to the River:

No washing, crushing, screening, stockpiling, or plant operations should occur at or below the streams "average high water elevation," or the dominant discharge. These and similar activities have the potential to release fine sediments into the stream, providing habitat conditions harmful to local fish.



j) Retain Vegetation Buffer at Edge of Water and Against River Bank:

Riparian vegetation performs several functions essential to the proper maintenance of geomorphic and biological processes in rivers. It shields river banks and bars from erosion. Additionally, riparian vegetation, including roots and downed trees, serves as cover for fish, provides food source, works as a filter against sediment inputs, and aids in nutrient cycling. More broadly, the riparian zone is necessary to the integrity of the ecosystem providing habitat for invertebrates, birds and other wildlife.

k) The River Bed mining should only be allowed during the dry season.

No River bed mining should be permitted during rainy season (see Appendix 9).

l) An Annual Status and Trends Report:

This report should review permitted extraction quantities in light of results of the monitoring program, or as improved estimates of replenishment become available. The report should document changes in bed elevation, channel morphology, and aquatic and riparian habitat. The report should also include a record of extraction volumes permitted, and excavation location. Finally, recommendations for reclamation, if needed should be documented.

2. Off-Channel or Floodplain Extraction Recommendations

a) Floodplain Extraction should be set back from the Main Channel

In a dynamic alluvial system, it is not uncommon for meanders to migrate across a floodplain. In areas where sand and gravel occurs on floodplains or terraces, there is a potential for the river channel to migrate toward the pit. If the river erodes through the area left between the excavated pit and the river, there is a potential for "river capture," a situation where the low flow channel is diverted through the pit. In order to avoid river capture, excavation pits should set back from the river to provide a buffer, and should be designed to withstand the 100-year flood (100-year ARI). Adequate buffer widths and reduced pit slope gradients are preferred over engineered structures which require maintenance in perpetuity. Hydraulic, geomorphic, and geotechnical studies should be conducted prior to design and construction of the pit and bund. In addition to river capture, extraction pits create the possibility of stranding fish.

b) The maximum depth of Floodplain Extraction should remain above the Channel Thalweg

Floodplain pits should not be excavated below the elevation of the thalweg in the adjacent channel. This will minimise the impacts of potential river capture by limiting the potential for head cutting and the potential of the pit to trap sediment. A shallow excavation (above the water table) would provide a depression that would fill with



water part of the year, and develop seasonal wetland habitat. An excavation below the water table would provide deep water habitat.

c) Side Slopes of Floodplain Excavation Should Range from 3:1 to 10:1

Side slopes of a floodplain pit should be graded to a slope that ranges from 3:1 to 10:1. This will allow for a range of vegetation from wetland to upland. Steep side slopes excavated in floodplain pits on other systems have not been successfully reclaimed, since it is difficult for vegetation to become stabilised. Terrace pits should be designed with a large percentage of edge habitat with a low gradient which will naturally sustain vegetation at a variety of water levels.

d) Place Stockpiled Topsoil above the 25-year Return Period or ARI Level

Stockpiled topsoil can introduce a large supply of fines to the river during a flood event and degrade fish habitat. Storage above the 25-year flood (25-year ARI) inundation level is sufficient to minimise this risk.

e) Floodplain Pits Should Be Restored to Wetland Habitat or Reclaimed for Agriculture

The key to successful restoration or reclamation is to conserve or import adequate material to re-fill the pit, while ensuring that pit margins are graded to allow for development of significant wetland and emergent vegetation.

f) Establish a Long-term Monitoring Program

A long-term monitoring program should provide data illustrating any impacts to river stability, groundwater, fisheries, and riparian vegetation. The monitoring program should assess the success of any reclamation or restoration attempted.

g) An Annual Status and Trends Report

The status and trends report described previously should include a section on the hydrologic and biologic components of floodplain pit reclamation.

3. Extraction Methods

The important methods of sand and gravel mining operations are as below:

- a) Bar scalping or skimming** is extraction of sand and gravel from the surface of bars. This method generally requires that surface irregularities be smoothed out and that the extracted material be limited to what could be taken above an imaginary line sloping upwards and away from the water from a specified level above the river's water surface at the time of extraction (typically 0.3 - 0.6 m (1-2 ft)). Bar scalping is commonly repeated year after year. To maintain the hydraulic control provided to upstream by the Riffle head, the preferred method of bar scalping is now generally to leave the top one-third (approximately) of the bar undisturbed, mining only from the downstream two-



thirds.

b) Dry-Pit Channel Mining

Dry-pit channel mines are pits excavated within the active channel on dry intermittent or ephemeral stream beds. Dry pits are often left with abrupt upstream margins, from which head cuts are likely to propagate upstream.

c) Wet-Pit Channel Mining

Wet-pit mining involves excavation of a pit in the active channel below the surface water in a perennial stream or below the alluvial groundwater table.

d) Bar Excavation

A pit is excavated at the downstream end of the bar as a source of aggregate and as a site to trap sand and gravel. Upon completion, the pit may be connected to the channel at its downstream end to provide side channel habitat.

e) Channel-wide River bed Mining

In rivers with a highly variable flow regime, sand and gravel are commonly extracted across the entire active channel during the dry season. The bed is evened out and uniformly (or nearly so) lowered.

4. Reclamation Plans

Reclamation plans should include:

- a) A baseline survey consisting of existing condition cross-section data: Cross-sections must be surveyed between two documented endpoints set back from the top of bank, and elevations should be referenced to bench mark;
- b) The proposed mining cross-section data should be plotted over the baseline data to illustrate the vertical extent of the proposed excavation;
- c) The cross-section of the replenished bar should be the same as the baseline data. This illustrates that the bar elevation after the bar is replenished will be the same as the bar before extraction;
- d) A planimetric map showing the aerial extent of the excavation and extent of the riparian buffers;
- e) A planting plan developed by a plant ecologist familiar with the flora of the river for any areas such as roads that need to be restored;
- f) A monitoring plan: The appropriate reclamation plans can turn river-bed and floodplain sand and gravel mining operations into something perceived by the public as desirable.



MARINE SAND MINING AND IMPACT ON MARINE BIODIVERSITY

The mining of marine aggregates is increasing significantly. Marine sand mining has had an impact on seabed flora and fauna. Dredging and extraction of aggregates from the benthic (sea bottom) zone destroys organisms, habitats and ecosystems and deeply affects the composition of biodiversity, usually leading to a net decline in faunal biomass and abundance or a shift in species composition. Aggregate particles that are too fine to be used are rejected by dredging boats, releasing vast dust plumes and changing water turbidity, resulting in major changes to aquatic and riparian habitats over large areas.

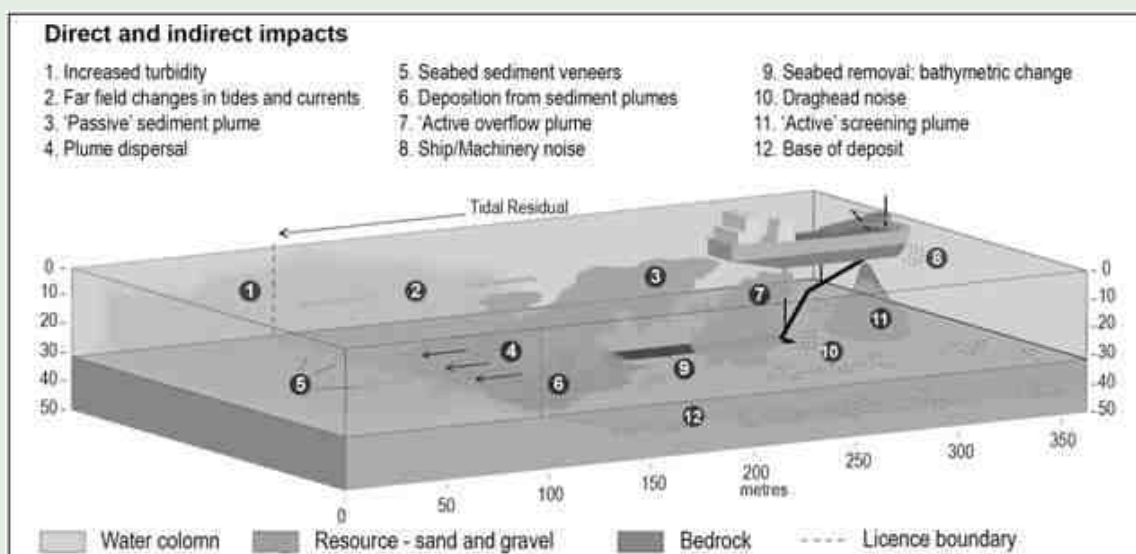


Figure: Direct and indirect consequences of aggregates dredging on the marine environment.

Source: Tillin, H.M., Houghton, A.J., Saunders, J.E., Drabble, R. and Hull, S.C., 2011. Direct and Indirect Impacts of Aggregate Dredging, Marine Aggregate Levy Sustainability Fund (MALSF). Science Monograph Series 1, 1-46.



REDUCING CONSUMPTION OF SAND

Because sand is still very cheap - sand itself is freely accessible; only extraction and transportation costs need to be covered - there is little or no incentive to induce a change in our consumption. Despite the very high value of minerals found in the sand, it is mostly used for concrete or is buried under highways. Recycled building and quarry dust material can be a substitute for sand. Concrete rubble should be recycled to avoid using aggregates, at least for low-quality uses.

Substitutes for sand are available. Quarry dust could be used to replace sand in general concrete structures. The replacement of sand by up to 40% of incinerator ash exhibits higher compressive strength than regular cement mortars. Some desert sand can be used if mixed with other material. There are alternatives for building houses, including wood, straw and recycled material. However, the current building industry is geared toward concrete know-how and equipment.

Training of architects and engineers, new laws and regulations, and positive incentives are needed to initiate a shift for lowering our dependency on sand. Renewable and recycled materials need to be targeted for building houses and roads. Use of Manufactured Sand (M-Sand) also needs to be promoted.

Alternative sources of sand and gravel, which accumulate at the bottom of dams, can also be targeted. Their use would address the problem of these aggregates accumulating which leads to a reduced capacity of dams to store water and could result in the dams' water intakes being blocked. Dams regularly release large amounts of water to flush out aggregates.

The important standard setting bodies in India are taking steps to promote the usage of alternatives to sand and gravel. Bureau of Indian Standards, the National Standards Body of the country, considering the scarcity of sand and coarse aggregates from natural sources, has evolved number of alternatives which are ultimately aimed at conservation of natural resources apart from promoting use of various waste materials without compromising in quality.

These measures include permitting in the Concrete Code (IS 456) as also in the National Building Code of India, the use of slag - a waste from steel industry, fly ash - a waste from thermal power plants, crushed over-burnt bricks and tiles - waste from clay brick and tile industry, in plain cement concrete as an alternative to sand/natural aggregate, subject to fulfilling the requirements of the Code. This Code, further, encourages use of fly ash and ground granulated blast furnace slag as part replacement of ordinary Portland cement in plain as well as reinforced cement concrete.

The Indian Standard on concrete mix design (IS 10262) has been upgraded to include guidance and examples of designing concrete mixes using fly ash and slag. Provisions for compliance for requisite quality of concrete made using fly ash and slag have been duly covered for the manufacturers of ready-mixed concrete in the Indian Standard Code of practice for RMC (IS 4926).

BIS has also formulated an Indian Standard Specification for artificial lightweight aggregates covering manufactured aggregates, such as foamed blast furnace slag, bloated clay aggregate, sintered fly ash aggregate and cinder aggregate (IS 9142).

A series of Indian Standards has also been formulated on various precast concrete products such as solid and hollow concrete blocks, light weight concrete blocks, autoclaved aerated concrete blocks, preformed foam concrete blocks, partial prefabricated concrete flooring and roofing units, concrete pipes, etc, all permitting use of fly ash and slag.



THE REPORT OF THE COMMITTEE HEADED BY SECRETARY, MoEF - 2010

A Committee headed by Secretary, Ministry of Environment and Forest was set up on the subject in 2010. The Committee considered this subject in detail and prepared a report. The important parts of the report are as follows:

Definition of Minor Mineral:

The term 'minor mineral' is defined in clause (e) of Section 3 of MMDR Act, 1957: '3 (e) "minor minerals" means building stones, gravel, ordinary clay, ordinary sand other than sand used for prescribed purposes and any other material which the Central Government may, by Notification in the Gazette of India declare to be a minor mineral;'

The term 'ordinary sand' used in clause (e) of Section 3 of the MMDR Act, 1957 has been further clarified in rule 70 of the MCR, 1960 as:

- (iv) Purposes of stowing in coal mines,
- (v) For manufacture of silvicate cement,
- (vi) Manufacture of sodium silicate and for
- (vii) Manufacture of pottery and glass.

Additionally, the Central Government has declared the following minerals as minor minerals:

Sl.No.	Minor Minerals	Sl.No.	Minor Minerals	Sl.No.	Minor Minerals
i)	Boulder	vi)	Brick-earth	xi)	Slate and shale when used for building material
ii)	Shingle	vii)	Fuller's earth	xii)	Marble
iii)	Chalcedony pebbles used for ball mill purposes only	viii)	Bentonite	xiii)	Stone used for making household utensils
iv)	Lime shell, kankar and limestone used in kilns for manufacture of lime used as building material	ix)	Road metal	xiv)	Quartzite and sandstone when used for purposes of building or for making road metal and household utensils
v)	Murram	x)	Reh-matti	xv)	Saltpetre, and
xvi)	Ordinary earth (Used for filling or leveling purposes in construction or embankments, roads, railways building).				



It may thus be observed that minerals have been classified into major and minor minerals based on their end use rather than level of production, level of mechanization, export and import etc. There do exist some minor mineral mines of silica sand and limestone where the scale of mechanization and level of production is much higher than those of industrial mineral mines. Further, in terms of the economic cost and revenue, it has been estimated that the total value of minor minerals constitutes about 10% of the total value of mineral production whereas the value of non-metallic minerals comprises only 3%. It is, therefore, evident that the operations of mines of minor minerals need to be subject to some regulatory parameters as that of mines of major minerals. Further, unlike India there does not exist such system in any other country where minerals are classified as major and minor based on end usage. Thus, there is a need to re-look at the definition of 'minor minerals' per se. It is, therefore, recommended that Ministry of Mines along with Indian Bureau of Mines, in consultation with the State Governments may re-examine the classification of minerals into major and minor categories so that the regulatory aspects and environment mitigation measures are appropriately integrated for ensuring sustainable and scientific mining with least impacts on environment.

Size of the Mine Lease:

Area for grant of mine lease varies from State to State. Maximum area which can be held under one or more mine lease is 2590 ha or 25.90 sq. miles in Jammu and Kashmir. Rajasthan prescribed a minimum limit of 1 ha for a lease. Maximum area prescribed for permit is 50x50 m. In most of the States area of permit is not specified in the rules.

It has recently been observed by Punjab and Haryana High Court in its order dated 15.05.2009 that State Government are apparently granting short term permits by dividing the mining area into small zones in effect to avoid environmental norms. There is, thus a need to bring uniformity in the extent of area to be granted for mine lease so as to ensure that eco-friendly scientific mining practices can be adopted. It is recommended that the minimum size of mine lease should be 5 ha. Further, preparation of comprehensive mine plan for contiguous stretches of mineral deposits by the respective State Governments may also be encouraged. This may suitably be incorporated in the Mineral Concession Rules, 1960 by Ministry of Mines.

Period of Mine Lease:

The period of lease varies from State to State depending on type of concessions, minerals and its end use. The minimum lease period is one year and maximum 30 years. Minerals like granite where huge investments are required, a period of 20 years is generally given with the provisions of renewal. Permits are generally granted for short periods which vary from one month to a maximum one year. In States like Haryana, minor mineral leases are auctioned for a particular time period. Mining is considered to be capital intensive industry and considerable time is lost for developing the mine before it attains the status of fully developed mine. If the tenure of the mine lease is short, it would encourage the lessee to concentrate more on rapid exploitation of mineral without really undertaking adequate measures for reclamation and rehabilitation of mined out area, posing thereby a serious threat to the environment and health of the workers and public at large.



There is thus, a need to bring uniformity in the period of lease. It is recommended that a minimum period of mine lease should be 5 years, so that eco- friendly scientific and sustainable mining practices are adopted. However, under exceptional circumstances arising due to judicial interventions, short term mining leases / contracts could be granted to the State Agencies to meet the situation arising there from.

Cluster of Mine Approach for Small Sized Mines:

Considering the nature of occurrence of minor mineral, economic condition of the lessee and the likely difficulties to be faced by Regulatory Authorities in monitoring the environmental impacts and implementation of necessary mitigation measures, it may be desirable to adopt cluster approach in case of smaller mine leases being operated presently. Further, these clusters need be provided with processing/crusher zones for forward integration and minimizing excessive pressure on road infrastructure. The respective State Governments / Mine Owners Associations may facilitate implementation of Environment Management Plans in such cluster of mines.

Requirement of Mine Plan for Minor Minerals:

At present, most of the State Governments have not made it mandatory for preparation of mining plan in respect of minor minerals. In some States like Rajasthan, eco- friendly mining plans are prepared, which are approved by the State Mining Department. The eco- friendly mining plans so prepared, though conceptually welcome, are observed to be deficient and need to be made comprehensive in a manner as is being done for major minerals. Besides, the aspects of reclamation and rehabilitation of mined out areas, progressive mine closure plan, as in vogue for major minerals could be introduced for minor minerals as well.

It is recommended that provision for preparation and approval of mine plan, as in the case of major minerals may appropriately be provided in the Rules governing the mining of minor minerals by the respective State Governments. These should specifically include the provision for reclamation and rehabilitation of mined out area, progressive mine closure plan and post mine land use.

Creation of Separate Corpus for Reclamation / Rehabilitation of Mines of Minor Minerals:

Mining of minor minerals, in our country, is by and large unorganized sector and is practiced in haphazard and unscientific manner. At times, the size of the leasehold is also too small to address the issue of reclamation and rehabilitation of mined out areas. It may, therefore, be desirable that before the concept of mine closure plan for minor minerals is adopted, the existing abandoned mines may be reclaimed and rehabilitated with the involvement of the State Government. There is thus, a need to create a separate corpus, which may be utilized for reclamation and rehabilitation of mined out areas. The respective State Governments may work out a suitable mechanism for creation of such corpus on the 'polluter pays' principle. An organizational structure may also need to be created for undertaking and monitoring these activities.

Depth of Mining:

Mining of minerals, whether major or minor have a direct bearing on the hydrological regime of the



area. Besides, affecting the availability of water as a resource, it also affects the quality of water through direct run of going into the surface water bodies and infiltration / leaching into groundwater. Further, groundwater withdrawal, dewatering of water from mine pit and diversion of surface water may cause surface and sub- surface hydrologic systems to dry up. An ideal situation would require that quarrying should be restricted to unsaturated zone only above the phreatic water table and should not intersect the groundwater table at any point of time. However, from the point of view of mineral conservation, it may not be desirable to impose blanket ban on mining operation below groundwater table. It is, therefore, recommended that detailed hydro-geological report should be prepared in respect of any mining operation for minor minerals to be undertaken below groundwater table. Based on the findings of the study so undertaken and the comments/ recommendations of Central Ground Water Authority/ State Ground Water Board, a decision regarding restriction on depth of mining for any area should be taken on case to case basis.

Uniform Minor Mineral Concession Rules:

The economic value of the minor minerals excavated in the country is estimated to contribute to about 9% of the total value of the minerals whereas the non- metallic minerals contribute to about 2.8%. Keeping in view the large extent of mining of minor minerals and its significant potential to adversely affect the environment, it is recommended that Model Mineral Concession rules may be framed for minor minerals as well and the minor minerals may be subjected to a simpler regulatory regime, which is, however, similar to major minerals regime.

River Bed Mining:

1. Environment damage being caused by unregulated river bed mining of sand, bajri and boulders is attracting considerable attention including in the courts. The following recommendations are therefore made for the river bed mining.
 - (a) In the case of mining leases for riverbed sand mining, specific river stretches should be identified and mining permits/lease should be granted stretch wise, so that the requisite safeguard measures are duly implemented and are effectively monitored by the respective Regulatory Authorities.
 - (b) The depth of mining may be restricted to 3m / water level, whichever is less.
 - (c) For carrying out mining in proximity to any bridge and / or embankment, appropriate safety zone should be worked out on case to case basis, taking into account the structural parameters, locational aspects, flow rate etc. and no mining should be carried out in the safety zone so worked out.

Conclusion:

Mining of minor minerals, though individually, because of smaller size of mine leases is perceived to have lesser impact as compared to mining of major minerals. However, the activity as a whole is seen to have significant adverse impacts on environment. It is, therefore, necessary that the mining of minor minerals is subjected to simpler but strict regulatory regime and carried out only under an



approved framework of mining plan, which should provide for reclamation and rehabilitation of the mined out areas. Further, while granting mining leases by the respective State Governments "location of any eco-fragile zone (s) within the impact zone of the proposed mining area, the linked Rules/ Notifications governing such zones and the judicial pronouncements, if any, need be duly noted.

The Union Ministry of Mines along with Indian Bureau of Mines and respective State Governments should therefore make necessary provisions in this regard under the Mines and Minerals (Development and Regulation) Act, 1957, Mineral Concession Rules, 1960 and adopt model Guideliness to be followed by all States (emphasis supplied)".



REGIME OF LAW AND ADMINISTRATIVE ORDERS RELATING TO MINING OF MINOR MINERALS

The Entry 54 of List 1 in Schedule VII to the Constitution of India is the entry which empowers the Parliament in respect of 'Regulation of Mines and Minerals Development. Entry 23 of List 2 of the same Schedule, read with Article 246 (3) of the Constitution confers legislative powers on the State Legislature in respect of Regulation of Mines and Mineral Development, but, this power is subject to the provisions of List 1 with respect to the regulation and development under the control of the Union. The Parliament, with the object to amend and consolidate the law relating to the regulation of labour and safety in mines enacted the Mines Act, 1952. Section 2 (JJ) of the Mines Act, 1952 defines "minerals" to mean, all substances which can be obtained from the earth by mining, digging, drilling, dredging, hydraulic, quarrying or by any other operation and includes mineral oils (which, in turn, include natural gas and petroleum). On 1st June, 1958, the Mines and Minerals (Development and Regulation) Act, 1957 was promulgated. This Act provides, inter alia, for general restrictions on undertaking prospecting and mining operations, the procedure for obtaining prospecting licenses or mining leases in respect of the land in which the minerals vests in the Government, the rule making power for regulating the grant of prospecting licenses and mining leases, special powers of Central Government to undertake prospecting or mining operations in certain cases, and for development of minerals.

The protection of natural environment is one of the fundamental duties of every citizen under Article 51-A of the Constitution of India. Article 48-A of the Constitution, obliged the State to endeavor to protect and improve the environment and to safeguard the forests and wild life of the country. The Environment (Protection) Act and Rules, 1986 were enacted and came into force on 19th November, 1986. The object of this Act is to provide for the protection and improvement of environment and for matters connected therewith. Under provisions of the Act and Rules of 1986, MoEFCC has issued various Notifications regulating the mining of minor minerals, specifically stating the procedures that were required to be complied by persons intending to carry on such mining activity and for the authorities to regulate the same.

Prior to 1994, there was no specific regime in place in relation to mining activity being carried out. The Notification issued by MoEF on 27th January, 1994, in exercise of the powers vested in it under Sub-Rule 3 of Rule 5 of the Rules of 1986 and Sub Section (1) and Clause (v) of Sub-Section (2) of Section 3 of the Act of 1986, prescribed the requirement and procedure for seeking Environmental Clearance for the projects listed in Schedule I. Schedule I of this Notification did not list mining projects of minor minerals. On the contrary, the projects covered under S. No. 20 of Schedule I of this Notification were only "mining projects (major mineral) with leases more than 5 hectares".

It provided for the constitution of Expert Committees and preparation of Environmental Impact Assessment Report which was to be evaluated and assessed by the Impact Assessment Agency. In exercise of its statutory powers afore-indicated, the Central Government on 14th September, 2006,



issued a Notification, i.e., 'Environment Impact Assessment Notification, 2006'. In terms of this Notification, the projects as stated in the Schedule to this Notification required prior Environmental Clearance as per the procedure. The projects have been categorised into two kinds, i.e., Category 'A' and Category 'B' under Clause 2 of the Notification. Projects under Category 'A' were required to take prior Environmental Clearance by MoEFCC. For Category 'B' projects, Environmental Clearance was to be given by State Environment Impact Assessment Authority (SEIAA).

The mining of minerals (both major and minor) were brought under the ambit of the EIA Notification, 2006. The mine lease area of more than equal to 50 ha was Category 'A' and mine lease area less than 50 ha and more than equal to 5 ha was category 'B' project. Mine lease area of less than 5 ha (both major and minor) was kept out of EIA Notification purview.

The Notification of 2006 came to be amended by Notification dated 1st December, 2009. It included the category of non-coal mine and coal mine lease and provided that non-coal mine lease of area more than equal to 5 ha and less than 50 ha will be category 'B' and mine lease area more than equal to 50 ha will be category 'A'. Similarly, mine lease area of more than equal to 5 ha and less than 150 ha for coal mine lease will be category 'B' and mine lease area of coal mine more than 150 ha will be category 'A'. Here again mining lease area of less than 5 ha (both coal and non-coal mine) was kept out of EIA Notification purview.

The Hon'ble Supreme Court, vide its order dated 27.2.2012 in I.A. No.12-13 of 2011 in SLP (C) No.19628-19629 of 2009 titled Deepak Kumar etc. v/s State of Haryana & Ors. has inter alia ordered *"We, in the meanwhile, order that leases of minor mineral including their renewal for an area of less than five hectares be granted by the States/Union Territories only after getting environmental clearance from the MoEF."*

Hon'ble Apex Court in Deepak Kumar's case (supra) extensively examined the environmental concerns, in the context of mining of minor minerals, considering its impact on the environment. The Apex Court observed that Extraction of alluvial material from within or near a streambed has a direct impact on the stream's physical habitat characteristics. These characteristics include bed elevation, substrate composition and stability, in-stream roughness elements, depth, velocity, turbidity, sediment transport, stream discharge and temperature. Altering these habitat characteristics can have deleterious impacts on both in-stream biota and the associated riparian habitat. The demand for sand continues to increase day by day as building and construction of new infrastructures and expansion of existing ones is continuous thereby placing immense pressure on the supply of the sand resource and hence mining activities are going on legally and illegally without any restrictions. Lack of proper planning and sand management cause disturbance of marine ecosystem and also upset the ability of natural marine processes to replenish the sand. Quarrying, mining and removal of sand from in-stream and upstream of several rivers, which may have serious environmental impact on ephemeral, seasonal and perennial rivers and river beds and sand extraction may have an adverse effect on bio-diversity as well. Further it may also lead to bed degradation and sedimentation having a negative effect on the aquatic life.

Apex Court observed that without conducting any study on the possible environmental impact on/



in the river beds and else- where the auction notices have been issued. Hon'ble Apex Court observed that "We are of the considered view that when we are faced with a situation where extraction of alluvial material within or near a river bed has an impact on the rivers physical habitat characteristics, like river stability, flood risk, environmental degradation, loss of habitat, decline in biodiversity, it is not an answer to say that the extraction is in blocks of less than 5 hectares, separated by 1 kilo meter, because their collective impact may be significant, hence the necessity of a proper environmental assessment plan".

In order to ensure compliance of the aforesaid order of the Hon'ble Supreme Court, MoEF issued an OM No.L-11011/47/2011-IA.II(M) dated 18.05.2012 stating inter alia that all mining projects of minor minerals including their renewal, irrespective of the size of the lease would henceforth require prior EC and that the projects of minor minerals with lease area less than 5 ha would be treated as Category "B" as defined in EIA Notification, 2006 and will be considered by the respective State Environment Impact Assessment Authorities (SEIAAs) notified by MoEF and following the procedure prescribed under the EIA Notification, 2006.

On 24th June, 2013, MoEF issued another Office Memorandum stating Guideliness for consideration of proposals for grant of Environmental Clearance under the Notification of 2006 for mining of 'brick earth' and 'ordinary earth' having lease area of less than 5 hectares. Referring to the judgment of the Hon'ble Supreme Court in the case of Deepak Kumar (supra) and its Office Memorandum dated 18th May, 2012, it further considered that the 'brick kiln' manufactures had stated that it was a small scale activity requiring that certain depth should be kept outside the purview of Environmental Clearance. Having considered various aspects, examining the recommendations of the Expert Committee, constituted by MoEF, finally it was directed as follows:

"(a) The activities of borrowing / excavation of 'brick earth' and ordinary earth', upto an area of less than 5 ha, may be categorized under 'B2' Category subject to the following Guideliness in terms of the provisions under '7.I Stage(1)-Screening' of EIA Notification, 2006:

- (i) The activity associated with borrowing/excavation of 'brick earth' and 'ordinary earth' for purpose of brick manufacturing, construction of roads, embankments etc. shall not involve blasting.
- (ii) The borrowing/excavation activity shall be restricted to a maximum depth of 2 m below general ground level at the site.
- (iii) The borrowing/excavation activity shall be restricted to 2 m above the ground water table at the site.
- (iv) The borrowing/excavation activity shall not alter the natural drainage pattern of the area.
- (v) The borrowed/excavated pit shall be restored by the project proponent for useful purpose(s).
- (vi) Appropriate fencing all around the borrowed/excavated pit shall be made to prevent any mishap.



- (vii) Measures shall be taken to prevent dust emission by covering of borrowed/excavated earth during transportation.
 - (viii) Safeguards shall be adopted against health risks on account of breeding of vectors in the water bodies created due to borrowing/excavation of earth.
 - (ix) Workers / labourers shall be provided with facilities for drinking water and sanitation.
 - (x) A berm shall be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation.
 - (xi) A minimum distance of 15 m from any civil structure shall be kept from the periphery of any excavation area.
2. (a) The concerned SEIAA while considering granting environmental clearance for such activity for brick earth / ordinary earth will prescribe the Guideliness as stated at (i) to (xi) above and specify that the clearance so granted shall be liable to be cancelled in case of any violation of above Guideliness.
- (b) Notwithstanding what has been stated at (a) above, the following will apply:
- (i) No borrowing of earth / excavation of 'brick earth' or 'ordinary earth' shall be permitted in case the area of borrowing/ excavation is within 1 km of boundary of national parks and wild life sanctuaries.
 - (ii) In case the area of borrowing / excavation is likely to result into a cluster situation i.e. if the periphery of one borrow area is less than 500 m from the periphery of another borrow area and the total borrow area equals or exceeds 5 ha, the activity shall become Category 'B 1' Project under the EIA Notification, 2006. In such a case, mining operations in any of the borrow areas in the cluster will be allowed only if the environmental clearance has been obtained in respect of the cluster. This issues with the approval of the Competent Authority."

These directions which were specific only to 'brick earth' and 'ordinary earth' activities for areas less than 5 hectares, as decided to be categorised as 'B 2' Category projects, subject to the restrictions stated in the memorandum, provided that if the cluster area exceeded 5 hectares, then it would become Category 'B 1' and would not be treated as Category 'B 2' projects. The above Office Memorandum was not dealing with the issues of sand mining or any other minor mineral activity except 'brick earth' and 'ordinary earth'. Further, MoEF has issued an amendment to EIA Notification vide Notification S.O. 2731 (E) dated 9th September 2013 and amended the EIA Notification, 2006 for item 1 (a) as follows:



(1)	(2)	(3)	(4)	(5)
"1(a)	(i) Mining of minerals.	≥ 50 ha of mining lease area in respect of non-coal mine lease	<50 ha of mining lease area in respect of minor minerals mine lease ; and < 50 ha ≥5 ha of mining lease area in respect of other non-coal mine lease.	General Conditions shall apply except for project or activity of less than 5 ha of mining lease area for minor minerals: Provided that the above exception shall not apply for project or activity if the sum total of the mining lease area of the said project or activity and that of existing operating mines and mining projects which were accorded environment clearance and are located within 500 metres from the periphery of such project or activity equals or exceeds 5 ha.
		>150 ha of mining lease area in respect of coal mine lease.	≤ 150 ha ≥ 5 ha of mining lease area in respect of coal mine lease.	(i) Prior environmental clearance is required at the stage of renewal of mine lease for which an application shall be made up to two years prior to the date due for renewal. Further, a period of two years with effect from the 4th April, 2011 is provided for obtaining environmental clearance for all those mine leases, which were operating as



(1)	(2)	(3)	(4)	(5)
	(ii) Slurry pipelines (coal lignite and other ores) passing through national parks or sanctuaries or coral reefs, ecologically sensitive areas.	All projects.		on the 4th April, 2011 with requisite valid environmental clearance and which have fallen due for renewal on or after the 4th November, 2011: Provided that no fresh environmental clearance shall be required for a mining project or activity at the time of renewal of mining lease, which has already obtained environmental clearance under this notification. (ii) Mineral prospecting is exempted.



In this Notification a new category of minor mineral was introduced and it was provided that mining lease area of minor mineral less than 50 ha will be category 'B' and will require EC. Accordingly the minor mineral mining projects having less than 5 hectare of lease area are required to be appraised by the SEIAA/SEAC of respective State for granting environment clearance. It was provided that the project or activity of less than 5 ha of mining lease area for minor minerals will be exempt from the General Conditions. Simultaneously the concept of cluster was introduced and it was provided that the exemption of applicability of General Conditions shall not apply for project or activity if the sum total of the mining lease area of the said project or activity and that of existing operating mines and mining projects which were accorded EC and are located within 500 m from the periphery of such project or activity equal or exceeds 5 ha.

The Ministry, on 24th December, 2013, issued another Office Memorandum for consideration of proposals for grant of Environmental Clearance regarding categorisation of Category 'B' projects into Category 'B (1)' and 'B (2)'. Mining of minor minerals had been separately dealt with in this Office Memorandum. This Office Memorandum stated that no river sand mining project with mining lease area of less than 5 hectares may be considered for grant of Environmental Clearance. Such area up to 25 hectares would be categorised as 'B (2)' and such projects were to be considered, subject to the stipulations stated therein. This Office Memorandum stated that no Environmental Clearance would be granted for extraction of minor minerals from any riverbed where the area is less than 5 hectares. Sand mining, in area other than riverbeds, would be permitted, only if the Project Proponent takes Environmental Clearance.

The Ministry vide Notification No. S.O. 1599 (E) dated 25.06.2014 reduced the area of 10 kilo meter to 5 kilo meters for applicability of General Conditions increasing the delegation to States by taking out projects located in 5 to 10 kilo meter of interstate boundary, CEPI, and, PAs from category 'A'.

The anomaly created by the Notification dated 09.09.2013 was corrected vide Notification No. S.O. 2601 (E) dated 7th October 2014, and category of minor mineral was deleted and mining leases were again classed as non-coal mine and coal mine and mining lease area of less than 50 ha was made category 'B' for non-coal mine and mine lease area of less than equal to 150 ha for coal mine was made category 'B'. The mine lease area of less than 5 ha was exempt from the applicability of General Conditions and cluster concept of Notification dated 09.09.2013 was retained.



Notification S.O. 2601 (E) dated 7th October 2014 provides as follows:

(1)	(2)	(3)	(4)	(5)
"1(a)	(i) Mining of minerals.	≥ 50 ha of mining lease area in respect of non-coal mine lease. >150 ha of mining lease area in respect of coal mine lease. Asbestos mining irrespective of mining area.	<50 ha of mining lease area in respect of non-coal mine lease. ≤ 150 ha of mining lease area in respect of coal mine lease.	General Conditions shall apply except for project or activity of less than 5 ha of mining lease area: Provided that the above exception shall not apply for project or activity if the sum total of the mining lease area of the said project or activity and that of existing operating mines and mining projects which were accorded environment clearance and are located within 500 metres from the periphery of such project or activity equals or exceeds 5 ha. Note: (i) Prior environmental clearance is required at the stage of renewal of mine lease for which an application shall be made up to two years prior to the date due for renewal. Provided that no fresh environmental clearance shall be required for a mining project or activity at the time of renewal of mining lease, which has already obtained environmental clearance under this notification. (ii) Mineral prospecting is exempted. "
	(ii) Slurry pipelines (coal lignite and other ores) passing through national parks or sanctuaries or coral reefs, ecologically sensitive areas	All projects.		



The NGT vide order dated 13.01.2015 (O.A. No. 123 of 2014 and M.A. No. 419 of 2014) has declared the Notification dated 09.09.2013 as invalid, inoperative and quashed it. The above order has also quashed the paragraph 4 (b) (i) of O.M. dated 24th June 2013 which provided that "No borrowing of earth / excavation of 'brick earth' or 'ordinary earth' shall be permitted in case the area of borrowing / excavation is within 1 km of boundary of national parks and wild life sanctuary." Though this provision was taken from the observation of Hon'ble Supreme Court in W.P. No. 435 of 2012 (Goa Foundation Vs. Union of India) and order dated 04.08.2006 of Supreme Court in *T.N. Godavarman Thirumulpad v. Union of India & Ors.* Supreme Court has taken a view that 1 km. from the boundaries of National Parks and Sanctuaries would be a safety zone, subject to the orders that may be made in IA No.1000 regarding Jamua Ramgarh Sanctuary and the State will not grant any Temporary Working Permit (TWP) in these safety zones comprising 1 km. from the boundaries of National Parks and Sanctuaries.

Similarly the proviso at paragraph 2 (iii) of O.M. dated 24.12.2013 which says that "No river sand mining project, with mine lease area less than 5 ha, may be considered for granting EC" has been quashed. This condition was taken from the recommendations of the Committee headed by the Secretary, MoEF constituted in 2010. The above proviso were quashed on the ground that as EIA Notification places no such restriction, so same cannot be imposed by an executive order and many hill States find it very difficult to get an area equal to or more than 5 ha. in riverbed. The information made available by the States also makes it clear that majority of the mining leases of sand are of area less than 5 hectares.



THE ISSUES AND MANAGEMENT OF MINING IN CLUSTER

In I.A. No. 12-13 of 2011 in SLP Nos. 729-731 / 2011, 21833 / 2009, 12498-499 / 2010, SLP (C) CC ... 16157 / 2011 & CC 18235 / 2011 (Deepak Kumar and Ors. Vs. State of Haryana and Ors. etc.) Hon'ble Supreme Court in its order dated 27.02.2012 on the subject of cluster has quoted the submission of affidavit dated 23.11.2011 of MOEFCC. It says that "The Ministry is of the opinion that where the mining area is homogeneous, physically proximate and on identifiable piece of land of 5 ha. or more, it should not be broken into smaller sizes to circumvent the EIA Notification, 2006 as the EIA Notification, 2006 is not applicable to the mining projects having lease area of less than 5 ha. The Report of Committee on Minor Minerals, under the Chairmanship of Secretary (E&F) with representatives of various state governments as members including the State of Haryana and Rajasthan recommended a minimum lease size of 5 ha for minor minerals for undertaking scientific mining for the purpose of integrating and addressing environmental concerns. Only in cases of isolated discontinued mineral deposits in less than 5 ha, such mining leases may be considered keeping in view the mineral conservation".

The order further quotes that "Cluster of Mine Approach for Small Sized Mines: Considering the nature of occurrence of minor mineral, economic condition of the lessee and the likely difficulties to be faced by Regulatory Authorities in monitoring the environmental impacts and implementation of necessary mitigation measures, it may be desirable to adopt cluster approach in case of smaller mine leases being operated presently. Further these clusters need be provided with processing / crusher zones for forward integration and minimizing excessive pressure on road infrastructure. The respective State Governments / Mine Owners Association may facilitate implementation of Environment Management Plans in such cluster of mines." The order has further quoted the letter dated 1.06.2010 written by the then Minister of Environment, Forest and Climate Change which says on the subject that "A cluster approach to mines should be taken in case of smaller mines leases operating currently". The Hon'ble Court has ordered that "The State of Haryana and various other States have not so far implemented the above recommendations of the MoEF or the Guideliness issued by the Ministry of Mines before issuing auction notices granting short term permits by way of auction of minor mineral boulders gravel, sand etc., in the river beds and elsewhere of less than 5 hectares. We therefore, direct to all the States, Union Territories, MoEF and the Ministry of Mines to give effect to the recommendations made by MoEF in its report of March 2010 and the model Guideliness framed by the Ministry of Mines, within a period of six months from today and submit their compliance reports."

"We in the meanwhile, order that leases of minor mineral including their renewal for an area of less than five hectares be granted by the States/ Union Territories only after getting environmental clearance from the MoEF."



The Ministry vide O.M. No. L-11011/47/2011-IA.II (M) dated 18th May 2012 said that "In order to ensure compliance of the above referred order of the Hon'ble Supreme Court dated 27.02.2012, it has now been decided that all mining projects of minor minerals including their renewal, irrespective of the size of the lease would henceforth require prior environment clearance. Mining projects with lease area up to less than 50 ha including projects of minor mineral with lease area less than 5 ha would be treated as Category 'B' as defined in EIA Notification, 2006 and will be considered by the respective SEIAAs notified by MoEF and following the procedure prescribed under EIA Notification, 2006."

On the issue of cluster, the Notifications No. S.O. 2731 (E) dated 09.09.2013 and Notification No. S.O. No. 2601 (E) of 07.10.2014 were issued.

The above Notifications in Schedule at Item No. 1 (a) in Conditions mentions that "General Conditions shall apply except for projects or activity of less than 5 ha of mining lease area:

Provided that the above exception shall not apply for project or activity if the sum total of the mining lease area of the said project or activity and that of existing operating mines and mining projects which were accorded environment clearance and are located within 500 meters from the periphery of such projects or activity equals or exceeds 5 ha. The Office Memorandum No. J-13012/12/2013-IA-II (1) dated 24.12.2013 is about Guideliness for consideration of proposals for grant of environment clearance under Environment Impact Assessment Notification 2006 and its amendments - regarding categorization of Category 'B' projects/ activities into Category 'B1' & 'B2'.

The above O.M. besides categorizing the Category B into Category B1 & B2 also has directions on mining of brick earth / ordinary earth and river sand mining. These provisions are as follows:

"Mining of minor minerals:

As of now, mining projects of minor minerals with less than 50 hectare of mining lease areas are categorized as Category 'B' as per Notification S.O. 2731 (E) dated 9th September 2013. Also vide O.M. No. L-11011/47/2011-IA-II (M) dated 24.06.2013, Guideliness has been issued regarding categorization of mining projects of brick earth and ordinary earth having lease areas less than 5 hectare as Category 'B2' subject to stipulations stated therein.

In the above backdrop, the projects of mining of minor minerals, categorized as Category 'B' are hereby categorized as 'B2' as per the following:

- (i) 'Brick Earth' / 'Ordinary Earth' mining projects having lease area less than 5 ha will be considered for granting EC as per the aforesaid Guideliness issued by MOEF on 24.06.2013.
- (ii) 'Brick Earth' / 'Ordinary Earth' mining projects with mining lease area more than equal to 5 ha but less than equal to 25 ha and all other minor , mineral mining projects with mining lease area < 25 ha, except for river sand mining projects will be appraised as Category 'B2' projects.



These projects will be appraised based on the following documents:

- (a) Form-1 as per the Appendix-I under the EIA Notification 2006
- (b) Pre-feasibility report of the project
- (c) Mining plan approved by the authorized agency of the concerned State Government.

Provided in case the mining lease area is likely to result into a cluster situation, i.e. if the periphery of one lease area is less than 500 meter from the periphery of another lease area and the total lease area equals or exceeds 25 ha, the activity shall become Category 'B1' Project under the EIA

Notification, 2006. In such a case, mining operations in any of the mine lease areas in the cluster will be allowed only if the environmental clearance has been obtained in respect of the cluster.

About river sand mining it says that:

- (iii) No river sand mining project, with mine lease area less than 5 ha, may be considered for granting EC. The river sand mining projects with lease area more than equal to 5 ha but less than 25 ha will be categorized as 'B2'. In addition to the requirement of documents, as brought out above under sub-para (ii) above for appraisal, such projects will be considered subject to the following stipulations:
 - (a) The mining activity shall be done manually. The depth of mining shall be restricted to 3 m / water level, whichever is less.
 - (b) For carrying out mining in proximity to any bridge and / or embankment, appropriate safety zone shall be worked out on case to case basis to the satisfaction of SEAC / SEIAA, taking into account the structural parameters, locational aspects, flow rate etc., and no mining shall be carried out in the safety zone so worked out. No in-stream mining shall be allowed.
 - (c) The mining plan approved by the authorized agency of the State Government shall inter-alia include study to show that the annual replenishment of sand in the mining lease area is sufficient to sustain mining operations at levels prescribed in the mining plan and that the transport infrastructure is adequate to transport the mines material. In case of transportation by road the transport vehicles will be covered with the tarpaulin to minimize dust/ sand particle emissions.
 - (d) EC will be valid for mine lease period subject to a ceiling of 5 years.

Provided, in case the mining lease area is likely to result into a cluster situation i.e. if the periphery of one lease area is less than 1 km from the periphery of another lease area and total lease area equals to or exceeds 25 ha., the activity shall become Category 'B1' Projects under EIA Notification, 2006. In such a case, mining operation in any of the mine lease area in the cluster will be allowed only if the environment clearance has been obtained in respect of the cluster.



The NGT order dated 13.01.2015 in O.A. No. 123 of 2014 and M.A. No. 419 of 2014 has following directions on the issue of cluster: "In light of the judgment of the Supreme Court and what has emerged from the various cases that are subject matter of this Judgment, we direct the Ministry of Environment and Forest to formulate a uniform cluster policy in consultation with the States for permitting minor mineral mining activity including its regulatory regime, in accordance with law.

Notification S.O. 1559 (E) dated 25th June 2014 provides that "Any project or activity specified in Category 'B' will be appraised at the Central Level as Category 'A', if located in whole or in part within 5 km. from the boundary of: (i) Protected Areas; (ii) CEPI; (iii) ESA; (iv) I n t e r - s t a t e boundaries or international boundaries".

The NGT vide its order dated 13.01.2015 has quashed the Notification dated 9th September 2013, but similar provision on clusters exists in Notification dated 7th October 2014.

The EIA Notification 2006, as amended makes it clear that projects in respect of non-coal mine leases, where the area is more than equal to 50 hectares would require prior Environmental Clearance from MoEFCC, while the projects of area less than 50 hectares would be appraised for prior Environmental Clearance at the level of SEIAA.

The EIA Notification of 2006 in Clause 7 specifies the stages through which projects for grant of Environmental Clearance are required to be passed and processed. The stages include Screening, Scoping, Public Consultation and Appraisal, upon which, the Expert Appraisal Committee makes recommendation to the MoEF/SEIAA. Under 'Screening', this Clause 7 also provides for a further bifurcation of projects falling under category 'B' into 'B 1' and 'B 2'. The relevant part of Clause 7, dealing with this aspect, reads as under: "Stage (1) - Screening (Only for Category 'B' projects and activities): In case of Category 'B' projects or activities, this stage will entail the scrutiny of an application seeking prior environmental clearance made in Form 1 by the concerned State level Expert Appraisal Committee (SEAC) for determining whether or not the project or activity requires further environmental studies for preparation of an Environmental Impact Assessment (EIA) for its appraisal prior to the grant of environmental clearance depending up on the nature and location specificity of the project . The projects requiring an Environmental Impact Assessment report shall be termed Category 'B1' and remaining projects shall be termed Category 'B2' and will not require an Environment Impact Assessment report. For categorization of projects into B1 or B2 except item 8 (b), the Ministry of Environment and Forests shall issue appropriate Guideliness from time to time."

The Ministry on 24th December, 2013, issued Office Memorandum for consideration of proposals for grant of Environmental Clearance regarding categorisation of Category 'B' projects into Category 'B1' and 'B2'. Mining of minor minerals had been separately dealt with in this Office Memorandum. Such area up to 25 hectares would be categorised as 'B 2' and such projects were to be considered, subject to the stipulations stated therein.



The EIA Notification, 2006 does not provide for issuance of Environment Clearance to Cluster of mines. It provides for EC to individual lease holders / project proponents. This position has also been upheld by the Hon'ble Supreme Court in its judgment of Vivek Bansal Vs. State of Haryana that EC should be applied for and granted to the individual lease holder.

There has been rising concerns about adverse impact of mining on small leases (less than 5 hectare) in case the numbers of such leases are large and they are located in close proximity to each other. This leads to the definition of Cluster. To avoid the rigors of environment impact assessment studies, environment management plan and the environment clearance there has been a tendency to break the leases into size which does not attract the provisions of environment impact assessment studies, environment management plan, public consultation and the environment clearance. In Deepak Kumar's case Hon'ble Supreme Court also encountered this situation and in its order dated 27.02.2012 mandated that no mining lease or renewal be done without environment clearance irrespective of size.

It is seen that the categorization of mines into 'B1' and 'B2' category in which Category 'B2' leases are being exempted from the requirement of Environment Impact Assessment, Environment Management Plan, and Public Consultation for grant of EC, in many cases now the mining leases are being given for 25 hectares or less. This defeats the purpose and intent of Hon'ble Supreme Court Judgment which orders environment clearance for all mining leases irrespective of size. The environment clearance without Environment Impact Assessment, Environment Management Plan, and Public Consultation does not serve the purpose of environment clearance which is to ensure environmentally sustainable and socially responsible mining. So if a cluster or individual lease size exceeds 5 hectare, the EIA/ EMP should be completed in the process of grant of prior environment clearance.

The EIA Notification, 2006 and subsequent amendments to that or any O.M. issued by the Ministry do not provide for procedures and Competent Authority for environment clearance for cluster. In a cluster there will mostly be situation where there are a number of different lease holders and as per the settled law the lease holder has to do the working of mine and the lease holder is the one who can apply for and get the environment clearance. The conditions stipulated in the environment clearance have to be complied by the EC holder and any violation of that empowers the authority to cancel the environment clearance or prosecute the EC holder if necessitated by the circumstances.

For cluster there is no mechanism about who will apply for EC, EC will be issued in whose name, and who will be responsible for compliance of EC conditions.

The intent of cluster assessment is to have a holistic knowledge of the impact on environment by different mines operating in close proximity of each other. There are also requirement of mitigative measures which need implementation in concerted manner by different EC holders of that cluster. To ensure that it is important that there should be an integrated Environment Impact Assessment /



Environment Management Plan for the cluster to be presented before the authority appraising the projects and considering the proposals for grant of EC. This integrated EIA/ EMP can be prepared by either the lease holder, group of lease holders, State or the State Agencies. This EIA/ EMP need to be prepared by the accredited consultants / Registered Qualified Persons of the State Governments. The application for EC and grant of EC should be done in the name of individual lease holders in the background of the integrated EIA/EMP report. The Competent Authority (SEIAA/ SEAC / EAC) will entertain individual lease holder's application for grant of EC to individual mining lease projects in that cluster in the name of lease holders. The conditions related to mitigative measures necessitated by the integrated EIA/EMP may run across more than one lease holder or EC holders, that should figure in each EC accordingly and its compliance be ensured by the individual EC holders.

The Hon'ble Supreme Court, NGT, SEAC/EAC and the Project Proponents have raised issue of cluster in mine lease allotment and environment clearance for the same, so following conditions need to be ensured for cluster of mines:

1. To address the concern of adverse impact of minor mineral mining on environment it is proposed that all mining activity including river sand mining (above 5 hectare individual or cluster) will need to prepare Environment Impact Assessment Report and Environment Management Plan before grant of environment clearance. These reports (EIA /EMP) can be prepared by the State or State nominated Agency / the Project Proponent (s).
2. As can be seen from the data provided by the States most of the mining leases for minor minerals are of lease area less than 5 hectare. It is also reported that in hill states getting a stretch in river with area more than 5 hectare is very uncommon. So the size of lease for minor minerals including river sand mining will be determined by the States as per their circumstances.
3. The EIA Notification, 2006 does not provide for cluster EC, it provides for issuance of EC to individual project proponents and the same has also been upheld in the judgment of Hon'ble Supreme Court in Vijay Bansal vs. State of Haryana case. So EC will have to be applied for and issued to the individual project proponent.
4. A cluster shall be formed when the distance between the peripheries of one lease is less than 500 meters from the periphery of other lease in a homogeneous mineral area.
5. The mining of minor minerals is mostly in clusters. The Environment Impact Assessment or Environment Management Plan are required to be prepared for the entire cluster in order to capture all the possible externalities. These reports shall capture carrying capacity of the cluster, transportation and related issues, replenishment and recharge issues, geo-hydrological study of the cluster area. The Environment Impact Assessment or Environment Management Plan shall be prepared by the State or State nominated Agency or group of project proponents



- in the Cluster or the project proponent in the cluster.
6. The individual lease holders in cluster can use the same Environment Impact Assessment or Environment Management Plan for application for environmental clearance. The cluster Environment Impact Assessment or Environment Management Plan shall be updated as per need keeping in view any significant change.
 7. There shall be one public consultation for entire cluster after which the final Environment Impact Assessment or Environment Management Plan report for the cluster shall be prepared.
 8. The details of cluster Environment Impact Assessment or Environment Management Plan shall be reflected in each environmental clearance in that cluster and District Expert Appraisal Committee (DEAC), SEAC, and EAC shall ensure that the mitigative measures emanating from the Environment Impact Assessment or Environment Management Plan study are fully reflected as environmental clearance conditions in the environmental clearance's of individual project proponents in that cluster.
 9. As the sand is mostly mined from rivers and majority of the rivers which are important source of sand also form boundary between States, so because of General Conditions most of the sand mining projects become Category 'A' project. So the General Conditions will not apply in case of river sand and gravel mining projects on account of being in 5 kilometer of inter-state boundary.
 10. The Committee headed by the District Magistrate or District Collector will be empowered to appraise and grant EC for mining leases up to 5 ha in case of individual lease and up to 25ha in case of cluster for sand mining.
 11. In case the mining leases are in cluster (if periphery of one lease is within 500 meters), following are the categorization of projects:-
 - Category 'B2'Project: Cluster area of mine leases up to 5 ha and to be dealt at DEIAA/ DEAC level
 - Category 'B2'Project: Cluster area of Mine leases > 5 ha and < 25 ha with no individual lease > 5 ha and to be dealt at DEIAA/DEAC level
 - Category 'B1'Project: Cluster of mine leases of area > 25 hectares with individual lease size < 50ha and to be dealt at SEIAA/SEAC level
 - Category 'A' Project: Cluster of any size with any of the individual lease >50ha and to be dealt at MoEFCC/EAC level



The schematic presentation of requirements on Environmental Clearance of Sand Mining including cluster situation is detailed as below:-

Area of Lease (Hectare)	Category of Project	Requirement of EIA / EMP	Requirement of Public Hearing	Requirement of EC	Who can prepare EIA/ EMP	Who will apply for EC	Authority to appraise/ grant EC	Authority to monitor EC compliance
EC Proposal of Sand Mining in cluster situation								
Cluster area of mine leases up to 5 ha	'B2'	Form-1M, PFR and Approved Mine Plan	No	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	DEAC/ DEIAA/	DEIAA SEIAA SPCB CPCB MoEFCC Agency nominated by MoEFCC
Cluster area of Mine leases > 5 ha and < 25 ha with no individual lease > 5 ha	'B2'	Form-I, PFR and Approved Mine Plan and one EMP for all leases in the Cluster	No	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	DEAC/ DEIAA/	
Cluster of mine leases of area > 25 hectares with individual lease size < 50ha	'B1'	Yes	Yes	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	SEAC/ SEIAA	



Cluster of any size with any of the individual lease > 50ha	'A'	Yes	Yes	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	EAC/ MoEFCC	



MANAGEMENT OF SAND DEPOSITED AFTER FLOOD ON AGRICULTURAL FIELD OF FARMERS

The Standing Committee on Water Resources on issues, concerning flood management, compensation, and status of ownership of submerged and eroded land in the country including compensation to farmers for loss of their crops destroyed by floods and right to disposal of the sand left in the fields of farmers in its meeting held on 29.04.2015 made observations on this subject.

The Committee observed that pursuant to Hon'ble Supreme Court of India decision in "Deepak Kumar Case" in 2012, regulations were framed by the Ministry of Mines to guide environmental clearance of minor minerals. ... The Committee, therefore, desires the Ministry of Water Resources, River Development and Ganga Rejuvenation to work in close coordination with the Ministry of Mines and Environment, Forest and Climate Change to frame regulations / Guidelines in this regard expeditiously.

Mining of Sand

The Committee further observed that due to the floods, the agricultural land of farmer is destroyed and rendered infertile. Further the farmer loses his livelihood as the produce of his land is destroyed by flood and become unsalable. The farmer is also deprived of the right of lifting sand from his land. He is therefore, left helpless and destitute and leave their land in search of job.

The Committee observes that "mining operation" means any operation undertaken for the purpose of winning any mineral. Accordingly, if desilting is undertaken perse with the objective of winning a mineral then only it will be construed as a mining operation. Apparently, if the desilting is undertaken not for winning any mineral, it will not be construed as mining operation and therefore, the farmer can remove the sand from the land without requiring the requisite permits. However, the Committee strongly feels that the farmer be given the right to use and dispose-off the sand accumulated over their land post flood, by incorporating the necessary provisions in the Mines and Mineral (Development and Regulation) Act, 1957".

Removal of sand from the agricultural field by the owner farmer of the land from environment point of view will not be considered as mining operation and its removal and disposal can be allowed without the requirement of environment clearance till it is done only to the extent of reclaiming the agricultural land. The sand deposited after flood only be removed, so no mining / digging below the ground level is allowed. For removing sand in case where private land has gone into the river due to erosion, the requirement of mining lease and environment clearance will continue. This operation



of removal of sand deposited on agricultural field should be done after a mapping of deposition is done by the Land Management Committee of the Gram Panchayat. The sand so deposited post flood can be removed by the farmer owning the land / group of farmers affected by this post flood sand deposition or the Gram Panchayat. Customary rights to remove and dispose off the sand should be given to the farmer affected by deposition of sand on account of sudden flood in his agricultural land.



MINING OF SAND FROM AGRICULTURAL FIELD

This practice is prevalent in Haryana, where the top layer of soil varying between 1 and 2 meters is removed and stacked separately and thereafter the sand deposit which may be 10-15 meter deep is mined. After removing the sand layer up to a maximum depth of 09 meters, the top soil stacked is spread out on the field and the same is brought under the cultivation. Though the level of this land (mined out area) is lowered to the depth of the excavation and in initial years of cultivation the productivity is low, but the productivity of the fields improves with continued cultivation and addition of organic manure in the field. In Haryana some leases are of large area (ranging from 1000 hectare to 2000 hectare) the agricultural fields and river bed both are included in the same lease for mining.

The following recommendations should be kept in mind for mining in such leases:

1. Mining of sand in such mine leases will require environment clearance.
2. The lease should be of sand mining either from the agricultural field or river. In same lease both type of area should not be included.
3. The sand mining from agricultural field is being done in Haryana for a long time and it can be done in a more sustainable manner without adverse impact on agricultural productivity, if proper environmental safeguards are taken.
4. The slope of mining area adjacent to agricultural fields should be proper (preferably 45-60 degree) and adequate gap (minimum 10 feet) be left from adjacent agricultural field to avoid erosion and scouring.

CUSTOMARY RIGHT ON SAND MINING

The native people have their long held customary rights to take silt, sand & soil from their tanks and nearby rivers for their use or community works in the village in almost all the States in some form or the other.

Next to the reserved forests, tanks and rivers are the biggest common properties in India. Most of the village tanks are 'government properties' with some exceptions of privately held tanks. Land revenue department, irrigation department and forest department is given powers to deal with property right' and hence protecting all tanks and rivers preventing damages including encroachments is their responsibility. The local villagers were given 'customary rights' under the Revenue Department Orders, and other laws related to Panchayats and Easements to take sand, soil and earth for agricultural and domestic purposes without seeking any permission from anyone. The States strive to keep these customary rights to use such resources like soil and sand for individuals work and community work in the village intact without requirement of any permit and clearance. These customary rights need to be protected and respected.



DESILTING OF RESERVOIRS / BARRAGES / ANNECUTS / LAKES / CANALS

These structures are generally in possession and maintenance of Irrigation Department / Minor Irrigation Department / PHED of State Governments. The dams and reservoirs can be a significant source of sand. Many such structures are silted and their water holding capacity has gone down considerably. In some instances to compensate for silted capacity raising of height of dam or construction of new structures is proposed which further leads to submergence of new areas of agricultural field and forests. Taking up desilting of such projects can serve dual purpose of increasing the water holding capacity and making available the sand for other usage. In some States the Irrigation Department is permitted to use it for the departmental works free of charge and balance can be disposed of in market after paying the due royalty. A detailed study is required to be carried out to verify economic viability and environmental sustainability before contemplating dredging of storage reservoirs for sand / gravel mining.

The de-silting of reservoir, dredging for upkeep and maintenance of structures, channels and averting natural disasters will not be treated as mining for the purpose of environmental clearance.

The Ministry of Water Resources (MoWR) view on desiltation from flood control point of view is as follows:

A multidisciplinary Committee (Mittal Committee) under the chairmanship of Dr. B.K. Mittal, former Chairman, Central Water Commission was constituted by MoWR, vide letter dated 08.10.2001 to identify cause and extent of siltations in rivers, suggest measures to minimize siltation, examine as to whether desilting is a technically feasible means to minimize magnitude of flood in rivers, suggest appropriate technology/ methods of desilting of rivers, propose a realistic operational programme in a time bound manner and other related aspects. The committee studied in respect of few sites on Ganga, Brahmaputra, Godavari, Krishna etc., and inter-alia concluded that:

- i) Siltation in river is not pronounced and alarming;
- ii) Desilting of rivers for flood control is not an economically viable solution;
- iii) Dredging in general has been found to be inadequate and should not be resorted to, particularly in major rivers;
- iv) There are, of course, some locations such as tidal rivers, confluence points with narrow constrictions and the like which can be tackled by desilting after thorough examination and techno-economic justification;
- v) Selective dredging is suggested depending upon local conditions; and
- vi) Desilting of rivers can marginally minimize the magnitude of floods and be effective only for a short period.

Thus, desilting in general is not feasible technically, due to several reasons like non-sustainability, non-availability of vast land required for disposal of dredged material etc. This cannot be viewed in isolation of other approaches to manage floods. Desilting of rivers in vulnerable reaches may be suggested based on model study, if it is found techno-economically viable. For navigation purposes, the river reaches in the water ways path may be dredged to have minimum depth of water.



MINING PLAN

The Environment Clearance shall be given to only those mining leases which have mine plan approved by the Competent Authority designated by the States. Modification of the mining plan during operation will also need approval of the Competent Authority. The Mining Plan shall be prepared by the Recognised Qualified Persons (RQP). The person to be recognized for preparing the mining plan should be a holding a degree of Mining Engineering, Environmental Engineering or a post graduate degree in Geology granted by a University established or incorporated by or under a Central Act or a State Act including any institutions recognized by the UGC or any equivalent qualification granted by any University or institution outside India and have a professional experience of three years of working in a supervisory capacity in the field of mining after obtaining a degree. The States will devise their own mechanism of selection and empanelment of RQPs. A mining plan should be valid for a period of 5 years, which can be renewed further.

EVALUATING THE IMPACT OF SAND MINING

To assess the impact of mining and effect of remedial measures can be assessed through monitoring. This is also required for mid-course corrections. Monitoring will provide data to evaluate the upstream and downstream effects of sand and gravel extraction activities, and long-term changes. A brief report summarizing the annual results of the physical and biological monitoring should document the evolution of the sites over time, and the cumulative effects of sand and gravel extraction. The summary should also recommend any modification of extraction rates needed to minimize impacts of extraction.

Sand Replenishment, Geomorphology and Hydrology:

Physical monitoring requirements of sand and gravel extraction activities should include surveyed channel cross-sections, longitudinal profiles, bed material measurements, geomorphic maps, and discharge and sediment transport measurements. The physical data will illustrate bar replenishment and any changes in channel morphology, bank erosion, or particle size.

In addition to local monitoring for replenishment at specific mining sites, monitoring of the entire reach through the estuary will provide information on the cumulative response of the system to sand and gravel extraction. For example, it is important for downstream bars and the estuary to receive sufficient sand and gravel to maintain estuarine structure and function. Because the elevation of the bed of the channel is variable from year to year, a reach-based approach to monitoring will provide a larger context for site-specific changes. If long-term monitoring data show that there is a reach-scale trend of bed lowering (on bars or in the thalweg), the extraction could be limited.

Cross-sections:

Surveyed channel cross-sections should be located at permanently documented sites upstream, downstream and within the extraction area. Cross-sections intended to show reach- scale changes



should be consistently located over geomorphic features such as at the head of riffles, across the deepest part of pools, or across particular types of channel bars.

Cross-section spacing should be close enough to define the morphology of the river channel. Cross-section data should be surveyed in March or April to evaluate changes that may occur during the flooding season.

Cross-section data should be collected over the reach to the estuary, and locally upstream, downstream, and within each mining site. This long-term monitoring data should be collected and analyzed even if no mining occurs in order to understand and estimate the sand budget of the river reach.

Photo-documentation:

Photographs of the project sites should be taken prior to excavation to document the baseline conditions, and again during each monitoring session. Photos should be taken twice a year. Photos of structures nearby like outfalls / off-takes, intakes, bridges and other structures may also be regularly taken.

Groundwater Level:

Monitoring wells should be established adjacent to each off-channel floodplain excavation to record changes in ground water levels. Measurements should be taken monthly. This should help analyse surface water and ground water interaction along the reach.

Extent and Quality of Riparian Vegetation:

Document the extent and quality of riparian vegetation, including successional status, and any increase in disturbance indicators (non-native plants). The extent of riparian habitat can be determined utilising aerial photos. Habitat quality data, i.e., successional status and species composition, must be determined through field reconnaissance.

Riparian Vegetation Maps:

Develop yearly maps of the sensitive habitat areas and document their aerial extent over time. These maps may be combined with the geomorphic maps. Monitor sites identified as sensitive for disturbance in excess of expected geomorphic trends - i.e., massive bank wasting up or downstream from an active mine site. Monitor sand and gravel mining impacts which may translate up and downstream, causing accelerated erosion of sensitive zones and impacting the ability of new habitat to form due to excessive scour or sedimentation.

This monitoring / documentation should be done by the EC holders and will be regularly checked and assessed by the DEIAA for corrective steps in time. The DEIAA should review the status of monitoring and documentation data of each mining site especially for sand mining once in a year.



MONITORING SYSTEM FOR SUSTAINABLE SAND MINING

The implementation of these Guidelines on Sustainable Sand Mining is not possible till States create a robust mechanism to monitor the mining operation and measure the mined out mineral. The entire exercise of Environment Impact Assessment and Environment Management Plan aims towards making the mining process environmentally sustainable. The Environment Clearance letter indicates the EC capacity that is the quantity of material which can be mined in a year. If this quantity is not measured, and much more mineral than envisaged in the EC is mined out then the entire process of EC is rendered futile. Keeping above objective in mind it is required of the State / State Agencies to create and establish a robust system to monitor and measure the mined out mineral at each lease location and its transportation in State.

The State Governments have tried various methods for monitoring the sand mining in their areas, the main feature of which generally has been through Transport Permits (T.P.). The printing of Transport Permits on security paper, invisible ink mark, fugitive ink background, VOID pantograph and Unique Barcode are some of the tools used by the States. These tools need to be backed by suitable software and dedicated websites with security certifications at different levels.

The system proposed is that States should issue Transport Permit. Bar code on the T.P. when scanned using the system, will generate a unique invoice number. The bidder has to enter destination, distance between plot and destination, vehicle number etc in the system. After scanning, unique bar code number; invoice date & time and validity date & time is sent to the bidder, which need to be written on T.P. Validity of T.P. is calculated based on distance between plot and destination. After validity time is over the T.P. stands invalid. The officers involved in monitoring should be provided with the android application using which the T.P. can be checked anywhere on road. As soon as the bar code on T.P. gets scanned through using android application, all details of T.P. such as plot details, vehicle details, validity time etc. should get fetched from server. This means, if anything is re-written on T.P. and attempt is made to reuse the same, it can be traced immediately. Registering of T.P. on server can be done using website, using android application (smartphone with internet) or even through SMS (smartphone without internet). This implies that TP can be registered on server even if only mobile phone range is available on plot. Various reports can be generated using the system showing daily lifting reports and user performance report. This way the vehicles carrying sand can be tracked from source to destination.



MONITORING SYSTEM FOR SUSTAINABLE SAND MINING

PROCEDURE FOR MONITORING OF SAND MINING OR RIVER BED MINING

1. The security feature of Transport Permit shall be as under:

- (a) Printed on Indian Banks' Association (IBA) approved Magnetic Ink Character Recognition (MICR) Code paper.
- (b) Unique Barcode.
- (c) Unique Quick Response (QR) code.
- (d) Fugitive Ink Background.
- (e) Invisible Ink Mark.
- (f) Void Pantograph.
- (g) Watermark.

2. Requirement at Mine Lease Site:

- (a) Small Size Plot (Up to 5 hectare): Android Based Smart Phone.
- (b) Large Size Plots (More than 5 hectare): CCTV camera, Personal Computer (PC), Internet Connection, Power Back up.
- (c) Access control of mine lease site.
- (d) Arrangement for weight or approximation of weight of mined out mineral on basis of volume of the trailer of vehicle used.

3. Scanning of Transport Permit or Receipt and Uploading on Server:

- (a) Website: Scanning of receipt on mining site can be done through barcode scanner and computer using the software;
- (b) Android Application: Scanning on mining site can be done using Android Application using smart phone. It will require internet availability on SIM card;
- (c) SMS: Transport Permit or Receipt shall be uploaded on server even by sending SMS through mobile. Once Transport Permit or Receipt get uploaded, an unique invoice code gets generated with its validity period.



4. Proposed working of the system:

The State Mining Department should print the Transport Permit or Receipt with security features enumerated at Paragraph 1 above and issue them to the mine lease holder through the District Collector. Once these Transport Permits or Receipts are issued, they would be uploaded on the server against that mine lease area. Each receipt should be preferably with pre-fixed quantity, so the total quantity gets determined for the receipts issued.

When the Transport Permit or Receipt barcode gets scanned and invoice is generated, that particular barcode gets used and its validity time is recorded on the server. So all the details of transporting of mined out material can be captured on the server and the Transport Permit or Receipt cannot be reused.

5. Checking On Route:

The staff deployed for the purpose of checking of vehicles carrying mined mineral should be in a position to check the validity of Transport Permit or Receipt by scanning them using website, Android Application and SMS.

6. Breakdown of Vehicle:

In case the Vehicle breakdown, the validity of Transport Permit or Receipt shall be extended by sending SMS by driver in specific format to report breakdown of vehicle. The server will register this information and register the breakdown. The State can also establish a call centre, which can register breakdowns of such vehicles and extend the validity period. The subsequent restart of the vehicle also should be similarly reported to the server or call centre.

7. Tracking of Vehicles:

The route of vehicle from source to destination can be tracked through the system using check points, RFID Tags, and GPS tracking.

8. Alerts or Report Generation and Action Review:

The system will enable the authorities to develop periodic report on different parameters like daily lifting report, vehicle log or history, lifting against allocation, and total lifting. The system can be used to generate auto mails or SMS. This will enable the District Collector or District Magistrate to get all the relevant details and shall enable the authority to block the scanning facility of any site found to be indulged in irregularity. Whenever any authority intercepts any vehicle transporting illegal sand, it shall get registered on the server and shall be mandatory for the officer to fill in the report on action taken. Every intercepted vehicle shall be tracked.

The monitoring of mined out mineral, environmental clearance conditions and enforcement of Environment Management Plan will be ensured by the DEIAA, SEIAA and the State Pollution Control Board or Committee. The monitoring arrangements envisaged above shall be put in place. The monitoring of enforcement of environmental clearance conditions shall be done by the Central Pollution Control Board, Ministry of Environment, Forest and Climate Change and the agency nominated by the Ministry for the purpose.



ADMINISTRATIVE STRUCTURE FOR ENVIRONMENT CLEARANCE AND ENSURING COMPLIANCE OF EC CONDITIONS

An no mining in allowed without Envirnomental Clearance. The process of EC involves preparation of EIA/EMP, PER and mine plan.

The EIA/EMP can be prepared by the State Government or any agency of the State, group of project proponents in the cluster or the individual project proponent. The EIA / EMP can be prepared by the accredited consultants or the Registered Qualified Person(s) / agencies selected by the States.

DISTRICT ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

The Central Government has constituted the District Level Environment Impact Assessment Authority (DEIAA), for grant of environmental clearance for Category 'B2' Projects for mining of minor minerals, for all the districts in the country.

For, minor minerals including sand and gravel mining lease of area up to 5 hectare in case of individual lease and up to 25 ha in case of cluster for sand mining, the grant of EC will be done by the District Environment Impact Assessment Authority (DEIAA) headed by the District Magistrate or District Collector. This Authority will be responsible for proper and sustainable management of sand mining in the district. The Authority will be responsible for designating the area / stretch in river suitable for mining in the district and also identifying the area / stretch in river prohibited for sand mining. The Authority will ensure clear demarcation of mining site, its documentation, and ensuring that no mining takes place without EIA / EMP and EC of the mining site.

The Chairperson and official members of the Authority for the districts should hold office during their tenure in the district on said posts and the expert member shall hold office for a period of three years from the date of nomination by the Competent Authority. The Committee shall meet at least once in a month.

The District Environment Impact Assessment Authority (DEIAA) :

The DEIAA will have following composition :

1. District Magistrate or District Collector of the district	Chairperson
2. Senior most Divisional Forest Officer in the district	Member
3. An expert member to be nominated by the Divisional Commissioner or Chief Conservator of the Forest	Member
4. Sub-Divisional Magistrate or Sub-Divisional Officer of the district head quarter	Member-Secretary



DISTRICT LEVEL EXPERT APPRAISAL COMMITTEE:

The District Level Expert Appraisal Committee (DEAC) will appraise the cases and make recommendations to the District Environment Impact Assessment Authority for environmental clearance. This Committee will also make recommendations / suggestions on the District Survey Report to the DEIAA. The DEAC will have following composition:

1. Senior most Executive Engineer, Irrigation Department	Chairperson
2. Senior most Sub-Divisional Officer (Forest)	Member
3. A representative of Remote Sensing Department or Geology Department or State Ground Water Department to be nominated by the District Magistrate or District Collector	Member
4. Occupational health expert or Medical Officer to be nominated by the District Magistrate or District Collector	Member
5. Engineer from Zila Parishad	Member
6. A representative of State Pollution Control Board or Committee	Member
7. An expert to be nominated by the Divisional Commissioner or Chief Conservator of Forest	Member
8. An expert to be nominated by the Divisional Commissioner or Chief Conservator of Forest	Member
9. An expert to be nominated by the Divisional Commissioner or Chief Conservator of Forest	Member
10. Senior most Assistant Engineer, Public Works Department	Member
11. Assistant Director or Deputy Director or District Mines Officer or Geologist in the district in that order	Member- Secretary

The DEAC will meet at least once a month, depending on the work load the frequency of meetings can be decided by the Chairperson of DEAC and Chairperson, DEIAA.

Each proposal for the mining lease under consideration for environmental clearance in the district will be inspected on-site by the Sub-Divisional Level Committee headed by the SDM.



The Sub-Divisional Committee should comprise of following officers:

Sub-Divisional Magistrate	Chairperson
Sub-Divisional Officer, Forest/ Assistant Conservator of Forest/ Forest Range Officer	Member
Representative of State Pollution Control Board	Member
SDO, Irrigation Department	Member
Geologist or Assistant Geologist or Mining Officer / Mining Inspector	Member

The presence of at least three members will be needed for inspection. This Committee shall submit its report within 15 days from the receipt of the proposal.

The monitoring of EC conditions and enforcement of EMP will be ensured by the District Collector and the, State Pollution Control Board. The monitoring of enforcement of EC conditions can also be done by the Central Pollution Control Board, Ministry of Environment, Forest & Climate Change and the agency nominated by the Ministry for the purpose.

Schematic Presentation of Requirements on Environmental Clearance of Sand Mining including cluster situation

Area of Lease (Hectare)	Category of Project	Requirement of EIA / EMP	Requirement of Public Hearing	Requirement of EC	Who can prepare EIA/ EMP	Who will apply for EC	Authority to appraise/ grant EC	Authority to monitor EC compliance
EC Proposal of Sand Mining on the basis of individual mine lease								
0 - 5ha	'B2'	Form - 1M, PFR and Approved Mine Plan	No	Yes	Project Proponent	Project Proponent	DEAC/ DEIAA	DEIAA SEIAA SPCB CPCB MoEFCC Agency nominated by MoEFCC



> 5 ha and < 25 ha	'B2'	Form-I, PFR and Approved Mine Plan and EMP	No	Yes	Project Proponent	Project Proponent	SEAC / SEIAA	DEIAA SEIAA SPCB CPCB MoEFCC Agency nominated by MoEFCC
≥ 25ha and < 50ha	'B1'	Yes	Yes	Yes	Project Proponent	Project Proponent	SEAC / SEIAA	
≥ 50 ha	'A'	Yes	Yes	Yes	Project Proponent	Project Proponent	SEAC / SEIAA	
EC Proposal of Sand Mining in cluster situation								
Cluster area of mine leases up to 5 ha	'B2'	Form - 1M, PFR and Approved Mine Plan	No	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	DEAC/ DEIAA/	DEIAA SEIAA SPCB CPCB MoEFCC Agency nominated by MoEFCC
Cluster area of Mine leases > 5 ha and < 25 ha with no individual lease > 5 ha	'B2'	Form -I, PFR and Approved Mine Plan and one EMP for all leases in the Cluster	No	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	DEAC/ DEIAA/	



Cluster of mine leases of area $\geq$ 25 hectares with individual lease size < 50ha	'B1'	Yes	Yes	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	SEAC/ SEIAA	
Cluster of any size with any of the individual lease ≥ 50ha	'A'	Yes	Yes	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	EAC/ MoEFCC	

General Conditions will not apply on account of inter- state boundaries for river sand mining leases.



EXEMPTION OF CERTAIN CASES FROM BEING CONSIDERED AS MINING FOR THE PURPOSE OF REQUIREMENT OF ENVIRONMENTAL CLEARANCE

Keeping in view the purpose, maintenance of infrastructure, abatement of disasters, customary easement and property rights, it is felt that following cases may not be treated as mining for the purpose of requirement of environmental clearance. The following cases shall not require prior environmental clearance, namely:-

1. Extraction of ordinary clay or sand, manually, by the Kumhars (Potter) to prepare earthen pots, lamp, toys, etc. as per their customs.
2. Extraction of ordinary clay or sand, manually, by earthen tile makers who prepare earthen tiles.
3. Removal of sand deposits on agricultural field after flood by farmers.
4. Customary extraction of sand and ordinary earth from sources situated in Gram Panchayat for personal use or community work in village.
5. Community works like de-silting of village ponds or tanks, construction of village roads, ponds, bunds undertaken in Mahatama Gandhi National Rural Employment and Guarantee Schemes, other Government sponsored schemes, and community efforts.
6. Dredging and de-silting of dams, reservoirs, weirs, barrages, river, and canals for the purpose of their maintenance, upkeep and disaster management.
7. Traditional occupational work of sand by Vanjara and Oads in Gujarat vide notification number GU/90(16)/MCR-2189(68)/5-CHH, dated the 14th February, 1990 of the Government of Gujarat.
8. Digging of well for irrigation or drinking water.
9. Digging of foundation for buildings not requiring prior environmental clearance.
10. Excavation of ordinary earth or clay for plugging of any breach caused in canal, nala, drain, water body, etc., to deal with any disaster or flood like situation upon orders of District Collector or District Magistrate.
11. Activities declared by State Government under legislations or rules as non- mining activity with concurrence of the Ministry of Environment, Forest and Climate Change, Government of India.



STANDARD ENVIRONMENTAL CONDITIONS FOR SAND MINING

Impact Category	S.No.	Environmental Conditions
Stakeholder Engagement	1	In the case of private land not owned by the lease holder an affidavit should be obtained regarding consent of the concerned land owner (s) for carrying out the mining operation.
	2	Stakeholder awareness and ability to raise concerns and getting it to be addressed.
	3	Implementation of Action Plan on the issues raised during the Public Hearing. The Proponent shall complete all the tasks as per the Action Plan submitted with the budgetary provisions during the Public Hearing.
	4	Having valid lease and all the permits is very much needed.
	5	To establish a Monitoring Committee including Local Panchayat, to check on traffic due to transportation and submit an annual report on the same.
	6	The directions given by the Hon'ble Supreme Court of India vide order dated 27.02.2012 in Deepak Kumar case [SLP(C) Nos. 19628-19629 of 2009] and order dated 05.08.2013 of the Hon'ble National Green Tribunal in application No. 171/2013 may be strictly followed.
	7	All the provisions made and restrictions imposed as covered in the Minor Mineral Rule, shall be complied with, particularly regarding Environment Management Practices and its fund management and Payment of compensation to the land owners.
Sustainable Mining Practices	8	District level Survey Report should be prepared and area suitable for mining and area prohibited for mining be identified.
	9	The depth of mining in Riverbed shall not exceed one meter or water level whichever is less, provided that where the Joint Inspection Committee certifies about excessive deposit or over accumulation of mineral in certain reaches requiring channelization, it can go up to 3 meters on defined reaches of the River.
	10	No River sand mining be allowed in rainy season.
	11	To submit annual replenishment report certified by an authorized agency. In case the replenishment is lower than the approved rate of production,



		then the mining activity / production levels shall be decreased / stopped accordingly till the replenishment is completed.
	12	Ultimate working depth shall be up to 3.0 m from Riverbed level and not less than one meter from the water level of the River channel whichever is reached earlier. In hilly terrain this depth be preferably restricted to one meter.
	13	In River flood plain mining a buffer of 3 meter to be left from the River bank for mining.
	14	In mining from agricultural field a buffer of 3 meter to be left from the adjacent field.
	15	Mining shall be done in layers of 1 meter depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers.
	16	To maintain safety and stability of Riverbanks i.e. 3 meter or 10% of the width of the River whichever is more will be left intact as no mining zone.
	17	No stream should be diverted for the purpose of sand mining. No natural water course and/ or water resources are obstructed due to mining operations.
	18	No blasting shall be resorted to in River mining and without permission at any other place.
	19	Depending upon the location, thickness of sand, deposition, agricultural land/Riverbed, the method of mining may be manual, semi-mechanized or mechanized; however, manual method of mining shall be preferred over any other method.
Identification and Preparation of Mining Site	20	Mining should be done only in area / stretch identified in the District Level Survey Report suitable for mining and so certified by the Sub-Divisional Level Committee after site visit.
	21	Mining should begin only after pucca pillar marking the boundary of lease area is erected at the cost of the lease holder after certification by the mining official and its geo coordinates are made available to the District Level Committee.
	22	The top soil in case of surface land mining shall be stored temporarily in an earmarked site and concurrently used for land reclamation.



Monitoring the Mining of Mineral and its Transportation	23	The EC holder shall keep a correct account of quantity of mineral mined out, dispatched from the mine, mode of transport, registration number of vehicle, person in-charge of vehicle and mine plan. This should be produced before officers of Central Government and State for inspection.
	24	For each mining lease site the access should be controlled in a way that vehicles carrying mineral from that area are tracked and accounted for.
	25	The State / District Level Environment Committee should use technology like Bar Coding, Information and Communications Technology (ICT), Web based and ICT enabled services, mobile SMS App etc. to account for weight of mineral being taken out of the lease area and the number of trucks moving out with the mineral.
	26	There should be regular monitoring of the mining activities in the State to ensure effective compliance of stipulated EC conditions and of the provisions under the Minor Mineral Concessions Rules framed by the State Government.
Noise Management	27	Noise arising out of mining and processing shall be abated and controlled at source to keep within permissible limit.
	28	Restricted working hours. Sand mining operation has to be carried out between 6 am to 7 pm.
Air Pollution and Dust Management	29	The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly.
	30	Air Pollution due to dust, exhaust emission or fumes during mining and processing phase should be controlled and kept in permissible limits specified under environmental laws.
	31	The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Wheel washing facility should be installed and used.
Management of Visual Impact	32	The mining operations are to be done in a systematic manner so that the operations shall create a major visual impact on the site.
Bio-Diversity Protection	33	Restoration of flora affected by mining should be done immediately. Twice the number of trees destroyed by mining to be planted preferably of indigenous species. Each EC holder should plant and maintain for lease period at least 5 trees per hectare in area near lease.
	34	No mining lease shall be granted in the forest area without forest clearance in accordance with the provisions of the Forest Conservation Act, 1980 and the rules made thereunder.



	35	Protection of turtle and bird habitats shall be ensured.
	36	No felling of tree near quarry is allowed. For mining lease within 10km of the National Park / Sanctuary or in Eco-Sensitive Zone of the Protected Area, recommendation of Standing Committee of National Board of Wild Life (NBWL) have to be obtained as per the Hon'ble Supreme Court order in I.A. No. 460 of 2004.
	37	Spring sources should not be affected due to mining activities. Necessary Protection measures are to be incorporated.
Management of Instability and Erosion	38	Removal, stacking and utilization of top soil in mining are should be ensured. Where top soil cannot be used concurrently, it shall be stored separately for future use keeping in view that the bacterial organism should not die and should be spread nearby area.
	39	The EC should stipulate conditions for adequate steps to check soil erosion and control debris flow etc. by constructing engineering structures
	40	Use of oversize material to control erosion and movement of sediments
	41	No overhangs shall be allowed to be formed due to mining and mining shall not be allowed in area where subsidence of rocks is likely to occur due to steep angle of slope.
	42	No extraction of stone / boulder / sand in landslide prone areas.
	43	Controlled clearance of riparian vegetation to be undertaken
Waste Management	44	Site clearance and tidiness is very much needed to have less visual impact of mining.
	45	Dumping of waste shall be done in earmarked places as approved in Mining Plan.
	46	Rubbish burial shall not be done in the Rivers.
Pollution Prevention	47	The EC holder shall take all possible precautions for the protection of environment and control of pollution.
	48	Effluent discharge should be kept to the minimum and it should meet the standards prescribed.
Protection of Infrastructure	49	Mining shall not be undertaken in a mining lease located in 200-500 meter of bridge, 200 meter upstream and downstream of water supply / irrigation scheme, 100 meters from the edge of National Highway and railway line, 50 meters from a reservoir, canal or building, 25 meter from the edge of State Highway and 10 meters from the edge of other



		roads except on special exemption by the Sub-Divisional level Joint Inspection Committee.
	50	For carrying out mining in proximity to any bridge or embankment, appropriate safety zone (not less than 200 meters) should be worked out on case to case basis, taking into account the structural parameters, location aspects and flow rate, and no mining should be carried out in the safety zone so worked out.
	51	Mining activities shall not be done for mine lease where mining can cause danger to site of flood protection works, places of cultural, religious, historical, and archeological importance.
Enhancement Road Safety	52	Vehicles used for transportation of sand are to be permitted only with of fitness and PUC Certificates.
	53	Junction at takeoff point of approach road with main road be properly developed with proper width and geometry required for safe movement of traffic by concession holder at his own cost.
	54	Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral; and transport of minerals will be as per IRC Guideliness with respect to complying with traffic congestion and density.
	55	No stacking allowed on road side along National Highways.
Closure and Reclamation of Mined Out Area	56	The Project Proponent shall undertake phased restoration, reclamation and rehabilitation of land affected by mining and completes this work before abandonment of mine.
	57	Restoration, reclamation and rehabilitation in cluster should be done systematically and jointly by each EC holder in that cluster. This should be appropriately reflected as EC condition in each EC in cluster.
	58	Site specific plan with eco-restoration should be in place and implemented.
Health and Safety	59	Health and safety of workers should be taken care of.
	60	Transport of mineral will not be done through villages / habitations.
	61	The Project Proponent shall make arrangement for drinking water, first aid facility (along with species specific anti-venom provisioning) in case of emergency for the workers.



	62	Project Proponent shall implement the Disaster Management Plan if the mine lease area is located in Seismic Zone-IV. Project Proponent shall appoint a Committee to have a check over any disaster to warn workers well before for the safety of the workers. Emergency helpline number will be displayed at all levels.
	63	Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers would also be adopted.
Monitoring the Impact of Mining	64	The Project Proponent shall report monitoring data on replenishment, traffic management, levels of production, River Bank erosion and maintenance of Road etc.
Mineral Conservation	65	Use of alternate material such as M-sand in place of natural River sand shall be encouraged in order to reduce stress on natural eco-system.

**APPENDIX: TABLE - 1****REVENUE FROM SAND MINING IN STATES / UTs**

(Rs. in crores)

Sl.No.	STATE / U.T	2012 - 2013	2013 - 2014	2014 - 2015
01	Andaman & Nicobar	0.073	0	0
02	Arunachal Pradesh	7	8	5
03	National Capital Territory of Delhi	0	0	
04	Himachal Pradesh	0.70	0.35	0.07
05	Jharkhand	4.25	3.04	0.07
06	Karnataka	23.74	15.33	25.99
07	Madhya Pradesh	184.93	179.41	172.53
08	Meghalaya	14.50	15.88	15.50 (as forest royalty from govt. contractors)
09	Mizoram	0.018	0.0475	0.0861
10	Puducherry	0.80	0.20	0.03
11	Rajasthan	173.36	252.06	134
12	Tamil Nadu	188.50	117.73	109.10
13	Uttar Pradesh	97.27	166.45	168.38

* States/UTs not mentioned have not provided the data.



APPENDIX: TABLE - 2

NUMBER OF MINING LEASES IN STATE

Sl.No.	STATE / U.T	In stream	Flood Plain	Sea Shore	Agricultural field	River	Total
01	Andaman & Nicobar						Nil
02	Andhra Pradesh						Nil
03	Haryana	5	12		7		31
04	Jammu & Kashmir					650	650
05	Jharkhand	10				387	397
06	Lakshadweep					1090	1090
07	Manipur						NIL
08	Meghalaya						NIL
09	Odisha						NIL
10	Punjab	2 + 80 Temporary Working Permit				73	155
11	Sikkim		85				85
12	Tripura	21	244		5		270

* States/UTs not mentioned have not provided the data.

**APPENDIX: TABLE - 3**
**AVERAGE SIZE OF SAND MINING LEASES IN
STATE / UT: 2014-15**

(In Hectare)

Sl.No.	STATE / U.T	AVERAGE SIZE	SMALLEST MINING LEASE AREA	LARGEST MINING LEASE AREA
01	Andaman & Nicobar	NOT APPLICABLE		
02	Arunachal Pradesh	ONLY MINING PERMITS		
03	Himachal Pradesh	1.20	0.25	4.09
04	Jharkhand	0.25	0.13	87.38
05	Karnataka	5	5	19.42
06	Madhya Pradesh	8.52	0.30	306.98
07	Meghalaya	Mostly < 1.5 ha.		
08	Mizoram	NA		
09	Puducherry	NA		
10	Rajasthan	2 5 in Bikaner	24.82 2 in Bikaner	1901.89 5 in Bikaner
11	Tamil Nadu	29 leases < 10 ha.	14 leases of 10 - 15 ha.	42 leases > 15 ha.
12	Uttar Pradesh	25	5	200

* States/UTs not mentioned have not provided the data.



APPENDIX: TABLE - 4

AVERAGE PERIOD OF SAND MINING LEASES IN STATE / UT

(In Hectare)

Sl.No.	STATE / U.T	AVERAGE MINING LEASE PERIOD (YEARS)
01	Andaman & Nicobar	Not Applicable
02	Arunachal Pradesh	Only mining permit is given
03	Himachal Pradesh	5
04	Jharkhand	3
05	Karnataka	2
06	Madhya Pradesh	5 to 10
07	Meghalaya	No lease in operation currently
08	Mizoram	No mining lease in operation currently
09	Puducherry	One year permit
10	Rajasthan	5 20-30 years in Bikaner
11	Tamil Nadu	3
12	Uttar Pradesh	3

* States/UTs not mentioned have not provided the data.

**APPENDIX: TABLE - 5**
**COMMON METHOD AND PRACTICE OF
SAND MINING IN STATE / UT**

Sl.No.	STATE / U.T	COMMON METHOD AND PRACTICE OF SAND MINING
01	Andaman & Nicobar	1. The Apex Court in its order dated 7.5.2002 in I.A. No. 502 in WP (C) No. 202 of 1995, had directed that extraction of sand be phased out @ minimum 20% per year on reducing balance basis to bring the sand mining to a level of 33% of the present level of mining within a maximum period of five years. 2. Since the level of extraction of sand in the territory in the year 2001-02 i.e. the base year, was 68909 cubic meter, the quantity of extractable sand is fixed at 22581 cubic meter. 3. The quantity of sea sand so allowed by MoEF is extracted from the identified and approved sites having such deposits on the sea beaches (identified accreting area) with adequate environmental safeguards so as to prevent any damage to the sensitive coastal eco-system including corals, turtle/ bird nesting sites and the protected areas. 4. The allotment of sea sand is made to the individuals by the Sand Allotment Committee constituted by the Lieutenant Governor under the Chairmanship of Chief Secretary who also heads the A&N CZMA. The quantum of sea sand allotted is fixed by the Committee on the basis of availability of sea sand and the number of applicants (local) applied for their bonafide use.
02	Arunachal Pradesh	1. Mining of sand restricted to foothills only that too for a very short period. Grant of mining lease is kept in abeyance, short term mining permits are issued to various Central and State agencies for carrying out developmental works under the strict supervision of the departmental officers.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	COMMON METHOD AND PRACTICE OF SAND MINING
03	Himachal Pradesh	Manual. The mining lease areas are sanctioned on the river bed if the area is approved in survey document. The mining activities are allowed strictly in accordance with the approved working cum Environment Management Plan and after the environment clearance.
04	Jharkhand	Manual
05	Karnataka	Manual
06	Madhya Pradesh	Manual
07	Meghalaya	Hill quarrying in private areas
08	Mizoram	Extraction of sand limited mainly for domestic purpose in the state. The produce extracted illegally is seized as per the Mizoram Forest Act, 1955. Mining is only limited to river banks and riverbeds with improvised equipments like spade, shovel, small canoes, etc.
09	Puducherry	Manual
10	Rajasthan	In Rajasthan sand is available in seasonal streams and rivers except Chambal which is perennial but mining is banned because of Chambal Crocodile Sanctuary. Mining is done up to 3 meters and is open cast. It is filled in trucks either manually or semi mechanized method. In Bikaner no river exists and mining for sand is being done from palaeo-channel. In this palaeo-channel the sand deposit occurs at the depth of 5 meter to 20 meter below ground level with an over burden of 5 to 20 meters. The mining here is done open cast benching method, where overlying blown sand, gravel, pebble etc. is removed, the sand is further sieved, graded and washed upto 12 to 18 mesh size.
11	Tamil Nadu	Manual mining is carried out in certain quarries. In most of the sand quarries two poclains are used by the PWD.
12	Uttar Pradesh	Manual and Semi-mechanised

* States/UTs not mentioned have not provided the data.



APPENDIX: TABLE - 6

SUGGESTIONS / RECOMMENDATIONS FROM STATES / UTs FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING

Sl.No.	STATE / U.T	SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING
01	Andaman & Nicobar	The quantum of extractable sand fixed at 22581 cubic meter should be enhanced. This limit has been fixed by the orders of Hon'ble Supreme Court subject to study by National Institute of Oceanography.
02	Arunachal Pradesh	1. For environmentally sustainable sand mining a strict and comprehensive sand mining policy need to be framed. 2. River sand is becoming a scarce commodity and hence exploring alternative to it has become imminent. Manufactured sand is a good alternative both for fine as well as coarse sand used in concrete. 3. Sand mining should be restricted to surface collection only without the use of heavy machinery. 4. Due to turbulent and inaccessible nature of rivers flowing in the hilly terrains of the state, deposition of the sand in the river bed is very negligible and except for few quarries in the foothills and plains, most of the notified quarries are boulders and mining of sand is very negligible. 5. In view of environment related issues the grant of mining lease for river bed minor mineral viz. sand, gravel, shingle, aggregate, boulder are kept in abeyance and extraction of these minerals is regulated only by grant of mining permits, that too not exceeding 3000 cubic meter in one permit. 6. For scientific mining of sand and other minor minerals Guideliness has been prepared and accordingly Geo-Technical Committee has been constituted under the chairmanship of ADC/SDO in the district level to determine the quantity of quarriable mineral that can be safely removed and also to give technical clearance for notification of quarries of smaller size, preferably within one hectare.
03	Chhattisgarh	1. While attempting to prepare a model Guidelines / policy for the country, the differences that exist in different states may be taken into account. It may be tried to take all stakeholders along.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING
		2. To ease the process of EC granting, SEIAA may have benches across the State with each bench having a SEAC under it. Time bound clearance with ease of access and grant. 3. Sand mining with use of machinery should be allowed. 4. Road construction material like murram should be exempted from EC considering their local / pocket occurrences and impossibility of obtaining EC. 5. Considering the traffic issue at urban areas and to reduce intermediaries like storage point dealers, night mining with adequate lighting should be allowed. 6. To make the availability of sand from local rivulet / streams the river bank to in-stream mine area distance should be reduced from 10 meter to 3 meters.
04	NCT of Delhi	1. Location of sand mining should be identified by a committee comprising of revenue deptt., Irrigation Deptt., CGWB, SPCB, Forest Department and mining department. Mining area should distinctly be marked at site, before allowing mining. 2. Depth of mining should be restricted to 3 mtrs or water level, whichever is less and that to from aggradation areas. The side slope of excavation should be less than 3:1. 3. Requirement of sand and gravel should be reduced by utilization of construction and demolition waste. It requires not only legislative support but also awareness campaign among the society. 4. Guidelines should be distinctly clear and easy to understand covering do's and don't during mining operation. 5. Sufficient safe distance should be left between mining site and adjoining engineering structures like embankment, spurs, bed bars, bridges, reservoir and regulator etc. 6. Security amount should be sufficient enough to compel the agency to carry out rehabilitation, corrective measures and to ensure strict compliance of conditions of lease. S.D. should be released after inspection of committee and recording of certificate that agency complied with the lease conditions. 7. Mining may be carried out by state agency instead of private agencies.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING
05	Himachal Pradesh	1. Working cum Environment Management Plan has been made mandatory. The mining activities are allowed after submission of environment clearance. 2. In compliance of order of Hon'ble Supreme Court dated 27.02.2012 in Deepak Kumar case, the Himachal Pradesh has repealed its rules called the Himachal Pradesh Minor Mineral (Concession) and Mineral (Prevention of illegal mining, transportation and Storage) Rule, 2015 in accordance to the recommendation of the Ministry of Environment & Forest and rules circulated by the Ministry of Mines. Hence the State of Himachal Pradesh has complied with the above directions of the Hon'ble Apex Court, 3. Therefore the condition of applicability of Environment Clearance on the area less than 5 hectare shall be exempted. 4. Further keeping in view, the peculiar topography, geography and socio-economic fabric of the State, the condition for the minimum size of the lease should be exempted as the rivers are in youth stage forming different land forms, land holdings are less, population is thin and scattered and the demand of minor mineral is limited, which could be met out locally by exploiting local resources on the small scale.
06	Jammu & Kashmir	1. Uniform Guidelines be framed for sand mining and river bed mining as they cannot be segregated. 2. Identification of sand belts be made in consultation with CGWB and while framing Guideliness CGWB may be taken on board. 3. Sand mining leases less than 5 hectare be exempted from EC and comprehensive policy may be made for hilly states for easing the process of grant of lease.
07	Jharkhand	1. Machine should not be used in sand mining. Only manual mining should be done. 2. The depth of mining shall be restricted to 3 meter / water level whichever is less. 3. No mining should be carried out in proximity of any bridge / embankment. 4. In-stream mining should not be allowed. 5. Mining should be done in accordance with an approved mining plan.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING
		6. EC should be valid for settlement period subject to ceiling of five years.
08	Karnataka	1. Undertaking sand mining activity through a Government agency to be governed by District Level Sand Monitoring Committee headed by Deputy Commissioner. 2. The area should be properly surveyed and mapped with the help of GPS to assign geo coordinates and accordingly erect boundary pillars so as to avoid illegal and unscientific mining. 3. Depth of sand available may be indicated in a contour map using suitable drilled holes to ensure sand mining do not exceed one meter depth. 4. Once thickness is established sand mining may be permitted to one meter depth where the thickness of sand is more than three meter deep. If the thickness of sand is less than three meter, sand mining shall not be permitted. 5. Sufficient spacing shall be ensured from one block to another block and sufficient time gap shall be provided for replenishment before undertaking mining activity in the same block. 6. Mining activity shall be restricted to only non-monsoon season and in the area that is exposed. 7. No in-stream mining shall be permitted. 8. No stream should be diverted for the purpose of sand mining. No natural water course and/ or water resources are obstructed due to mining operations. 9. Site specific plan with eco-restoration should be in place. 10. Sand mining shall be undertaken only by manual method without use of earth moving equipment such as JCB etc. Use of mechanized boats for sucking sand from in-stream area shall be strictly prohibited. 11. Appropriate safety zones shall be maintained in proximity to any bridge / and / or embankment and other permanent structures. No sand mining shall be undertaken in such safety / buffer zones. Guideliness issued by the Ministry of Mines in this regard shall also be adhered to. 12. The quarrying activity shall not intersect subterranean water level and ground water table.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING
		13.The top soil in case of surface land mining shall be stored temporarily in an earmarked site and concurrently used for land reclamation. 14.Use of alternate material such as M-sand in place of natural river sand shall be encouraged in order to reduce stress on natural eco-system.
09	Madhya Pradesh	1. Geographical location of the state should be taken care of. 2. Keep provision for extraction of sand from forest areas. 3. Expedite the EC process. 4. In inter-state boundary leases sand mining EC be giver by the SEIAA. 5. Clear Guidelines for B-1, B2 be issued. 6. Simplify cluster cases. 7. Exempt mining leases of less than 5 hectare from EC.
10	Meghalaya	1. No sand mining within 3 kilometer from Protected area and Reserved Forest area. 2. Advance royalty etc for entire quantity of mineral be realized in full. 3. Only loose boulder and sand are allowed to be removed from the mid river stream leaving 15 meter on either side untouched. 4. No collection of sand is allowed on 15 meter of either side of structures like bridge, culvert etc. 5. No blasting allowed. 6. No extraction of stone / boulder / sand in landslide prone areas. 7. No stacking allowed on road side along national highways. 8. No felling of tree near quarry is allowed. 9. No transportation of forest produce (sand from forest area) is allowed after sunset. 10.Export fee realized if sand is sent outside the state. 11.Stone crusher cannot be installed without permission of DFO. 12.Tree should be planted at quarry after completion of mining. 13.Violation of above conditions will result in cancellation of permit and forfeiture of advance royalty already paid.
11	Mizoram	1. Extraction of sand from the forest may be permitted strictly as per mining plan approved by the Competent Authority and after getting necessary clearance under various acts related to the forest and environment.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING
12	Odisha	1. EC may be exempted for leases less than 5 hectare.
		2. EC should not be required for earth mining.
		3. Minor minerals even close to inter-state borders should be allowed to be cleared by the SEIAA.
		4. In case a river is forming boundary of states and mechanized mining of sand is causing tension in states it should be resolved at the national level.
13	Puducherry	1. Environment Clearance is issued by SEIAA, Puducherry strictly under the provisions of the EIA Notification, 2006 and subsequent amendments.
14	Rajasthan	1. The bajari mined out from river bed is filled back by the river itself during the next rainy season. So, nature itself reclaims the mined out area every year. The formation of bajari is a natural process in the river and it is also essential to remove bajari from the river bed to avoid silting. If the sand deposited in the river bed is not removed, it may cause change of river course and may also results in flood plains will be developed.
		2. Price control system adopted in Rajasthan. Sand is a essential commodity.
		3. The depth of mining should be restricted to 3 meters or above water table.
		4. Machinery having boom height more than 3 meter shall not be allowed in extraction of bajari.
		5. Size of mining leases be allowed below 5 hectare.
		6. In streams with low deposit of sand and if use is mostly local no mechanized mining should be allowed and EC should not be required.
		7. In larger deposits there should be semi-mechanised mining with EC.
		8. The sand (river and stream) in different categories, with their availability, use and size of the deposit. Category A: Small deposits in river and stream where thickness of sand bed is very less and sand is used locally in villages and towns only and no mechanical mining is done, in such areas restriction of obtaining Environment Clearance can be relaxed for manual mining.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING
		Category B: Large deposits, where in rivers and streams having thickness of sand bed is medium to large, sand mining, shall be allowed with semi mechanized manner after obtaining Environment Clearance. Bikaner District: Bikaner district is a desert terrain where ground water table is very deep. Bajari is excavated above water table and it does not affect the water table. In addition to this boulder, gravel and waste generated due to bajari mining is used in reclamation of pits. Hence environment is not adversely affected due to bajari mining.
15	Sikkim	1. Forest department is the nodal department for sand and stone extraction from the riverbed. 2. Use of machines is prohibited. 3. Quarrying sites are allotted to village youth cooperatives. 4. For bigger companies quarry sites in forest area are allotted after FC. 5. State Government has considerations for allotment of quarries for Border Road Organization and MoD. 6. GoI can monitor mining in states through GIS.
16	Tamil Nadu	1. Excess sand deposits identified in the flood plains and in-stream areas only to be mined in order to safeguard and maintain ground water table. 2. Sand mining operation has to be carried out between 6 am to 7 pm. 3. Mining operation should be carried out in a systematic manner without affecting environment and ecology of the area.
17	Uttar Pradesh	1. Depth of mining cannot be more than 3 meter or water table whichever is less. 2. Mining can be done in slices forming benches where bench height cannot be more than 1 meter and bench width cannot be less than 10 meter. 3. A width of not less than 50 meter or 10% width of river can be restricted for mining activities from river bank. A condition can be imposed that mining will be done from river activities from river bank. 4. SEIAA should be decentralized to expedite EC process. It can be decentralized to district or zonal level.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING
		5. Make EC conditions practical.
		6. Requirement of mining plan in river bed mining be done away with.
		7. There should not be requirement of EC for short term permit.
		8. The quantity of sand should not be fixed in EC as it leads to loss in revenue and illegal mining.
		9. Semi-mechanised form of sand mining be allowed.
		10. Sand mining to be exempted from EC as it takes 6-8 months and environment department do not have requisite work force to enforce EC conditions. A Guidelines for environmentally sustainable sand mining be framed and it can be complied by imposing it in the lease condition.
18	Uttarakhand	1. Area less than 5 hectare be exempted from EC.
		2. Use of machine be allowed for scientific mining and reducing the cost of production.
		3. RBM deposition in the lease should not be fixed for the entire lease period. RBM in lease area be assessed after rains every year.
		4. 70% of leases in state not operating for want of EC and these vacant lots are source of illegal mining.

* States/UTs not mentioned have not provided the data.

**APPENDIX: TABLE - 7**
**BEST PRACTICE OF SAND MINING ADOPTED IN
DISTRICT / STATE / UT**

Sl.No.	STATE / U.T	DESCRIPTION OF BEST PRACTICES
01	Andaman & Nicobar	Institute of Ocean Management has been entrusted the task of identification of sand accreting sites.
02	Arunachal Pradesh	Mining of sand is restricted to foothills only that too for a very short period.
03	National Capital Territory of Delhi	In Delhi sand mining lease is granted by Revenue department. NOC from I&FC Deptt. Were issued with condition of limitation of depth, area of mining, operation timing limitation and limited period of NOC. Compliance of laid down conditions and monitoring is ensured by collector.
04	Himachal Pradesh	1. The mining activities on river beds are allowed strictly as per the provisions of river / stream bed mining policy as under. 2. No river / stream bed mining shall be allowed without the recommendation of the Sub Divisional Level Committee constituted under the Chairmanship of Sub Divisional Magistrate having XEN PWD, Irrigation and Public Health, SPCB, DFO and Mining Officer as its member. 3. Nor river / stream bed mining shall be allowed within 75 meter from the periphery of soil conservation works, nursery plantations, check dams or within the distance as recommended by the Sub-Divisional Committee whichever is more. 4. No river / stream bed mining shall be allowed within 1/10th of its span or 5 meters from the banks or as specified by the Sub-Divisional Level Committee, whichever is more. 5. Nor river / stream bed mining shall be allowed within 200 meters upstream and downstream of water supply scheme or as specified by the Committee whichever is more. 6. Nor river / stream bed mining shall be allowed within 200 meters upstream and 200 to 500 meters downstream of bridges depending upon the site specific conditions.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	DESCRIPTION OF BEST PRACTICES
		7. No approach road from PWD road shall be allowed to lease area unless lessee / contractor obtains written permission from XEN, PWD for making road leading to all intake places from the PWD road. 8. No boulders/ cobbles/ hand broken road ballast shall be allowed to be transported outside the State from river/stream beds. 9. No digging for more than 3 feet shall be allowed in river/ stream beds. 10.No blasting shall be allowed in river/stream beds.
05	Madhya Pradesh	1. In some districts the Cooperative Societies of Labour are doing the sand collection, loading and unloading work.
06	Tamil Nadu	Permission has been granted in favour of PWD for quarrying sand in the river Poramboke lands in 16 districts in the state of Tamil Nadu. Sand mining is being carried out by the PWD in the entire State.
07	Uttar Pradesh	U.P. Minor Mineral Concession Rules, 1963.

* States/UTs not mentioned have not provided the data.

**APPENDIX: TABLE - 8****STATUS OF PROMULGATION OF RULE ON SAND MINING
IN THE STATE / UT**

Sl.No.	STATE / U.T	NAME OF RULE WITH YEAR OF PROMULGATION
01	Andaman & Nicobar	Indian Forest Act, 1927 as sand has been included as forest produce.
02	Arunachal Pradesh	APMMCR 2002 and made effective from 1.01.2003
03	Himachal Pradesh	1. River/Stream bed Mining Policy-2004. 2. Himachal Pradesh Minor Mineral Policy-2013. 3. Himachal Pradesh Minor Mineral (Concession) and Mineral (Prevention of illegal mining, transportation and storage) Rule, 2015.
04	Jharkhand	Rule 12 of Jharkhand Minor Mineral Concession (Amendment) Rule 2014.
05	Karnataka	Karnataka Sand Policy was brought out in the year 2011 and as such amendment to the Karnataka Minor Mineral Concession Rule 1994 were made in the year 2011 and a separate chapter IV B for sand mining was introduced under Rule 31-R. Further, as per the Hon'ble Supreme Court orders sated 27.02.2012 in SLP No. 19628-19629 between Deepak Kumar and State of Haryana and others and as per the model Guideliness issued by the Government of India for Environmental Management of Mining of Minor Minerals, amendment to the Karnataka Minor Mineral Concessions Rule 1994 were brought out on 16.12.2013 incorporating a new chapter II A applicable to all minor minerals on Systematic, Scientific Mining and Protection of Environment, wherein Quarrying Plan, Environmental Management Plan and Environment Clearance was made mandatory. Amendments to Rule 31- R were also made wherein the Government, PWD Department was entrusted with sand mining, storage and transportation, under the District Sand Monitoring Committee and Taluk Sand Monitoring Committee.
06	Madhya Pradesh	Rules have been framed as per the orders of Hon'ble Supreme Court for sand mining under M.P. Minor Mineral Rules 1996 and Sand Mining Policy 2015 is also formulated in the State.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	NAME OF RULE WITH YEAR OF PROMULGATION
07	Meghalaya	No rules notified by the state on sand mining
08	Mizoram	Mizoram Forest Act, 1955, which came into force on 1.01.1956.
09	Puducherry	Puducherry Minor Minerals (Concession) Rules, 1977.
10	Rajasthan	RMMCR, 1986 Notification dated 2.11.2012: 1. First proviso of Rule 8(2) and first proviso of 17 (1) - Renewal of Bajari Mining Leases is not allowed. 2. Rule 16 (3) - Mining Leases of Bajari to be granted for 5 years. 3. Rule 18 (18) - Part surrender of lease area of Bajari not allowed. Notification dated 3.4.2013 - (First proviso Rule 7 (1)- Mining leases of Bajari to be granted only by way of tender or auction. Notification dated 12.07.2013 - (First proviso Rule 11 (2)) - Maximum area limit of 10 sq. km. not applicable for Bajari Mining Leases. Bikaner District: Chapter II of RMMCR, 1986 (last amended 12.07.2013).
11	Sikkim	Sikkim Forest (Allotment of Areas for Quarrying of Sand and Stone), 2006.
12	Tamil Nadu	1. As per G.O. Ms. No. 95 Industries (MMCI) Department dated 1.10.2003, a new Rule 38 A has been introduced in the Tamil Nadu Minor Mineral Concession Rules, 1959. Accordingly quarrying and sale of sand is being carried out by PWD in the state of Tamil Nadu since October 2003. 2. As per G.O. Ms. No. 158 Industries (MMIC) Department dated 25.08.2008, a new Rule 38 B has been introduced in the Tamil Nadu Minor Mineral Concession Rules, 1959. Accordingly transportation of sand outside the state not to be made. To regulate storage and transportation of sand a new Rule 38 C B has been introduced in the Tamil Nadu Minor Mineral Concession Rules, 1959 vide G.O. No. 32 Industries (MMIC) Department dated 11.02.2011.

* States/UTs not mentioned have not provided the data.

**APPENDIX: TABLE -9**
**NORMAL DATES OF ONSET AND WITHDRAWAL OF
SOUTH-WEST MONSOON**

The India Meteorological Department, Nagpur, vide letter No. NAGPUR RMC /CS-312, dated 18th January, 2016 has provided the period of Rainy Season viz. Normal dates of Onset and Withdrawal of Southwest Monsoon over India as state-wise and union territory- wise which are as below:-

States	Normal date of Onset of SW-Monsoon	Normal date of Withdrawal of SW-Monsoon
Andhra Pradesh	1st June	15th October
Arunachal Pradesh	5th June	15th October
Assam	5th June	15th October
Bihar	10th June	15th October
Chhattisgarh	10th June	15th October
Goa	5th June	15th October
Gujarat	15th June	15th September
Haryana	1st July	15th September
Himachal Pradesh	1st July	15th September
Jammu & Kashmir	1st July	15th September
Jharkhand	10th June	15th October
Karnataka	5th June	15th October
Kerala	1st June	15th October
Madhya Pradesh	15th June	1st October
Maharashtra	10th June	1st October
Manipur	1st June	15th October
Meghalaya	1st June	15th October
Mizoram	1st June	15th October
Nagaland	5th June	15th October
Odisha (Orissa)	5th June	15th October
Punjab	1st July	15th September
Rajasthan	1st July	1st September
Sikkim	5th June	15th October
Tamil Nadu	1st June	15th October
Telangana	5th June	15th October
Tripura	1st June	15th October



States	Normal date of Onset of SW-Monsoon	Normal date of Withdrawal of SW-Monsoon
Uttar Pradesh	15th June	1st October
Uttarakhand	15th June	1st October
West Bengal	10th June	15th October
Union territory	Normal date of Onset of SW-Monsoon	Normal date of Withdrawal of SW-Monsoon
Andaman and Nicobar Islands	20th May	15th October
Dadra and Nagar Haveli	10th June	1st October
Daman and Diu	10th June	1st October
Lakshadweep	1st June	15th October
Delhi	1st July	15th September
Puducherry	1st June	15th October

Note: The District Environment Impact Assessment Authority (DEIAA) in consultation with District Expert Appraisal Committee (DEAC) can make necessary changes as per local meteorological variations in this period of rainy season with respect to prohibition of River Sand Mining in the District.

ENSURING SUSTAINABLE SAND MINING FOR SUSTAINABLE DEVELOPMENT

A Major Initiative of Ministry of Environment, Forest and Climate Change for ensuring Environmentally Sustainable Sand Mining and Prevention of illegal Sand Mining.

(Notification No: SO No. 141 (E) dated 15.01.2016 and S.O. No. 190 (E) dated 20.01.2016 available at www.envfor.nic.in)

- ◆ Use of Satellite imagery to decide the site suitable for mining and quantity of sand which can be mined.
- ◆ Transit permit with tamper proof security features and tracking of mined out mineral.
- ◆ Monitoring of mined out mineral to prevent mining in excess of environmental clearance capacity.

- ▶ Delegation of power to grant environmental clearance for sand mining to an authority headed by District Magistrate.

- ▶ Intergration of power with District Authorities to grant environmental clearance and prevent illegal mining.



Note : Any information of mining without environmental clearance or against the norms prescribed in these notifications be reported at e-mail id: sandmining-moef@gov.in

ANNEXURE-4

**Enforcement & Monitoring Guidelines
for Sand Mining – January 2020
published by Ministry of Environment,
Forest and Climate Change**



Enforcement & Monitoring Guidelines for Sand Mining



Ministry of Environment, Forest and Climate change

January, 2020

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1.0 INTRODUCTION

The Ministry of Environment Forest & Climate Change formulated the Sustainable Sand Management Guidelines 2016 which focuses on the Management of Sand Mining in the Country. But in the recent past, it has been observed that apart from management and systematic mining practices there is an urgent need to have a guideline for effective enforcement of regulatory provision and their monitoring.

Section 23 C of MMDR, Act 1957 empowered the State Government to make rules for preventing illegal mining, transportation and storage of minerals. But in the recent past, it has been observed that there was large number of illegal mining cases in the Country and in some cases, many of the officers lost their lives while executing their duties for curbing illegal mining incidence. The illegal and uncontrolled illegal mining leads to loss of revenue to the State and degradation of the environment.

India is developing at a faster pace and much technological advancement has already been taken place in the surveillance and remote monitoring in the field of mining. Thus, it is prudent to utilize the technological advancement for the effective monitoring of the mining activities particularly sand mining in the country.

Use of latest remote surveillance and IT services helps in effective monitoring of the sand mining activity in-country and also assist the government in controlling the illegal mining activity in the country. Thus, there is a need for an effective policy for monitoring of sand mining in the Country which can be enforced on the ground. These guidelines focus on the effective monitoring of the sand mining since from the identification of sand mineral sources to its dispatch and end-use by consumers and the general public. Further, the effective monitoring and enforcement require efforts from not only Government agencies but also by consumers and the general public.

It is the responsibility of every citizen of India to protect the environment and effective monitoring can only be possible when all the stakeholders viz. Central Government, State Government, Leaseholders/Mine Owners, Distributors, Dealers, Transporters and Consumers (bulk & retail) will contribute towards sustainable mining, and comply with all the statutory provisions. It is felt necessary to identify the minimum requirements across all geographical region to have a uniform protocol for monitoring and enforcement of regulatory provision prescribed for sustainable sand and gravel mining.

This document will serve as a guideline for collection of critical information for enforcement of the regulatory provision(s) and also highlights the essential infrastructural requirements necessary for effective monitoring for Sustainable Sand Mining.

The document is prepared in consideration of various orders/directions issued by Hon'ble NGT in matters pertaining to illegal sand mining and also based on the reports submitted by expert committees and investigation teams.

Further, this document is supplemental to the existing "Sustainable Sand Mining Management Guideline-2016" (SSMG-2016), and these two guidelines viz. "Enforcement & Monitoring Guidelines for Sand Mining" (EMGSM-2020) and SSMG-2016 shall be read and implemented in sync with each other. In case, any ambiguity or variation between the provision of both these document arises, the provision made in "Enforcement & Monitoring Guidelines for Sand Mining-2020 "shall prevail.

2.0 NEED FOR POLICY GUIDELINES

The Ministry of Environment, Forest & Climate Change (MoEF&CC) published Environmental Impact Assessment Notification 1994 which is only applicable for the Major Minerals more than 5 ha. In order to cover the minor minerals also into the preview of EIA, the MoEF&CC issued EIA Notification 2006 for Major & Minor Mineral more than 5 Ha. The Hon'ble Supreme Court in its Judgment dated the 27th February 2012 in I.A. No.12- 13 of 2011 in Special Leave Petition (C) No.19628-19629 of 2009, in the matter of Deepak Kumar etc. Vs. State of Haryana and Others etc. made prior environment clearance mandatory for mining of minor minerals irrespective of the area of mining lease. In order to comply with the judgment of Hon'ble Supreme Court, the Ministry issued S.O.141 (E) dated 15.01.2016. Further, MoEF&CC published Sustainable Sand Mining Management Guidelines 2016 for scientific and sustainable sand mining in the Country. The recommendations for the management of sustainable sand extraction are the key objective of the Guidelines. Special emphasis is given on monitoring of the mined out material, which is key to the success of the environmental management plan. Use of IT and IT-enabled services for effective monitoring of the quantity of mined out material and transportation along with process re-engineering has been made a part of the Guidelines. Guidelines support the fundamental concept, promote environmental protection, limit negative physiological, hydrogeological and social impacts underpinning sustainable economic growth.

The Hon'ble NGT in its order dated 04.09.2018 in O.A. 173/2018 in the matter of Sudarsan Das vs. State of West Bengal & Ors. Inter-alia observed that ***"There can be no two views that an effective institutional monitoring mechanism is required not only at the stage when Environmental Clearance is granted but also at subsequent stages". "The guidelines focus on the preparation of District Survey Report and the Management Plan" ... We are of the view that all the safeguards which are suggested***

in sustainable sand mining guidelines as well as notification dated 15.01.2016 ought to be scrupulously followed.”...It is a known fact that in spite of the above-suggested guidelines being in existence, on the ground level, illegal mining is still going on. The existing mechanism has not been successful and effective in remedying the situation.” ...” Since there is an utter failure in the current monitoring mechanism followed by the State Boards, SEIAAs and DEIAAs, it is required to be revised for effective monitoring of sand and gravel mining and a dedicated monitoring mechanism be set up.”

The Hon’ble NGT in its order dated 04.09.2018 in O.A. 173/2018 in the matter of Sudarsan Das vs. State of West Bengal & Ors. directed that ***MoEF&CC has issued directions from time to time under Section 3 and 5 of the Environment (Protection) Act, 1986. The MoEF&CC needs to revise its directions keeping in mind the following:***

- *Mining Surveillance System discussed in para 23 above be finalized in consultation with ISRO Hyderabad.*
- *Safeguards suggested in Sustainable Sand Mining Guidelines published by the MoEF&CC in the year 2016.*
- *Suggestions in the High Power Committee Report.*
- *The requirement of demarcation of boundaries being published in respect of different leases in the public domain.*
- *Need to issue SOP laying down mechanism to evaluate loss to the ecology and to recover the cost of restoration of such damage from the legal or illegal miners. Such evaluation must include the cost of mining material as well as the cost of ecological restoration and the net present value of future ecosystem services forgone.*
- *Need to set up a dedicated institutional mechanism for effective monitoring of sand and gravel mining which may also take care of mining done without any Environmental Clearance as well as mining done in violation of Environmental Clearance conditions.*

- *The Mining Department may make a provision for keeping apart at least 25% of the value of mined material for the restoration of the area affected by the mining and also for compensating the inhabitants affected by the mining.*
- *One of the conditions of every lease of mine or minerals would be that there will be independent environmental audit at least once in a year by reputed third party entity and report of such audit be placed in the public domain.*
- *In the course of such an environmental audit, a three-member committee of the local inhabitants will also be associated. Composition of three members committee may preferably include ex-servicemen, a former teacher and former civil servant. The Committee will be nominated by the District Magistrate.*

The Hon'ble NGT in its order dated 05.09.2018 in O.A. 44/2016 in the matter of Mushtakeem Vs. MoEF & CC & Ors. Inter-alia observed the following:

"Para 20. In Original Application No. 481/2016, the allegation is that there is the connivance of the District Administration with the miners and mining is going in violation of conditions of Environmental Clearance. According to the applicant, an effective mechanism is required to be evolved so that illegal mining does not place."

*"Para 22. We proceed to consider the main question proposed for the consideration stated earlier hereinabove as to **how to ensure the protection of the environment by checking illegal mining.**"*

"Para 23. We have dealt with the identical issue relating to the illegal sand mining in the border districts in the State of West Bengal and Odisha in the order dated 04th September 2018 in Sudarsan Das Vs. State of West Bengal & Ors., Original Application No. 173 of 2018. We have directed the MoEF&CC to revise the guidelines on the subject for an effective mechanism for sand mining, relevant portions of which are reproduced below: -..."

The Hon'ble NGT in its order dated 10.09.2018 in O.A. 304/2015 in the matter of Jai Singh & Anr.Vs. Union of India Ors. inter-alia observed the following:

*"Para 6. After disposal of the above matters, a disturbing event widely reported in media which took place on 07th September 2018 has been brought to our notice. **A Deputy Ranger who tried to stop illegal mining was killed by mining mafia at Morena in the State of M.P.***

"Para 7. The above disturbing event may also be kept in mind by the MoEF, while considering the issuance of revised guidelines in light of the judgment dated 05th September 2018 (Supra)."

The Hon'ble NGT in its order dated 05.04.2019 in O.A. 360/2015 in the matter of National Green Tribunal Bar Association & Anr.Vs. Union of India & Ors. inter-alia observed the following:

"The 2016 Guidelines need revision in the light of the report of High Powered Committee in September 2016, failure of Monitoring mechanism followed by State Boards, SEIAs, DEIAs and MSS system developed by Ministry of Mines & IBM with the assistance of BISAG and MAITY and other observations quoted in paras 12 to 15 above.

50. As noted earlier in paras 17, 23, 27, 31 and 35, States of West Bengal, Odisha, Gujarat, Karnataka, Maharashtra, Punjab, Haryana and Uttar

Pradesh are required to follow SSMG, 2016 as may be revised by MoEF&CC and even other States where illegal sand mining is taking place.

The States may review the monitoring mechanism in terms of several directions of the Tribunal and guidelines of MoEF&CC.

The international conservation concern regarding natural wealth is a universal demand. Article 51(a) subsection (G) of the constitution requires every citizen of India to protect and improve the natural environment including forest, lakes, rivers, wildlife and to have compassion for the living creature.

The Hon'ble Supreme Court in the case of M.C. Mehta Vs. Kamal Nath (1997) 1 SCC 388 held that under Article of Indian Constitution incorporates the "Public Trust Doctrine" and as such extents to the protection of all-natural resources which includes the protection of flora and fauna.

The Hon'ble Supreme Court in the case of Vellore Citizens Welfare Forum Vs. Union of India & Ors (1996) held that the precautionary principle is part of the Environmental Law in India. It further stated that onus of proof is on the actor of the developer/industrialize to show that its actions are environmentally benign."

3.0 OBJECTIVE OF GUIDELINES

- Identification and Quantification of Mineral Resource and its optimal utilization.
- To regulate the Sand & Gravel Mining in the Country since its identification to its final end-use by the consumers and the general public.
- Use of IT-enabled services & latest technologies for surveillance of the sand mining at each step.
- Reduction in demand & supply gaps.
- Setting up the procedure for replenishment study of Sand.
- Post Environmental Clearance Monitoring.
- Procedure for Environmental Audit.
- To control the instance of illegal mining.

4.0 REQUIREMENTS FOR MONITORING & ENFORCEMENT

Sustainable Sand Mining Management Guidelines (SSMMG) 2016 and past experience suggest that the source of sand in India are through

- a) River (riverbed and flood plain),
- b) Lakes and reservoirs,
- c) Agricultural fields,
- d) Coastal / marine sand,
- e) Palaeo-channels and
- f) Manufactured Sand (M-Sand).

The SSMMG-2016 highlights the identification of the sand mining sources, replenishment of the River Bed Material (Sand, Boulder, Gravel, Cobble etc.), preparation of Districts Survey Report, and Standard Environmental Conditions suitable for sand mining projects.

The necessary requirements to comply with the direction of Hon'ble NGT and to facilitate effective monitoring and enforcement of regulatory provision for sand mining in the country are as follows:

- i) Identification of sand mining sources, its quantification and feasibility for mining considering various environmental (proximity of protected area, wetlands, creeks, forest etc.) and other factors such as important structures, places of archaeological importance, habitation, prohibited area etc.
- ii) The mining lease auctioned by State government as per their Minor Mineral Concession Rules are granted of Letter of Intent (LoI), but it has been observed that many of the sites are not suitable w.r.t environmental aspects. In most of the cases, the unplanned grant of mining lease leads to formation of cluster and/or contiguous cluster

of small mining leases which sometimes is difficult to regulate and monitor. In order to address such issues, more emphasis is required on the preparation of District Survey Report and its format for reporting,

- iii) Mining Plan is an important document to assist the mine owner to operate the mine in a scientific manner. States have their own format for preparation of mining plan and it is observed that recording of the initial level of mining lease at shorter interval say 25m X 25 m grid interval is not present.
- iv) There is no practice for regular replenishment study to ascertain the rate of depositing, plan and section needs to be prepared based on the restrictions provided in letter of intent and provisions of Sustainable Sand Mining Management Guidelines 2016.
- v) Environmental Clearance is a process wherein the regulatory authorities after considering the potential environment impact of mining clearance is granted with a set of specific & standard conditions to carry out mining operations, but often it is observed that letter of intent is granted for a location which has less potential for mining and not feasible for environment-friendly mining. This leads to an unnecessary financial burden on the mine owners and litigations. Thus, LoI should be preferably granted for those locations which have the least possibility of an impact on the environment and nearby habitation.
- vi) It is the responsibility of the mine owner to obtain all the statutory clearance and comply with the conditions stipulated in the clearance letter. Mining should be carried out within the mining lease area as per

approved mining plan or mining plan concurred by other regulatory authorities.

- vii) Mining operation also involves transportation of mineral from the mining area to end-user and its necessary that movement of the mineral needs to be monitored.

The State Government already have power under section 23c of MMDR, Act 1957 to make rules for preventing illegal mining, transportation and storage of minerals. However, there are instances of illegal mining which shows that there is a need for strengthening the system of mineral dispatch and its monitoring. This document provides good practices already under implementation by various states for regulating the mineral sale, dispatch, storage, transportation and use.

- viii) The river reaches with sand provide the resource and thus it is necessary to ascertain the rate of replenishment of the mineral. Regular replenishment study needs to be carried out to keep a balance between deposition and extraction. This document provides the procedure to be followed for conducting replenishment study.
- ix) Even after all the regulatory procedure and policy being in place, there are instances where illegal mining is taking place. There is a need for regular surveillance of the sand mining reaches. The monitoring agencies can monitor the sites remotely by using Unmanned Artificial Vehicles (UAVs)/Drone which is now a viable option. The drone can also be used for reserves estimation, quantity estimation, land use monitoring. This document highlights possible use of IT/Satellite/Drone technology for effective monitoring of sand mining.

4.1 Identification of possible sand mining sources and preparation of District Survey Report (DSR)

4.1.1 Preparation of District Survey Report.

"Sustainable Sand Mining Guidelines, 2016" issued by MoEF&CC requires preparation of District Survey Report (DSR), which is an important initial step before grant of mining lease/Lol. The guidelines emphasize detailed procedure to be followed for the purpose of identification of areas of aggradation/ deposition where mining can be allowed and identification of areas of erosion and proximity to infrastructural structures and installation where mining should be prohibited. Calculation of annual rate of replenishment, allowing time for replenishment after mining, identification of ways of scientific and systematic mining; identifying measures for protection of environment and ecology and determining measures for protection of bank erosion, benchmark (BM) with respect to mean Sea Level (MSL) should be made essential in mining channel reaches (MCR) below which no mining shall be allowed.

The Hon'ble NGT in its Judgment dated 08.12.2017 in the matter of Anjani Kumar vs State of Uttar Pradesh & Ors. inter-alia mentioned the following regarding sand mining in the Uttar Pradesh.

"It states that the main object of preparation of District Survey Report is to ensure identification of areas of aggradation/deposition where mining can be allowed and identification of areas of erosion and proximity to infrastructural structures and installation where mining should be prohibited and calculation of annual rate of replenishment and allowing time for replenishment after mining area. Thus, the environmental protection requires a strictly regulated mining in terms of area, quantity as well as most importantly replenishment thereof."

"The data collection and declared for preparation of DSR shall take precedence over other data and would form the foundation for providing mining lease in terms of Appendix- x to the Notification dated 15th January 2016 must be prepared by the statutory authority stated therein i.e. DEIAA prior to awarding of permits for carrying on mining activity in any part of the State of UP."

The Hon'ble High Court of Jharkhand at Ranchi in its orders dated the 11th April 2018 and 19th June 2018 in W.P. (PIL) No. 1806 of 2015, in the matter of Court on its Own Motion Versus the State of Jharkhand & Others with W.P. (PIL) No. 290 of 2013, in the matter of Hemant Kumar Shilkarwar Versus the State of Jharkhand & Others, has inter-alia directed the preparation of District Survey Report for minor minerals other than Sand and Bajri or delegation of the powers for preparation of format of District Survey Report of minor minerals other than sand and Bajri to the State Government and/or District Environment Impact Assessment Authority and District Expert Appraisal Committee. **To comply with the direction of Hon'ble High Court the Ministry has issued S.O. 3611(E) dated 25.07.2018, wherein, the procedure of preparation of DSR is mentioned.** But it is felt that still there is other information that needs to be reported in DSR to make it a comprehensive DSR.

Therefore, preparation of District Survey Report is a very important step and sustainable sand mining in any part of the country will depends on the quality of District Survey Report.

Considering the importance of district survey report, the Ministry of Environment Forest and climate change, after consultation with experts dealing with mining-related matters, formulated the following guidelines for **the preparation of comprehensive District Survey Report for sand mining.**

- a) District Survey Report for sand mining shall be prepared before the auction/e-auction/grant of the mining lease/Letter of Intent (LoI) by Mining department or department dealing the mining activity in respective states.
- b) The first step is to develop the inventory of the River Bed Material and Other sand sources in the District. In order to make the inventory of River Bed Material, a detailed survey of the district needs to be carried out, to identify the source of River Bed Material and alternative source of sand (M-Sand). The source will include rivers, de-siltation of reservoir/dams, Patta lands/Khatedari Land, M-sand etc.

The revenue department of Kerala already conducted river mapping and sand auditing of around 20 rivers of Kerala which is a good example wherein the profile of rivers was created at regular intervals and aggradation/deposition was identified along with water level. In the same study, benchmarks were also created at a prominent location at regular interval for future surveying. Such study helps the mining departments to identify the source of sand.

Thus, it is proposed that for preparation of district survey report, the auditing of rivers needs to be carried out. There is already a provision under MMDR Act 2015 for National Mineral Exploration Trust (MET) wherein a 2% of royalty amount to be deposited in the trust. This fund is used for mineral exploration in the country. The Sand Auditing is also a sort of identification of mineral and State Government may request Central Govt. for proving funds for river auditing. The Central Govt. (Ministry of Mines) may also explore the possibilities for providing the funds for river auditing. The other option is that State Govt. may conduct such studies by its own fund and the same may be recovered from the leaseholders to whom the mining lease will be allocated.

- c) District Survey Report is to be prepared in such a way that it not only identifies the mineral-bearing area but also define the mining and no mining zones considering various environmental and social factors.
- d) Identification of the source of Sand & M-Sand. The sources may be from Rivers, Lakes, Ponds, Dams, De-silting locations, Patta land/Khtedari lands. The details in case of Rivers such as [name, length of river, type (Perennial or Non-Perennial), Villages, Tehsil, District], in case of Lakes, Ponds, Dams, De-silting locations [Name, owned/maintained by (State Govt./PSU), area, Villages, Tehsil, District] in case of Patta land/Khtedari lands [Owner Name, Sy No, Area, Agricultural/Non-Agricultural, Villages, Tehsil, District], in case of M-Sand Plant [Owner Name, Sy No, Area, Quantity/Annum, Villages, Tehsil, District], needs to be recorded as per format given in **Annexure-I**.
- e) Defining the sources of Sand/M-Sand in the district is the next step for identification of the potential area of deposition/aggradation wherein mining lease could be granted. Detailed survey needs to be carried out for quantification of minerals. The purpose of mining in the river bed is for channelization of rivers so as to avoid the possibility of flooding and to maintain the flow of the rivers. For this, the entire river stretch needs to be surveyed and original ground level (OGL) to be recorded and area of aggradation/deposition needs to be ascertained by comparing the level difference between the outside riverbed OGL and water level. Once the area of aggradation/deposition are identified, then the quantity of River Bed Material available needs to be calculated. The next step is channelization of the river bed and for this central $\frac{3}{4}$ th part of the river, width needs to be identified on a map. Out of the $\frac{3}{4}$ th part area, where there is a deposition/aggradation of the material needs to be identified. The remaining $\frac{1}{4}$ th area needs to be kept as no mining zone for the

protection of banks. The specific gravity of the material also needs to be ascertained by analyzing the sample from a NABL accredited lab. Thus, the quantity of material available in metric ton needs to be calculated for mining and no mining zone.

Note: As physical survey with conventional method is time-consuming, use of unmanned aerial vehicle (UAV) may be explored to carry out the survey and finalizing the original ground level and for developing a 3D model of the area.

- f) The permanent boundary pillars need to be erected after identification of an area of aggradation and deposition outside the bank of the river at a safe location for future surveying. The distance between boundary pillars on each side of the bank shall not be more than 100 meters.
- g) Identifying the mining and no mining zone shall follow with defining the area of sensitivity by ascertaining the distance of the mining area from the protected area, forest, bridges, important structures, habitation etc. and based on the sensitivity the area needs to be defined in sensitive and non-sensitive area.
- h) Demand and supply of the Riverbed Material through market survey needs to be carried out. In addition to this future demand for the next 5 years also needs to be considered.
- i) It is suggested that as far as possible the sensitive areas should be avoided for mining, unless local safety condition arises. Such deviation shall be temporary & shall not be a permanent feature.
- j) The final area selected for the mining should be then divided into mining lease as per the requirement of State Government. It is suggested the mining lease area should be so selected as to cover the entire deposition area. Dividing a large area of deposition/aggradation into smaller

mining leases should be avoided as it leads to loss of mineral and indirectly promote illegal mining.

- k) Cluster situation shall be examined. A cluster is formed when one mining lease of homogenous mineral is within 500 meters of the other mining lease. In order to reduce the cluster formation mining lease size should be defined in such a way that distance between any two clusters preferably should not be less than 2.5 Km. Mining lease should be defined in such a way that the total area of the mining leases in a cluster should not be more than 10 Ha.
- l) The number of a contiguous cluster needs to be ascertained. Contiguous cluster is formed when one cluster is at a distance of 2.5 Km from the other cluster.
- m) The mining outside the riverbed on Patta land/Khatedari land be granted when there is possibility of replenishment of material. In case, there is no replenishment then mining lease shall only be granted when there is no riverbed mining possibility within 5 KM of the Patta land/Khatedari land. For government projects, mining could be allowed on Patta land/Khatedari land but the mining should only be done by the Government agency and material should not be used for sale in the open market. Cluster situation as mentioned in para k above is also applicable for the mining in Patta land/Khatedari land.
- n) The State Government should define the transportation route from the mining lease considering the maximum production from the mines as at this stage the size of mining leases, their location, the quantity of mineral that can be mined safely etc. is available with the State Government. It is suggested that the transportation route should be selected in such a way that the movement of trucks/tippers/tractors from the villages having habitation should be avoided. The transportation route so

selected should be verified by the State Government for its carrying capacity.

- o) Potential site for mining having its impact on the forest, protected area, habitation, bridges etc, shall be avoided. For this, a sub-divisional committee may be formed which after the site visit shall decide its suitability for mining. The list of mining lease after the recommendation of the Committee needs to be defined in the following format given in as **Annexure-II**. The Sub-Divisional Committee after the site visit shall make a recommendation on the site for its suitability of mining and also records the reason for selecting the mining lease in the Patta land. The details regarding cluster and contiguous cluster needs to be provided as in **Annexure-III**. The details of the transportation need to be provided as in **Annexure IV**.
- p) **Public consultation**-The Comments of the various stakeholders may be sought on the list of mining lease to be auctioned. The State Government shall give an advertisement in the local and national newspaper for seeking comments of the general public on the list of mining lease included in the DSR. The DSR should be placed in the public domain for at least one month from the date of publication of the advertisement for obtaining comments of the general public. The comments so received shall be placed before the sub-divisional committee for active consideration. The final list of sand mining areas [leases to be granted on riverbed & Patta land/Khatedari land, de-siltation location (ponds/lakes/dams), M-Sand Plants (alternate source of sand)] after the public hearing needs to be defined in the final DSR in the format as per **Annexure-V**. The details regarding cluster and contiguous cluster needs to be provided in **Annexure-VI**. The details of the transportation need to be provided in **Annexure-VII**.

4.2 Grant of Letter of Intent to those mining leases which are falling in potential mining zone

The State Government shall issue letter of intent as per procedure laid down in their Minor Mineral Concession Rules with due consideration of final district survey report. The State Government shall ensure that all the letter of intent shall have complete details of the mining lease including geo-coordinate of the corner points, the involvement of forest land, distance from the forest land, distance from the protected area, distance from other sites of archaeological importance, details of the cluster situation etc. The demarcation of the boundaries of Lol/Lease area shall be placed in public domain along with Lol/lease deed details.

The LOI should not be granted for mining area falling on both riverbed and outside riverbed. Therefore, in the same lease, both types of area should not be included.

The authority responsible for grant of lease for sand mining shall ensure that annual audit of the sand mining process, production and compliance of the imposed conditions by regulatory authority (Environmental clearance or mine plan) shall be one of the essential condition of the lease agreement. The annual audit report shall be submitted to the district administration, which shall be put in public domain through the district website. Any deviation observed shall be appropriately and in accordance with applicable law shall be dealt by the concerned authority and corrective measures shall also be taken to restoration of ecological/environmental damage, if observed.

4.3 Mining Plan

The preparation of Mining Plan is also very important. The mining plan should include the original ground level recorded at an interval not more than 10M x 10M along & across the length of the river. In addition to this-levels, outside the mining lease and bank of the river up to meters needs to be recorded. In the mining plan, there should be 3 plates for each year production & development planning (pre-monsoon, monsoon and post-monsoon). The time period of monsoon should be defined in the DSR. At the time of review of the mining plan, the details of the replenishment study conducted for all the years needs to be included in the mining plan. The Mining Plan should include the certificate from PCCF on forest land, distance from the protected area, past production details for mining leases seeking expansion.

Following considerations shall be kept in mind for sand/gravel mining while approving mining plan

- a) Parts of the river reach that experience deposition or aggradation shall be identified. The Leaseholder/ Environmental Clearance holder may be allowed to extract the sand and gravel deposit in these locations to manage aggradation problem.
- b) The distance between sites for sand and gravel mining shall depend on the replenishment rate of the river. Sediment rating curve for the potential sites shall be developed and checked against the extracted volumes of sand and gravel.
- c) Sand and gravel may be extracted across the entire active channel during the dry season.

- d) Abandoned stream channels on the terrace and inactive floodplains be preferred rather than active channels and their deltas and flood plains. The stream should not be diverted to form the inactive channel.
- e) Layers of sand and gravel which could be removed from the river bed shall depend on the width of the river and replenishment rate of the river.
- f) Sand and gravel shall not be allowed to be extracted where erosion may occur, such as at the concave bank.
- g) Segments of the braided river system should be used preferably falling within the lateral migration area of the river regime that enhances the feasibility of sediment replenishment.
- h) Sand and gravel shall not be extracted up to a distance of 1 kilometre (1 km) from major bridges and highways on both sides, or five times (5x) of the span (x) of a bridge/public civil structure (including water intake points) on up-stream side and ten times (10x) the span of such bridge on down-stream side, subjected to a minimum of 250 meters on the upstream side and 500 meters on the downstream side.
- i) The sediment sampling should include the bed material and bed material load before, during and after the extraction period. Develop a sediment rating curve at the upstream end of the potential reach using the surveyed cross-section. Using the historical or gauged flow rating curve, determine the suitable period of high flow that can replenish the extracted volume. Calculate the extraction volume based on the sediment rating curve and high flow period after determining the allowable mining depth.

- j) Sand and gravel could be extracted from the downstream of the sand bar at river bends. Retaining the upstream one to two-thirds of the bar and riparian vegetation is accepted as a method to promote channel stability.
- k) The flood discharge capacity of the river could be maintained in areas where there is a significant flood hazard to existing structures or infrastructure. Sand and gravel mining may be allowed to maintain the natural flow capacity based on surveyed cross-section history. Alternatively, off-channel or floodplain extraction is recommended to allow rivers to replenish the quantity taken out during mining.
- l) The Piedmont Zone (Bhabhar area) particularly in the Himalayan foothills, where riverbed material is mined, this sandy-gravelly track constitutes excellent conduits and holds the greater potential for groundwater recharge. Mining in such areas should be preferred in locations selected away from the channel bank stretches.
- m) Mining depth should be restricted to 3 meters and distance from the bank should be $\frac{1}{4}$ th or river width and should not be less than 7.5 meters.
- n) The borrow area should preferably be located on the riverside of the proposed embankment because they get silted in the course of time. For low embankment, less than 6 m in height, borrow area should not be selected within 25 m from the toe/heel of the embankment. In the case of the higher embankment, the distance should not be less than 50 m. In order to obviate the development of flow parallels to the embankment, crossbars of width eight times the depth of borrow pits spaced 50 to 60 meter center-to-center should be left in the borrow pits.

- o) Demarcation of mining area with pillars and geo-referencing should be done prior to the start of mining.
- p) A buffer distance /un-mined block of 50 meters after every block of 1000 meters over which mining is undertaken or at such distance as may be the directed/prescribed by the regulatory authority shall be maintained.
- q) A buffer distance /unmined block of 50 meters after every block of 1000 meters over which mining is undertaken or at such distance as may be the directed/prescribed by the regulatory authority shall be maintained.
- r) River bed sand mining shall be restricted within the central 3/4th width of the river/rivulet or 7.5 meters (inward) from river banks but up to 10% of the width of the river, as the case may be and decided by regulatory authority while granting environmental clearance in consultation with irrigation department. Regulating authority while regulating the zone of river bed mining shall ensure that the objective to minimize the effects of riverbank erosion and consequential channel migration are achieved to the extent possible. In general, the area for removal of minerals shall not exceed 60% of the mine lease area, and any deviation or relaxation in this regard shall be adequately supported by the scientific report.
- s) Mining Plan for the mining leases(non-government) on agricultural fields/Patta land shall only be approved if there is a possibility of replenishment of the mineral or when there is no riverbed mining possibility within 5 KM of the Patta land/Khatedari land. For government projects mining could be allowed on Patta land/Khatedari land but the mining should only be done by the Government agency and material should not be used for sale in the open market.

The minerals reserve for river bed area is calculated on the basis of maximum depth of 3 meters and margins, width and other dimensions as mentioned in para (s) above. The area multiplied by depth gives the volume and volume multiplied with bulk density gives the quantity in Metric Ton. In case of river bed, mineable material per hectare area available for actual mining shall not exceed the maximum quantity of 60,000 MT per annum.

4.4 Obtaining Environmental & Other Statutory Clearance

The LOI Holder/Lease Holder to obtain Environmental and Other Statutory Clearances from the concerned authorities as per provision of applicable laws.

4.5 Baseline data before Commencement of Mining Operations

Baseline data in respect of the initial level of mining lease in the interval not more than 25 X 25 meters shall be collected for record by leaseholder. The level of river bed upstream and downstream up to 100 meters also needs to be recorded. The area outside the mining lease/river bank (if lease boundary coincides with mining lease) up to 100 meters from both the banks/mining lease needs to be surveyed for initial level.

4.6 Additional measures where project proponent is selected by a bidding

In those states where sand plots are auctioned to the highest bidder, the following is suggested:

It has been observed that bidders try to form a cartel and bids are received for certain plots where legal mining is done, and bids for certain other plots don't elicit any response. Sand from these un-

auctioned plots is then excavated using the same machinery deployed for the excavation of adjacent plot which might have been auctioned off. It is not easily possible for the field machinery to prevent such illegal activities. This may be prevented by having plot of larger size. plots are large in size as possible are identified for auction. Care may be taken to ensure that no continuous stretch of plot in the river bed is divided for auction. A continuous stretch of plot shall be preferred for auction, and the attempt may not be made to auction it off in pieces.

5.0 REPLENISHMENT STUDY

The need for replenishment study for river bed sand is required in order to nullify the adverse impacts arising due to excessing sand extraction. Mining within or near riverbed has a direct impact on the stream's physical characteristics, such as channel geometry, bed elevation, substratum composition and stability, in-stream roughness of the bed, flow velocity, discharge capacity, sediment transport capacity, turbidity, temperature etc. Alteration or modification of the above attributes may cause an impact on the ecological equilibrium of the riverine regime, disturbance in channel configuration and flow-paths. This may also cause an adverse impact on in-stream biota and riparian habitats. It is assumed that the riparian habitat disturbance is minimum if the replenishment is equal to excavation for a given stretch. Therefore, to minimize the adverse impact arising out of sand mining in a given river stretch, it is imperative to have a study of replenishment of material during the defined period.

5.1 Generic Structure of Replenishment Study

Initially replenishment study requires four surveys. The first survey needs to be carried out in the month of April for recording the level of mining lease before the monsoon. The second survey is at the time of closing of mines for monsoon season. This survey will provide the quantity of the material excavated before the offset of monsoon. The third survey needs to be carried out after the monsoon to know the quantum of material deposited/replenished in the mining lease. The fourth survey at the end of March to know the quantity of material excavated during the financial year. For the subsequent years, there will be a requirement of only three surveys. The results of year-wise surveys help the state government to establish the replenishment rate of the river. Based on the replenishment rate future auction may be planned.

The replenishment period may vary on nature of the channel and season of deposition arising due to variation in the flow. Such period and season may vary on the geographical and precipitation characteristic of the region and requires to be defined by the local agencies preferable with the help of the Central Water Commission and Indian Meteorological Department. The excavation will, therefore, be limited to estimated replenishment estimated with consideration of other regulatory provisions.

5.2 Methodology for Replenishment Study

The replenishment estimation is based on a theoretical empirical formula with the estimation of bedload transport comprising of analytical models to calculate the replenishment estimation. The iso-pluvial maps of IMD can be used for estimation of rainfall. Catchment yield is computed using different standard empirical formulas relevant to the geographical and channel attributes. eg. Strange's Monsoon runoff curves for runoff coefficient). Peak flood discharge for the study area can be calculated by using Dickens, Jarvis and Rational formula at 25, 50 and 100 years return period. The estimation of bed load transport using Ackers and White Equation or similar can be made. A simulation model is used with basic data generated from the field in the pre-study and post-study period (preferably pre-monsoon and post-monsoon) to estimate the volume of replenished material. The particle size distribution and bulk density of the deposited material are required to be assessed from a NABL recognized laboratory. Considering the bulk density and the volume, the estimation of replenishment in weight will be calculated after considering safeguards and stability of the slopes and riverine regime. Some of the common methods used for field data acquisition for replenishment study

5.2.1. Physical survey of the field by the conventional method

- i. The conventional survey technical using DGPS and other survey tools are used to define the topography, contours and offsets of the lease area. The survey should clearly depict the important attributes of the stretch of the river and its nearby important civil and other feature of importance. Such information will provide the eligible spatial area for mining. The contour and the elevation benchmarks will provide the baseline data for assessing the pre and post-study period scenario.
- ii. Physical benchmarks are to be fixed at appropriate intervals (preferable 1 in 30 m) and the Reduced Level (RL) shall be validated from a nearby standard RL. These RL should be engraved on a steel plate (Bench Plate) and shall be fixed and placed at locations which are free from any damages and are available in pre and post-study period. The bench plates shall be available for use during the mining period as reference for all mining activity. Reference pillar may also be used in place of Bench Plates with visible and readable demarcation on the ground as common reference points to control the topographic survey and mining activity.
- iii. Baseline data on elevation status for a grid of 10 m x 10 m is preferred to have accuracy in the assessment. It is expected that two consecutive cross-sections in longitudinal and lateral direction should not be more than 10-meter distance apart, however, the regulatory authority may fix these intervals depending on the geographical and site-specific conditions, only and after providing the scientific reason for such deviation.
- iv. The changes observed in the elevation in pre and post scenario at each node should be depicted in graphical forms with an appropriate scale to estimate the area of deposition and erosion. These graphical

presentations should depict the active channel regime and the flow bed elevation with other important features required to be considered for estimation of the mining area. The area of deposition and erosion shall be calculated for each cross-section after giving due regard to the stability and safety of active channel banks, and other features of importance. The elevation level shall be in reference to the nearest bench-plates established for the purpose.

- v The levels (MSL & RL) of the corner point of each grid should be identifiable and safety barriers (Non-Mining) demarcated as restricted in consensus with Mineral Concession Rules of respective State, and the provision mentioned in this Sustainable Sand Mining Management Guidelines.
- vi A clear identification is required to be highlighted between grids under mineable and grids under the non-mineable area. These baseline data (pre and post) be subjected to stimulation with the help of data mine software to derive at the replenishment area and corresponding volume and estimated weight.
- vii The database should be structured in a tabulated form clearly depicting the nomenclature of the section lines, latitude and longitude of the starting point, chain-age and respective levels of all the points taken on that section line.
- viii Net area shall be derived after the summation of the area of deposition minus area of erosion for each cross-section. The volume will be estimated by multiplying the distance between two cross-sections with the average of net area of these two consecutive cross-sections.
- ix One sample per 900 square meters (30 m x 30 m) shall be preferred sample density for assessment of bulk density for estimation of deposition rate. Care should be taken that the sample for assessment

of bulk density is taken from the deposition zone and not from erosion. However, depending on the site condition, river morphology and geographical condition, sample density may be adjusted. Reason for such deviation shall be appropriately highlighted in the report with supporting scientific data.

5.2.2. Use of UAV/Drone and other image data processing techniques

With the development in image data processing tools and its accuracy acceptability, Drone/UAV fitted with the advance camera are used for survey purposes. Such technology has promising potential in the survey of sand mining zones due to its fast and reliable output deliveries. The survey is conducted using a set of instruments and compatible software to utilized the properly referenced data for depicting the topography of the study area. Instrument calibration and software compatibility and its validation with the ground data are an essential requirement for using this technique.

The details of the instruments their limitation and software used shall be demonstrated in the form of the accuracy assessment report, through a chapter in the replenishment study report. Other details to be incorporated in the report with regard to the study using such imaginary techniques shall highlight the followings:

- a) **Flight Planning:** - The lease co-ordinates and the flight plan devised to capture the front and side overlap percentages for in each flight in reference to global coordinates (Kml or SHP file) system. The software used for the purpose and its details along with limitations with basic analytical assumptions.
- b) **Block file generation:** - This operation concerns the selection of the sensor model and the definition of block properties, the addition of

imagery to the block file, marking of GCPs, generation of tie points and refining of the model.

- c) **Interior orientation:** - The interior orientation of the stereo pair rational polynomial coefficients (RPC) used, which should be bundled with the scenes. RPCs are coefficient, which is used by photogrammetric software to represent the ground to-image viewing geometry.
- d) **Exterior orientation:** For exterior orientation, ground control points shall be used, which are collected from the DGPS survey.
- e) **Aero Triangulation:** - A critical phase in photogrammetric mapping is to rectify the satellite imagery at an appropriate tract on the surface of the earth. This is accomplished by collecting horizontal and vertical data [GCP's] to ascertain the spatial location of a number of features that are visible and measurable on the aerial images – this process is often called control bridging, which refers to passing horizontal and vertical information from one aerial image to the next.
- f) **Ortho Generation:** - After running the above steps; the software shall automatically generate orthorectified imagery.
- g) **DTM extraction:** For extraction of DTM, Generated point cloud data classified manually to extract bare earth.

5.2.3 Accuracy Assessment of Aerial Data:

To check the accuracy of DTM generated by Aerial data, few points are selected and compared with on-site by using DGPS instrument for the ground-truthing purpose. It is preferred to do ground-truthing at minimum 5 locations spread evenly across the lease area. The readings from the DGPS instrument are then compared with the Drone data for accuracy assessment

purpose. A comparative chart will be prepared in comparison of Data related to ground-truthing (by DGPS) and from Drone. Such accuracy assessment report shall a chapter of the replenishment study.

5.2.4 Replenishment study shall have the details of

- List of instruments
- List of software
- Establishment of Benchmark by putting No. of pillar points and various Ground Control Points (GCP) at the site.
- Ground Control Points (GCP) Collection: - Various GCPs were observed by using DGPS for Permanent Benchmarks and for control points.
- The summary of the elevation data from each section's profile based on the post-monsoon the survey should have mentioned in the table form.
- The detail of post-monsoon survey data in the tabular form shall be
- The detailed comparison of both pre-monsoon and post-monsoon elevation data shall be attached
- Cross-sectional depiction of deposition and erosion for each section in pre and post-deposition season shall be given supported by relevant field study data and plan.

6.0 ENFORCEMENT

6.1 Mining Operation:

The mining operations should be strictly carried out in accordance with the approved mining plan and after complying with all the conditions stipulated in Environmental & Other Statutory Clearance. Mine owner shall follow the operational procedure (for sale, dispatch, storage, reserve reconciliation and transportation) as may be defined by the concerned state government in its monitoring guidelines. Mine owner should comply with the recommendation and suggestion made by the High Power Committee as applicable.

6.2 Post Environment Clearance Monitoring:

It's the responsibility of the EC Holder to comply with the Environmental Clearance conditions and upload the six-monthly EC compliance report on the website of the Ministry. For the category, 'A' mines (>100 Ha individual & cluster) Regional Office of the MoEF&CC are entrusted to carry out EC Monitoring and for the Category 'B' Mines by SEIAA. The monitoring shall be carried out as per the procedure/schedule suggested by MoEF&CC from time to time. MOEF&CC vide its notification S.O. 637(E) dated 28.02.2014 has delegated the power to State/Union Territory Environmental Impact Assessment Authority to issue show cause notice to project proponent in case of violation of Conditions of Environmental Clearance issued by the said authority and to issue direction for keeping the said EC in abeyance or withdrawing it. Thus, for category 'B' (0 to 100 Ha) projects SEIAAs are responsible for EC monitoring.

6.3 Environment Audit:

The Hon'ble NGT in its order dated 04.09.2018 in O.A. 173/2018 in the matter of Sudarsan Das vs. State of West Bengal & Ors. Inter-alia directed

that "One of the conditions of every lease of mine or minerals would be that there will be independent environmental audit at least once in a year by reputed third party entity and report of such audit be placed in the public domain. In the course of such an environmental audit, a three-member committee of the local inhabitants will also be associated. Composition of three member's committee may preferably include ex-servicemen, a former teacher and former civil servant. The Committee will be nominated by the District Magistrate.

The gazette notification on environmental audit has been issued by the Ministry of Environment and Forests on March 13, 1992 (amended vide notification GSR 386 (E) dated April 22, 1993). This notification applies to every person carrying on an industry, operation or process requiring consent to operate under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) or under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981), or both, or authorization under the Hazardous Waste (Management and Handling) Rules, 1989, issued under the Environment (Protection) Act, 1986 (29 of 1986). The notification requires that an Environmental Statement for the financial year ending the 31st March be submitted to the concerned State Pollution Control Board, on or before the 30th September of the same year.

It is suggested that NABET Accredited consultant may be engaged for Environment Audit and during the course of the audit, a three-member committee nominated by District Magistrate shall be associated.

6.4 Monitoring of Sale & Purchase of Sand:

6.4.1 In order to curb illegal mining it is very necessary that the general public is aware of the legal source of sand and RBM suppliers. The Ministry of Mines issued **Sand Mining Framework 2018** wherein it has proposed two mechanisms for the online sale of sand depending on whether there is a free market for sand in the State or the prices are regulated by the Government.

Para 1.2.12.2 Under the market model

In the case of the market model, all the lessees/ certified dealers in the State should register themselves on the online portal/ mobile app. For registering, the lessee/ certified dealer will have to enter the details of its concession/ stockyard, location, the quantity of sand expected on a weekly basis, as per the approved mining plan. Once registered, the online portal/ app will display the name of the reach/ stockyard and sand could be booked by the consumer from those leases/ stockyards and prices up to the delivery level. Further, the lessee/ certified dealer needs to regularly update the sand available in the reach/ stockyard, and they can decide the price at which they want to sell their sand. Anyone who wishes to purchase sand in the State will have the following options for buying:

- 1. Mobile app*
- 2. Online portal*
- 3. Customer care/ telephone call*
- 4. Licensed traders*

The consumer needs to register on the portal and log in using his/her credentials (Aadhar card based only). After logging in, the portal will display the entire list of reaches/ stockyards along with the quantity of sand available in those reaches/ stockyards and the quality and price of

sand. The consumer can filter/ sort the reaches/ stockyards based on such parameters as location, quality and price, and book from the lease/ stockyard he/she wishes to. The consumer should also have the option to purchase the sand by ordering at customer care. Also, stockyards should be made around all the major consumption hubs in the State based on their estimated demand.

Para 1.2.12.3 Controlled market prices

In case the prices are regulated by the State Government, the only difference from the previous model is that the price of sand at the river reach/ stockyard shall be uniform across the State/ district based on the quality and transportation lead. A consumer after logging in may choose the reach/ stockyard from which he/she wishes to purchase the sand. The payment for booking the sand in both the cases should be made on the portal/ app so that proper accounting of the sale of sand can be maintained by the Government. Also, stockyards should be made around all the major consumption hubs in the State based on their estimated demand.

It is suggested that the State Government should develop an online portal for sale and purchase of Sand & RBM. In addition to this State Government shall decide on the model viz. *Under market model or Controlled market prices or both* to be adopted for their respective States. The State Government shall accordingly modify their Minor Mineral Concession Rules within 6 months of publication of these guidelines. It is suggested that the controlled price model is more effective in controlling illegal sand mining. Because if the State Government is the only agency to provide the sand in the State, then price and supply of sand can be controlled more effectively. There will be no confusion in the consumers about legality of the purchase as the only source of sand provider is the State Government through its network of registered stockiest, retailers and transporters. The consumers

can fill the online request, pay the amount, select the transporter and give its feedback after the receipt of the sand. The transportation can also be controlled as the tippers used for transportation is registered tippers with GPS facility, the transportation route is well defined for easy monitoring, control over overloading of tippers, control over spillage of mineral etc. The State Govt. shall also make provision for penalizing the persons/agency buying the sand and RBM from the illegal sources.

6.4.2 The Ministry of Mines in its Sand Mining Framework also mentioned the following different level of monitoring:

Para 1.2.13.1 Level 1- Reach/ Stockyard level monitoring

For monitoring of the active reaches:

- a. Quantity of sand to be extracted from the reach should be based on the quantity of sand assessed in the reach by the Joint Inspection Team.*
- b. The lease boundary should be demarcated with geo-coordinates or geo-fenced to ensure that sand extraction is going on only within the permitted area.*
- c. De-casting from river beds should be monitored on a regular basis to keep a track of excavated quantity.*
- d. After every two years, a mandatory audit of the quantity extracted and quantity permitted along with the replenishment rate.*
- e. Mandatory e-pass/ e-permit should be made available at reach level for transportation of any sand by any GPS enabled vehicle with the provision of entering the vehicle number of the sand carrying vehicle and expected delivery address and customer name/ mobile number. Also, provision should be made available for stockyards/ stockiest of sand. In the case of*

nomination based (controlled pricing) business model, the margin of private stockist should be capped over a fixed percentage of notified prices.

- f. At the stockyard, the stock supervisor should verify the authenticity of online payment receipt before issuing the transit pass. The loading of sand should be monitored electronically and all transporting vehicles should pass through an electronically monitored weighbridge. g. Real-time data capture for transportation*

Para 1.2.13.2 Level 2 - Transportation monitoring

To make transportation monitoring effective and useful, all the sand carrying vehicles (tractors/ trucks) should be registered with the department and GPS equipment should be installed in all the sand carrying vehicles. Weighbridges with CCTV should be installed at all the stockyards, active reaches to ascertain the exact quantity of sand being transported in the vehicle. Check posts with CCTV cameras should be established near all major consumption centres to check if all the transporting vehicles are carrying a valid transport permit. The transport permit generated should contain the security features mentioned under section 5.11 so that one permit cannot be re-used by generating photocopies of the permit.

Para 1.2.13.3 Level 3 - End consumer monitoring/ bulk consumer

For end consumer monitoring, a customer grievance redressal center should be established to enquire about the grievances faced by the sand consumers. The telephone number of the call center should be advertised so that it reaches the general public through which anyone in the State can register his/her complain related to the sand, be it in terms of price or any other grievance. Additionally, profiles of customers should be analyzed such as the delivery of sand at the same address, usage pattern and its comparison with the estimated usage, as mentioned in purpose, etc. Further, surprise checking

should be conducted by the district level committee staff as per instructions of the monitoring agency.

Para 1.2.13.4 Level 4 - Indirect monitoring

Indirect monitoring can be done by determining sand consumption through the quantum of cement sales in the State, as the sale of cement is quite organized and data is easily available at the State level and district levels for the same. From district-wise cement consumption, the further trend of sand consumption can be derived. Any anomalies in the sand consumption/demand can be analyzed further.

Note: *The above monitoring mechanism is just a suggestion and the States may visit Andhra Pradesh and Telangana to study the monitoring mechanism in greater detail.*

It is suggested that State Government may consult with concern department of State of Telangana and Tamil Nadu to have better understanding on their experience and knowledge in adopting best sand mining enforcement provisions and monitoring practices and frame their own regulatory regime and monitoring framework. The framework of monitoring should essential include online sale & purchase of River Bed Material/ Auction of leases, Sand from rivers and other sources, online monitoring of excavation, storage and transportation of mineral for control of illegal mining.

The respective State Governments shall develop the online Sale & Purchase System after defining the model viz. Under market model or Controlled market prices model. The level of monitoring needs to be defined and guidelines need to be finalized by the respective State Governments as per their requirement with due consideration of suggestive guideline in this document. These all measure will help in curbing illegal mining.

7.0 Recommendations of High Power Committee:

A high power committee (HPC) was constituted by Hon'ble National Green Tribunal to assess the status of illegal mining the stretch of River Yamuna, under the chairmanship of Secretary, Ministry of Environment Forest & Climate Change. The committee after exhaustive field survey and interaction with stakeholders and having surprise visits submitted a comprehensive report on river sand mining along with certain recommendations on enforcement requirements and monitoring essentials. The same is provided in the following section for consideration of monitoring / regulatory authority to adopt applicable provisions in their monitoring framework and also to ensure that the infrastructural requirements recommended by the HPC are put in use at all locations including the lease area.

7.1 Recommendations of High Power Committee (HPC)

The following recommendation of the High Power Committee shall be considered while framing the monitoring mechanism by the State Government.

- i. Project Proponent must ensure that following security features are included in the Transport Permission/Permits (TP) so that duplicate/fraudulent/forged TPs for transport, not accounted for in the IT-based system, is not possible.:
 - (a) Printed on Indian Bank Association (IBA) approved
 - (b) Magnetic Ink Character Recognition Code (MICR) paper;
 - (c) Unique Barcode;
 - (d) Unique Quick Response Code (QR);
 - (e) Fugitive Ink Background;
 - (f) Invisible Ink Mark;
 - (g) Void Pantograph;
 - (h) Watermark.

- ii. Project Proponent must ensure that CCTV camera, Personal Computer (PC) or laptop, Internet Connection, Power Back up, access control of mine lease site; and arrangement for weight or approximation of weight of mined out mineral on basis of volume of the trailer of vehicle used at mine lease site are available.
- iii. The PP has to enter the destination, distance between plot and destination, vehicle number etc in the system. After scanning, unique bar code number, invoice date time and validity date-time are generated by the software which gets printed individually on each TP. Validity of TP is calculated based on the distance between plot and destination. After validity time is over the TP stands invalid.
- iv. The officers involved in monitoring should be provided with mobile application and/or bar code scanners using which the TP can be checked anywhere on road. As soon as the bar or QR code on TP gets scanned through using the mobile application and/or scanner or vehicle number is entered into the application or sent by SMS to a predefined number, all details of TP such as plot details, vehicle details, validity time, etc. should be fetched from the server. This means if anything is re-written on TP and attempt is made to reuse the same, it can be traced immediately. Various reports can be generated using the system showing daily lifting reports and user performance report. This way the vehicles carrying sand can be tracked from source to destination.
- v. The facility to fetch details using mobile app, website and SMS may be made available to the general public as well. However, they shall not be allowed to stop the vehicles to check the transportation. The only option that they should have is to check vehicle numbers of the passing vehicle in the mobile app or SMS for the validity of the pass. The only result that should be available to them should be if the vehicle carrying sand has a

valid permit at the relevant point of time or not. If the citizen finds that the vehicle doesn't have such a permit, as ascertained from mobile app or website or SMS, he should alert local authorities, who shall then take further action as per the law.

- vi. In case, the vehicle break-down, the validity of Transport Permit or Receipt shall be extended by sending SMS by the driver in specific format to report the breakdown of the vehicle. The server will register this information and register the breakdown. The State can also establish a call center, which can register breakdowns of such vehicles and extend the validity period. The subsequent restart of the vehicle also should be similarly reported to the server/call center.
- vii. The route of the vehicle from source to destination shall be tracked through the system using checkpoints, Radio-frequency identification (RFID) tags, and Global Positioning System (GPS) tracking.
- viii. The system shall enable the Authorities to develop a periodic report on different parameters like daily lifting report, vehicle log/ history, lifting against allocation, and total lifting. The system can be used to generate auto mails/SMS. This will enable the District Collector / Magistrate and other authorities to get all the relevant details and will enable the authority to block the scanning facility of any site found to be indulged in irregularity. Whenever any authority intercepts any vehicle transporting illegal sand, it shall get registered on the server and shall be mandatory for the officer to fill in the report on action taken. Every intercepted vehicle should be tracked.
- ix. It is necessary to prevent any truck/vehicle from transporting sand out of the identified plot bypassing the strong IT enabled system. Therefore, at each of the sand plot, the following additional measures should be taken.

- (a) There shall be one entry and exit point provided for trucks/vehicles. The said entry point should have facilities as mentioned above. In case, it is necessary to have more than one entry/exit points, all such points shall have checkpoints with facilities as mentioned above. All other possible ways of entry/exit should be closed using barriers like compound, trench, etc. All provisions shall be made to not make it possible for any vehicle to enter or exit without entry into the computerized system.
- (b) All such points should have 24X7 CCTV coverage, the footage of which should be made available online to the district administration. In cases, where sufficient internet bandwidth is not available, it may be deposited with the district administration on a weekly basis. If possible, the entry/exit points should have boom barriers which will record the vehicles entering and exiting the plot.

8.0 GENERAL APPROACH TO SUSTAINABLE SAND MINING

8.1 Pre-requisite for starting sand mining operation

- i)** All district to prepare a comprehensive mining plan for the district as per the provision of District Survey Report. These reports shall be put on the website of District Administration. No mining shall be allowed in the area which has not been identified in the comprehensive mining plan of the District.
- ii)** Replenishment study should be conducted on regular basis.
- iii)** All potential rivers mining zone/area shall be identified and put for auction with proper geo-tagged details by the auctioning authority concerned.
- iv)** The latitude and longitude of each mining lease shall be clearly mentioned in Letter of Intent issued to the potential mine lease. Such information shall be provided on the website of the district administration.
- v)** The provision of these guidelines shall be considered while identifying the potential stretches /locations and boundaries of the leases for the minable area.
- vi)** The Lol holder shall seek Environmental Clearance as per the provision of EIA Notification, and the regulatory authority shall ensure that the provision suggested in "Sustainable Sand Mining & Management 2016" and in this documents, as applicable are part of the clearance conditions.
- vii)** There shall be no river bed mining operation allowed in monsoon

period. The period as defined by IMD Nagpur for each state shall be adhered with.

- viii) The monitoring infrastructures including weighbridge and adequate fencing of the lease area, CCTV, Transport permits, etc, as suggested in this document shall be ensured in order to reduce unrecorded dispatch.
- ix) Regular monitoring of mined minerals and its transportation and storage shall be ensured and all information shall be captured at centralized database so that easy tracking of illegal material can be done.
- x) Annual audit of each mining lease shall be carried out wherein three independent member of repute, nominated by District administration shall also participate.

8.2 Mining of Sand from Agricultural Fields

This practice is prevalent in Haryana; to ensure that mining from outside doesn't affect rivers, no mining is permitted in an area up to a width of 100 meters from the active edge of embankments or distance prescribed by Irrigation department whichever is critical. The top layer of soil varying between 1 and 2 meters is removed and stacked separately and thereafter the sand deposit which maybe 10-15 meter deep is mined. After removing the sand layer up to a maximum depth of 09 meters or the maximum mineable minerals, as permitted by competent authority. The topsoil stacked is spread out on the field and the same is brought under the cultivation. Though the level of this land (mined out area) is lowered to the depth of the excavation and in initial years of cultivation the productivity is low, but the productivity of the fields improves with continued cultivation and addition of organic manure in the field. In Haryana, some leases are of large area

(ranging from 1000 hectare to 2000 hectare) and agricultural fields and river bed both are included in the same lease for mining.

The following recommendations should be kept in mind for mining in such leases:

1. Mining of sand in such mine leases will require environment clearance.
2. The lease should be of sand mining either from the agricultural field or river. In the same lease, both types of area should not be included.
3. The sand mining from the agricultural field is being done in Haryana for a long time and it can be done in a more sustainable manner without adverse impact on agricultural productivity if proper environmental safeguards are taken.
4. The slope of mining area adjacent to agricultural fields should be proper (preferably 45 degree) and adequate gap (minimum 10 feet) be left from adjacent agricultural field to avoid erosion and scouring.

The provision for sand mining in agricultural field may be permitted, whenever replenishment of sand occurs due to natural phenomena.

Permission may also be granted by competent authority (District administration) for excavation of sand/Soil from agricultural fields, after due diligence of this prevailing condition in order to avoid any unacceptable impact on the environment and nearby livelihood from agriculture provided such objective of such excavation mining of Soil/Sand in limited increase the productivity of sand agricultural field.

9.0 MONITORING MECHANISM

9.1 Illegal Mining

The Hon'ble Supreme Court in its Judgment dated 2.08.2017 in W.P 114 of 2014 in the matter of Common Cause Vs Union of India & Ors, inter-alia passed the following:

Para 128. *The simple reason for not accepting this interpretation is that Rule 2(ii-a) of the MCR was inserted by a notification dated 26th July 2012 while we are concerned with an earlier period. That apart, as mentioned above, the holder of a mining lease is required to adhere to the terms of the mining scheme, the mining plan and the mining lease as well as the statutes such as the EPA, the FCA, the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981. If any mining operation is conducted in violation of any of these requirements, then that mining operation is illegal or unlawful. Any extraction of a mineral through an illegal or unlawful mining operation would become illegally or unlawfully extracted mineral."*

In view of above Judgement, any mining activities which are not governed under the provision of Environment (Protection) Act, 1985, The Water (Prevention & Control of Pollution Act, 1974, The Air (Prevention & Control of Pollution) Act, 1981, Forest Conservation Act-1980, Wildlife Protection Act - 1972, shall be considered as illegal mining within the provision of section 21(5) of Mines and Minerals (Development & Regulation) Act, 1957 (MMDR Act) and the concerned authority shall take necessary action within the provision of MMDR Act.

As per the provision of 23(C) of MMDR Act, the State Government is empowered to make rules for preventing illegal mining, and transportation

& storage of Illegal minerals. All such mining which qualifies under illegal, shall be dealt with in the provision of MMDR Act by the concern authorities.

State Pollution Control Board (SPCB) is the nodal authority in the State for dealing with cases related to pollution or environment management coming under the purview of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981 and the Environment Protection Act 1986. SPCB shall initiate appropriate action under the provision of these acts for non-compliance or violation of the provisions.

9.2 Environmental Damage due to illegal mining

The environmental damages incurred or resulting due to illegal mining shall be assessed by a committee constituted by District Administration having expertise from relevant fields, and also having independent representation of locals and State Pollution Control Board. Guidelines for assessment of ecological damages prescribed by the State Government or Concerned Pollution Control Boards or any other authority shall be applicable and compensation as fixed shall be paid by the project proponent, in light of Hon'ble National Green Tribunal orders.

9.3 Monitoring of Mining near Inter-district or inter-state boundary

There are situations where bifurcated river becomes district boundaries or state boundaries in such situation it is difficult to assess the mining potential, or to have close monitoring and enforcement of the regulatory provision. Such challenges have been identified and dealt with in SSMG-2016. However, in the absence of any standardized procedure, the monitoring has not been effectively practiced. This has been highlighted by the High Power Committee constituted by NGT in the matter pertaining to illegal mining.

The districts/state sharing the boundary shall constitute the combined task force for monitoring of mined materials, mining activity and also should actively participate in the preparation of DSR by providing appropriate inputs. In such cases, the draft DSR so prepared shall be put up for public consultation in both the districts through respective district administration website.

The task force shall meet every quarter to reconcile the data collected during the period and identify any gap/ lapses based on the outcome of such meeting. The respective district shall take action/ corrective measures. Effort shall be made for real-time data sharing between both the district.

The task –force shall include essentially the representative of respective districts from the mining department, transport department, regional office of SPCB concerned and a reputed citizen nominated by district administration. The Taskforce shall be headed by officer not less than ADM rank and quarterly outcome shall be submitted to District administration.

In addition to the above, there is a need for strict surveillance, particularly at night. The State of Gujarat has already initiated a program called '*Trinetra*' for night surveillance by using night-vision drones to control illegal mining incidents. This program is giving satisfactory results. Such type of system may also be developed by each State within a reasonable time.

A typical standard operating procedure for assessing illegal mining by the committee constituted shall, but not limited to, include the steps given in the following table. However, the process of assessing can be modified based on site-specific conditions and any deviation shall be recorded in the report with proper justification.

Suggestive standard Practice for assessing illegal mining

Step 1	The assessment team should collect the information and documents prescribed in the Pre-Requisite section.
Step 2	The assessment team should verify the applicability/validity of statutes under EPA-1986, Air and Water Act, MMDR 1957, State Mines and Mineral Rules, etc.
Step 3	Field visit should be conducted for identification of mining lease area (in hectare) and boundary pillar constructed to indicate the same.
Step 4	With the help of GPS instrument, the team should assess the area where any extraction or mining have been carried out on the day of visit and calculate the mined-out area in a hectare.
Step 5	If available, the team may avail the use of latest satellite images for calculating the total mined out area.
Step 6	The team should verify the Ground / Surface Level (in meter above MSL) of at least 04 highest points in or around the area where mining has been done. The Ground/surface level will then be computed based on averaging of 04 highest points verified by the team.
Step 7	With the help of Depth Measurement kit or any depth measuring instruments, the depth should be measured for at least 04 points in the mined-out area. For computing, the depth, averaging of the value obtained at 04 points should be done.
Step 8	Verification of compliance conditions of Environmental Clearance and Consent to operate, mining methodology under Mining Plan
Step 9	Identification of vulnerable impacts observed on the field and non-compliance of conditions of Environmental Clearance and Consent to Operate.

Step 10	Field Survey for identification, monitoring and verification of ecological species based on the information available and documents mentioned in the Pre-requisite section.
Step 11	Preparation of inventory of machinery used/observed on the field (optional)
Step 12	Preparation of inventory of hydraulic structures observed on the field (optional)
Step 13	Water sampling for assessment of water quality including physical and biological parameters. (optional)
Step 14	Reconciliation collation of data/information and compilation to maintain violation.
Step 15	Identification of restoration plan and computation of cost of the restoration plan.

9.4 Monitoring Mechanism

A uniform monitoring mechanism is required to assess the regulatory provision in quantitative terms, with robust institutional and legal framework. Based on past experience and suggestions available, the following requirements are suggested for defining a mechanism for monitoring of mining activities which will help in identification of mining which is operating either illegally or are violating the regulatory provisions. Some suggestion will facilitate direct or indirect information to help in such an assessment.

1. All precaution shall be taken to ensure that the water stream flows unhindered and process of Natural river meandering doesn't get affected due to mining activity.
2. River mining from outside shall not affect rivers, no mining shall be permitted in an area up to a width of 100 meters from the active edge of embankments or distance prescribed by the Irrigation department.

3. The mining from the area outside river bed shall be permitted subject to the condition that a safety margin of two meters (2 m) shall be maintained above the groundwater table while undertaking mining and no mining operation shall be permissible below this level unless specific permission is obtained from the Competent Authority. Further, the mining should not exceed nine-meter (9 m) at any point in time.
4. Survey shall be carried out for identifying the stretches having habitation of freshwater turtles or turtle nesting zones. Similarly, stretches shall be identified for other species of significant importance to the river ecosystem. Such stretch with adequate buffer distance shall be declared as no-mining zone and no mining shall be permitted. The regulatory authority as defined for granting Environmental Clearance, while considering the application of issuance of ToR and/or EC for the adjacent block (to non-mining zone) of mining shall take due precaution and impose requisite conditions to safeguard the interest of such species of importance.
5. District administration shall provide detailed information on its website about the sand mines in its district for public information, with an objective to extend all information in public domain so that the citizens are aware of the mining activities and can also report to the district administration on any deviation observed. Appropriate feedback and its redressal mechanism shall also be made operational. The details shall include, but not limited to, lease area, geo-coordinates of lease area and mineable area, transport routes, permitted capacity, regulatory conditions for operation including mining, environmental and social commitments etc.

6. A website needs to be maintain to track the movement of centralised sand mining and a Centralised server system should be made to manage the data related to sand mining across India.
7. The mineral concession holders shall maintain electronic weighbridges at the appropriate location identified by the district mining officer, in order to ensure that all mined minerals from that particular mine are accounted for before the material is dispatched from the mine. The weighing bridge shall have the provision of CCTV camera and all dispatch from the mine shall be accounted for.
8. The mineral movement shall be monitored and controlled through the use of transit permit with security features like printing on IBA approved MICR papers, Unique bar/QR, fugitive ink background, invisible ink mark, void pantographs and watermarks papers or through use of RFID tagged transit permits and IT /IT-enabled services. Such monitoring system shall be created and made operationalised by State Mining department and district level mining officer shall be responsible for ensuring that all legal and operational mines are connected and providing the requisite information on the system. Regular check and associated report shall be submitted to DLTF and uploaded on the website.
9. State Government shall constitute a District Level Task Force (DLTF) under the Chairmanship of Deputy Commissioner/District Magistrate/Collector with Superintendents of Police and other related senior functionaries (District Forest Officer, District transport officer, Regional officer- SPCBs, Senior Officer of Irrigation Department, District Mining Officer) with one/two independent member nominated by the Commissioner concerned. The independent member shall be retired government officials/teacher or ex-serviceman or ex-judiciary member.

The DLTF shall keep regular watch over the mining activities and movement of minerals in the district. The DLTF shall have its regular meeting, preferably every month to reconcile the information from the mining activity, and other observations made during the month and take appropriate corrective and remedial action, which may include a recommendation for revoking mining lease or environmental clearance. The DLTF may constitute an independent committee of the expert to assess the environmental or ecological damage caused due to illegal mining and recommend recovery of environmental compensation from the miner's concern. The recommendation may also include action under the provision of E(P) Act, 1986.

10. The area not identified for mining due to restriction or otherwise are also to be monitored on a regular basis by the DLTF. Any observations of mining activity from the restricted area shall be reported and corrective measures shall be initiated on an urgent basis by the DLTF.
11. The dispatch routes shall be defined in the Environmental Clearance and shall be avoided through densely habituated area and the increase in the number of vehicle movement on the road shall be in agreement with the IRC guidelines / carrying capacity of the road. The alternate and dedicated route shall be explored and preferred for movement of mining to avoid inconvenience to the local habitat. The mining production capacity, by volume/weight, shall be governed by total permissible dispatch calculated based on the carrying capacity of dispatch link roads and accordingly, the production should be regulated.
12. The movement of minerals shall be reconciled with the data collected from the mines and various Naka/check posts. Other measures may also include a general survey of the potential mineable area in the district

which has not been leased/auctioned or permitted for mining due to regulatory or other reasons.

13. The location and number of check post requirement shall be reviewed by DLTF on a regular basis so that appropriate changes in location/number could be made as per the requirement. Such review shall be carried out on a regular basis for the district on inter-state boundary or district providing multiple passages between two districts of different states.
14. The district administration shall compile the information from their district of the permitted and legal mined out minerals and other details and share such information and intelligence with the officials of the adjoining district (Inter or/and Intra State) for reconciliation. The information shall include the area of operation, permissible quantity, mined out minerals (production) the permitted route etc., and other observations, especially where the mine lease boundary is congruent with the district boundary. Such coordination meeting shall be held on a quarterly basis, alternatively in two district headquarters or any other site in two districts decided mutually by the District Magistrate.
15. The mining department shall include submission of an annual environmental audit report as one of the conditions in the mining lease agreement. The annual audit for each river bed mining lease shall be carried out and the audit report shall be uploaded on the website of district administration. The audit shall be carried out by an independent team of 3 members nominated by District Collector/Magistrate/Commissioner comprising of Ex-Serviceman, Ex-Government officials of repute, Professor or Person having experience of mining/environment. The guidelines and method of the audit shall reflect adequately the monitor-able parameters and output and reflect

the compliance status with respect to the conditions imposed by the regulatory authorities including conditions of Environmental clearance.

16. The in-situ and ex-situ environmental mitigative measures stipulated as EMP, CER, CSR and other environmental and safety conditions in mines including the welfare of labours shall properly reflect in the audit report.

9.5 Suggestive additional requirements are

i. The requirement at the Mine Lease Site:

- a. Small Size Plot (Up to 5 hectares): Android Based Smart Phone.
- b. Large Size Plots (More than 5 hectares): CCTV camera, Personal Computer (PC), Internet Connection, Power Back up.
- c. Access control of mine lease site.
- d. Arrangement for weight or approximation of the weight of mined out mineral on the basis of the volume of the trailer of vehicle used.

ii. Scanning of Transport Permit or Receipt and Uploading on Server:

- a. Website: Scanning of receipt on mining site can be done through barcode scanner and computer using the software;
- b. Android Application: Scanning on mining site can be done using Android Application using a smartphone. It will require internet availability on SIM card;
- c. SMS: Transport Permit or Receipt shall be uploaded on the server even by sending SMS through mobile. Once Transport Permit or Receipt get uploaded, a unique invoice code gets generated with its validity period.

iii. Proposed working of the system:

The State Mining Department should print the Transport Permit or Receipt with security features and issue them to the mining leaseholder through the District Collector. Once these Transport Permits or Receipts are issued, they would be uploaded on the server against that mine lease area. Each receipt should be preferable with pre-fixed quantity, so the total quantity gets determined for the receipts issued. When the

Transport Permit or Receipt barcode gets scanned and invoice is generated, that particular barcode gets used and its validity time is recorded on the server. So all the details of transporting of mined out material can be captured on the server and the Transport Permit or Receipt cannot be reused.

iv. Checking On Route:

The staff deployed for the purpose of checking of vehicles carrying mined mineral should be in a position to check the validity of Transport Permit or Receipt by scanning them using the website, Android Application and SMS.

v. Breakdown of Vehicle:

In case the vehicle break-down, the validity of Transport Permit or Receipt shall be extended by sending SMS by the driver in specific format to report the breakdown of the vehicle. The server will register this information and register the breakdown. The State can also establish a call center, which can register breakdowns of such vehicles and extend the validity period. The subsequent restart of the vehicle also should be similarly reported to the server or call center.

vi. Tracking of Vehicles:

The route of the vehicle from source to destination can be tracked through the system using checkpoints, RFID Tags, and GPS tracking.

vii. Alerts or Report Generation and Action Review:

The system will enable the authorities to develop a periodic report on different parameters like daily lifting report, vehicle log or history, lifting against allocation, and total lifting. The system can be used to generate auto mails or SMS. This will enable the District Collector or District Magistrate to get all the relevant details and shall enable the authority to block the scanning facility of any site found to be indulged in irregularity. Whenever any authority intercepts any vehicle transporting illegal sand, it shall get registered on the server and shall be mandatory for the officer to fill in the report on action taken. Every intercepted vehicle shall be tracked.

The monitoring of mined out mineral, environmental clearance conditions and enforcement of Environment Management Plan will be ensured by the regulatory authority and the State Pollution Control Board or Committee. The monitoring arrangements envisaged above shall be put in place. The monitoring of enforcement of environmental clearance conditions shall be done by the Central Pollution Control Board, Ministry of Environment, Forest and Climate Change and the agency nominated by the Ministry for the purpose.

Some of the State has followed the SSMMG-2016 and has also improvised or customized on the provisions given therein, and are successfully in operation. Salient provision adopted at different stages of sand mining in the state of Tamil Nadu is given as **Annexure VIII**.

9.6 Actions against illegal excavation and transport

Solapur district administration in Maharashtra had adopted a multi-pronged strategy to penalize the persons involved in illegal excavation and transport which resulted in a significant increase in revenue earned by the state. Following rules and procedures as mentioned in these guidelines will add to the costs of PP. Those involved in illegal activities are not required to bear these costs and this will make their supply in the market cheaper (though illegal). This will put the players running their business by following rules and procedures laid down by the government to disadvantage as far as the selling price is considered. Therefore, it is necessary to come down heavily on those involved in illegal excavation/transport, so that there is no incentive for players to abide by the rules.

The following action may be taken to achieve this deterrence against illegal business:

1. The action should be taken under all legal options available simultaneously. Thus, after identifying the case of illegal excavation, storage and/or transport of minor minerals (including sand), fine should be levied as per the land revenue laws/code(s) of the state. In addition, FIR should be lodged in the police station under relevant sections of law including sec 379 IPC. In addition, action under the Motor Vehicle Act, 1989 and relevant rules should initiate to cancel/suspend the driving license of the driver and permit of the vehicle. Further, action should be initiated under provisions in the Income Tax Act, 1961 for unaccounted income and under the Central Goods and Services Act, 2017 for non-payment of GST. (Earlier this was done under the state act pertaining to Value Added Tax/Sales Tax). Habitual offenders should also be taken up under local state laws for externment and/or preventive action. It is clarified that as per law, it is possible to take all actions under various laws

simultaneously for one offence. What is prohibited in law is an action under the same law for the same act more than once.

2. The action should be taken against all persons responsible. Often, there is a tendency to penalize only the drivers of the vehicles. The mafia of illegal mining and transport is much bigger and drivers are only one part of the system. It is necessary to identify all those involved in the offence. It is usually not possible to reach the place of excavation without creating a motorable pathway up to the same through land which may be private land. Such role of such landowners needs to be looked into for each offence and proceeded against simultaneously. Further, the role of vehicle owners needs to be probed. Role of the person who allowed his land to be used for illegal excavation and storage should also be examined. Lastly, the person who purchases such sand should also be probed. The legal proceedings stated above needs to be initiated against all of these together. An attempt should be made to fix the financial responsibility in joint and several ways so that recovery is easier.
3. There may be discretion available in law about the extent of the penalty to be levied. If such discretion is very wide, then it is advisable that guidelines may be laid down to reduce such discretion in law for levying penalties. For example, in Maharashtra, Land Revenue Code, fine of any amount of penalty up to thrice the value of the sand can be levied. Solapur district administration had instructed Tahsildars and SDMs not to use discretion and levy the fine of three times the value. Availability of discretion makes junior level functionaries susceptible to pressures and it may also lead to corrupt practices.
4. It is emphasized that actions, as stated above, are most important to ensure that the IT-based system works. If these exemplary actions are not taken against everyone, it shall create a strong disincentive to those

involved in legal excavation and transportation. For IT-based (or any other) legal system to work, it is necessary to ensure that illegal system stops working altogether.

Annexure-I

Details of Sand/M-Sand Sources

a) Rivers:

River Name/M-Sand Plant	Total Stretch of River (in KM)	Type of River (Perennial or Non-Perennial)

b) De-Siltation Location: (Lakes/Ponds/Dams etc.)

Name of Reservoir/Dams	Maintain/Controlled by State Govt./PSU etc.	Location	District	Tehsil	Village	Size(Ha)

c) Patta Lands/Khatedari Land:

Owner	Sy. No	Area (Ha)	District	Tehsil	Village	Agricultural Land (Yes/No)

d) M-Sand Plants:

Plant Name	Owner	District	Tehsil	Village	Geo-location	Quantity Tonnes/Annum

Note: For inclusion of M-Sand Plant/Patta Land in DSR the plant/landowners need to submit the request to the Mining Department with complete details. Inclusion in DSR does not give them the right to operate the M-Sand Plant/Sand Mining lease.

Annexure-II

List of Potential Mining Leases (existing & proposed)

Rivers

River Details	Lease Details	Area (in Ha)	Distance (in KM) from PA/BR/WC/	Distance from Forest Area (in KM)	Mining leases within 500 meters (if yes cluster area)	Total excavation in Tonnes /Annum considering digging depth max as 3 meters	Mineral to be mined (Sand/ Bajri/ RBM etc.)	Existing / Proposed

Patta Lands/Khatedari Land: (existing & proposed)

Owner	Sy. No	Area	District	Tehsil	Village	Total Reserve (MT)	Total Mineral to be mined (MT)	Existing /Proposed

De-Siltation Location: (Lakes/Ponds/Dams etc.) (Existing & proposed)

Name of Reservoir /Dams	Maintain /Controlled by State Govt./PSU etc.	Location	District	Tehsil	Village	Size (Ha)	Quantity MT / Year	Existing /Proposed

M-Sand Plants :(existing & proposed)

Plant Name	Owner	District	Tehsil	Village	Geo-location	Quantity Tonnes/Annum	Existing/Proposed

Annexure-III

Cluster & Contiguous Cluster details

Clusters:

River Name	Cluster No.	Lease No	Location (Riverbed / Patta Land)	Village	Area (in Ha)	Total Excavation (Ton)	Total Mineral Excavation (Ton)

Contiguous Clusters:

River Name	Contiguous Cluster No.	Cluster No	Number of leases in the cluster	Location (Riverbed / Patta Land)	Distance between clusters	Village	Area of Cluster (Ha)	Total Mineral Excavation (Ton)

Annexure-IV

Transportation Routes for individual leases and leases in Cluster

Lea se No	Transporta tion Route No	Numb er of tipper s /day of lease	Numb er of tipper s /day of all the lease on route	Leng th of Rout e in KM	Type of Road (Black Toppe d/ unpav ed)	Recommend ation for road (Black Topped/ unpaved)	The road will be Construc ted by Govt/ Lease Owner	Route Map & Locati on

Clust er No	Transporta tion Route No	Num ber of tipper s /day of cluste r	Num ber of tipper s /day of all the cluste rs on route	Leng th of Rout e in KM	Type of Road (Black Toppe d/ unpav ed)	Recommend ation for road(Black Topped/ unpaved)	The road will be Construc ted by Govt/Lea se Owner	Route Map & Locati on

Annexure-V

Final List of Potential Mining Leases (existing & proposed)

Rivers

River Details	Lease Details	Area (in Ha)	Distance (in KM) from PA/BR/WC/	Distance from Forest Area (in KM)	Mining leases within 500 meters (if yes cluster area)	Total excavation in (MT/Yr) (Mine depth max as 3 m)	Mineral to be mined (Sand/Bajri/RBM etc.)	Existing /Proposed

Patta Lands/Khatedari Land: (existing & proposed)

Owner	Sy. No	Area	District	Tehsil	Village	Total Reserve (MT)	Total Mineral to be mined (MT)	Existing /Proposed

De-Siltation Location: (Lakes/Ponds/Dams etc.) (Existing & proposed)

Name of Reservoir/ Dams	Maintain/ Controlled by State Govt./PSU etc.	Location	Distt.	Tehsil	Village	Size(Ha)	Quantity MT/Year	Existing/ Proposed

M-Sand Plants :(existing & proposed)

Plant Name	Owner	District	Tehsil	Village	Geo-location	Quantity MT/Annum	Existing/Proposed

Annexure-VI

Final List of Cluster & Contiguous Cluster

Clusters:

River Name	Cluster No.	Lease No	Location (Riverbed / Patta Land)	Village	Area (in Ha)	Total Excavation (Ton)	Total Mineral Excavation (Ton)

Contiguous Clusters:

River Name	Contiguous Cluster No.	Cluster No	Number of leases in the cluster	Location (Riverbed /Patta Land)	Distance between clusters	Village	Area of Cluster (in Ha)	Total Mineral Excavation (Ton)

Annexure-VII

Final Transportation Routes for individual leases and leases in Cluster

Lease No	Transportation Route No	Number of tippers /day of lease	Number of tippers /day of all the lease on route	Length of Route in KM	Type of Road (Black Topped/unpaved)	Recommendation for road(Black Topped/unpaved)	The road will be Constructed by Govt/Lease Owner	Route Map & Location

Cluster No	Transportation Route No	Number of tippers /day of cluster	Number of tippers /day of all the clusters on route	Length of Route in KM	Type of Road (Black Topped/unpaved)	Recommendation for road(Black Topped/unpaved)	The road will be Constructed by Govt/Lease Owner	Route Map & Location

Salient provision for sand mining in the state of Tamil Nadu

STEPS TO BE FOLLOWED BEFORE EXECUTION:

- The state as a policy should endeavor to have single authority/agency responsible for all river sand mining in the state with an objective to ease the gap in demand and supply and accordingly, take necessary measures including planning, monitoring of mined material and its transport, and to curb illegal mining and sale of materials.
- The prospective site for sand quarry may be identified based on the availability of adequate sand deposits along the river beds, which hinders the free flow of water and results in flooding during monsoon seasons. Emphasis may be given to such quarry sites which is more viable for replenishment.
- A detailed study may be conducted by engaging expert from reputed Institutions to identify prospective sand reaches, assessment of the impact of sand quarrying on the Ground Water Table and water availability, conduct bore log details and study the social and environmental aspects. The generic requirement for replenishment study is to be followed.
- Once the site is identified for prospective sand quarry site based on the detailed replenishment study, the concerned department shall submit the proposal with the geo-tagged boundary of the proposed mining Precise Area Proposal to the District Collector for approval.
- A joint inspection may be carried out by the RDO/Sub-Collector, Assistant/Deputy Director,

- Executive Engineer, TWAD Board and the PWD officials to consider the various factors before giving consent to the proposal.
- The RDO concerned along with Revenue officials may verify the revenue records of the proposed sand quarrying area and give the NOC.
- The AD/DD Mines may verify the presence of permanent structures such as tower line, bridge, monuments if any, in the vicinity of the proposed mining site as per Tamil Nadu Minor Mineral Concession Rules, 1959 (As per Rule 36 " there shall be no quarrying of sand in any river bed or adjoining area or any other area which is located within 500 meter radial distance from the location of any bridge, water supply system, infiltration well or pumping installation of any of the local bodies or Central or State Government Department or the Tamil Nadu Water Supply and Drainage Board head works or any area identified for locating water supply schemes by any of the above mentioned Government Department or other bodies" and " The distance of 50 meter shall be measured in the case of railway, reservoir or canal horizontally from the outer toe of the bank or the outer edge of the cutting, as the case may be "). Also, the availability of minerals may be cross verified with the available DSR.
- The TWAD officials may verify the drinking water schemes located nearby the proposed quarry site and the minimum distance required as per statutory norms.
- Based on the feasibility report of the joint inspection by the Revenue, Tamil Nadu Water Supply and Drainage Board and Mining officials/experts, the District Collector may give consent for the Precise Area proposal.

- After getting Precise Area approval, a detailed Mining Plan and sketch shall be prepared by the Executive Engineer, PWD using the services of a NABET accredited consultant who holds the pivotal role in the preparation of mining plan. Due responsibility will be expected on the concerned consultant in the mining plan preparation taking care of adhering to all mining rules, existing as on date. The mining plan shall contain the details of quantity to be excavated, the period of mining, method of excavation, deployment of required machinery, Environment Management Plan (EMP), proposed number of laborers to be deployed and Conceptual Mining Plan, as per Rule 41 of TNMMC Rules 1959. It is also the duty of the consultant to give the safe distance of 50 m or twice the bank height from the toe of the riverbank, whichever is higher and fixing the Geo coordinates for boundaries using DGPS instruments.
- The concerned Executive Engineer, PWD shall submit the Mining Plan prepared by the NABET accredited consultant to the concerned Assistant/Deputy Director, Department of Geology and Mines for approval, as per Rule 42 of TNMMC 1959. After scrutiny, the Assistant/Deputy Director, Department of Geology will present the Mining plan before the State Level Environment Impact Assessment Authority (SEIAA) for granting Environmental Clearance.
- The Executive Engineer, PWD shall prepare Form I and Pre-feasibility report with the help of the consultant and submit to SEIAA for an area less than 50 Ha. or to the Ministry of Environment and Forest and Climate Change (MoEF&CC) for the area more than 50 Ha.
- The State Expert Appraisal Committee (SEAC) under SEIAA, consisting of experts from renowned fields such as Mines, Environment, Sociology etc. shall conduct a site inspection of the proposed sand quarry site and after intense scrutiny, may recommend the proposal to SEIAA for approval.

- SEIAA shall grant Environmental Clearance for the sand quarry proposal after analyzing all the statutory provisions and based on the recommendation of the SEAC.
- The Environmental Clearance shall be informed to the public with basic details through advertisement in at least two widely circulated local newspapers with at least one in the vernacular language of the locality, within 7 days of the receipt of the clearance.
- On receipt of the Environmental Clearance, the Executive Engineer, PWD shall apply for Consent to Establish (CTE), from the Tamil Nadu Pollution Control Board as per the Air and Water Act, to enter upon the sand quarry site and commence the preliminary works such as construction of temporary sheds, bio-toilets, formation of biodegradable road using sugar cane leaves etc., drilling of bore wells etc. as per the statutory requirements. After all the preliminary works are completed, the Executive Engineer, PWD shall apply for the Consent to Operate (CTO) from the Tamil Nadu Pollution Control Board. Earmarking boundary of the identified land site through the concrete posts along with red flags need to be established.
- On receipt of the CTO, the Executive Engineer, PWD shall request the consent of the District Collector to commence the quarries. The District Collector shall request the Taluk Level Task Force comprising of Tahsildar, Inspector of Police, Officials from the Departments of Geology and Mining, Transport and Forest, Assistant Engineer, PWD and the Village Administrative Officer concerned, to verify the compliance of all preconditions mentioned in the Environmental Clearance and grant necessary permission to start the functioning of new sand quarries.

II. STEPS TO BE FOLLOWED DURING EXECUTION:

- Before the commencement of mining operations, the depth of sand quarrying needs to be measured accurately using Advanced technology and new gadgets like Total Stations, Global Positioning System (GPS) instruments etc. The Total Station and GPS instruments also need to be calibrated before measurement. Both the traditional and modern techniques may be infused in the right blend to get an accurate measure of the depth. A clear contour map (0.25m interval) of the levels within 2Km (one Km U/s and one Km D/s) needs to be prepared and submitted to both the Project Director, Sand Quarrying Operations and all the Monitoring Committee members. The depth of sand quarrying shall be restricted to 1 m from the theoretical/design bed level.
- The mining area must be demarcated at a minimum distance of at least 50 m away from the river embankment on either side. The boundaries of the quarries may be fixed with reference to the existing survey marks from the survey fields adjacent to the river. Sand quarrying lease area shall be demarcated on the ground with pucca stone or concrete pillars to show the present natural bed level and the depth of mining allowed.
- Modern techniques such as drone survey may be adopted to assess the depth and quantity of the mined area. Boundary pillars shall be erected at an interval of 50 m each on all four sides of the sand quarry site with red flags on every pillar and also in site pillars. The levels of shoal height, river bed height and depth to be excavated up to one meter downwards shall be marked in the pillars to avoid any deviation from the approved depth of excavation.
- It shall be ensured that no sand quarrying of any type is undertaken within 50m of the distance mentioned in the proposal (whichever is higher)

from both the banks of the river to control and avoid erosion of river banks.

- Temporary access roads or Katcha roads shall be formed between the banks of the river and the mining area with locally available bio-degradable materials such as sugarcane waste (bagasse), hay, etc.
- Proper entry and exit point for the movement of loading vehicles in and out of the sand quarry site shall be carefully located taking into consideration the habitations/settlements in the area.
- To monitor the groundwater level during sand quarrying operations, a network of existing wells may be established around the sand quarrying area and new piezometers must be installed at all sand quarry sites. Monitoring of Ground Water Quality in the vicinity (one Km radius from the sand quarrying site) shall be carried out once in two months.
- Periodic Monitoring (at least four times in a year – pre-monsoon, Monsoon, Post monsoon and winter) once in each season shall be carried out by PWD and the data thus collected may be sent regularly to SEIAA/TNPCB. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity; necessary corrective measures shall be carried out, which includes immediate stopping of mining.
- Similar to the Baseline studies for data on water, soil and air etc., that is being done before the sand quarrying operations, the air and water quality may be checked periodically by Tamil Nadu Pollution Control Board to ensure that no pollution is caused due to Sand Quarrying Operations. 10. Safety gadgets such as earplugs, goggles, respiratory

devices, luminescent vests etc. may be provided to the workers at the sand quarry site.

- First aid kit with all essentials shall be kept ready at all quarry/depot site, in case of any emergency.
- To prevent air pollution due to the dust during sand quarrying operations and safeguard the persons in the sand quarry and depot site, constant water sprinkling on the pathways and dust prone areas may be done. The sand loaded vehicles are to be covered with a tarpaulin before moving out of the quarries/depots.
- Suitable depots shall be located in the vicinity of the sand quarry site to facilitate the sale of sand. While selecting the site for depots, it must be ensured that the site is within 25 km from the sand quarry site and has an area of around 10-15 Acres with parking facilities and proper entry and exit for smooth movement of the vehicles. The depot site shall preferably be a Government poramboke land, foreshore area of tank bund etc., near an NH/SH/MDR/ODR. In the absence of any Government land in the vicinity, private Patta land may be leased out and rent fixed as per the approved Government rates applicable therein.
- Permission must be obtained from the Electricity Board for power supply to operate the CCTV cameras at sand quarry site and depots.
- Minimum of two CCTV cameras, one each at the entry and exit point and one PTZ camera may be installed at all quarries/depots to monitor illegality if any taking place in the sand quarry/depot.
- To ensure uninterrupted seamless live streaming of videos from the surveillance cameras, a high-speed Internet Lease Line connection may

be made available at all quarries/depots. Arrangements may also be made for online monitoring of the sand quarrying, Centre for Assessing Real-Time Sand Mining (CARS) that could be located at the office of the Project Director in Chennai.

- The live streaming of the videos shall be monitored at a Centralised control room and the data shall be stored in the Server for future references. A robust Customer Care may also be functional 24 x 7 at the Control Room, to redress the grievance of the public.
- Drop gates shall be installed at the entry and exit points of all quarries/depots.
- Display boards shall be erected in local vernacular language at sand quarry/depot site, in the nearest village by which sand transportation will be carried and at the entrance of the village road from the main road.
- The concerned authority of PWD shall call for e-tender to select the contractors for loading/raising of sand at the quarry site, transporting contractors to transport sand from the quarry site to depots and loading/maintenance contractors at depots.
- Sand shall be loaded in the quarries in the PWD tendered GPS fitted vehicles and online transmit permit shall be issued by the competent authorities in PWD to the transporting vehicles to transport sand from the quarry to depots.
- On the arrival of the sand shunting vehicles from quarry to the depot, an online authentication shall be done to confirm the arrival of the

appropriate quantity of sand mentioned in the transport permit into the depot.

- The loading of sand from the depots shall be carried out by booking through the online portal "www.tnsand.in" as done presently. Online transit passes will also be issued to the loaded vehicles which could be verified by using an Android app "TNsand Investigator".
- During operation of the quarries, the PWD officers shall ensure that at no point in time, the depth of quarry exceeds 1 m depth from the river bed level and quarrying is done in a uniform manner over the entire mining area to avoid overexploitation and formation of pits at fixed places.
- Proper registers may be maintained at the entry and exit points of the sand quarry/depot sites and a Loading Register may be made available during inspection. An Inspection Register and a Complaint Register may be made available at the sand quarry/depot site.
- The functioning time of quarries/depots shall be from 7.00 AM to 6.00 PM. No sand transporting vehicles to be parked inside the quarry/depot site during night time.
- A copy of the approved mining plan may be kept at the quarry site for ready reference.
- Photographs and sketch showing the pit dimensions, depth etc. may be recorded every week and maintained in the sand quarry. The Executive Engineer, PWD may inspect each sand quarry on a weekly basis and ensure that mining activities are taking place within the approved boundaries/depth.

- The sand quarrying activity shall be stopped if the entire quantity is quarried even before the expiry of the sand quarry lease period and the same shall be mentioned by the PWD authorities.
- The Taluk Level Taskforce shall inspect the quarries every fortnight, as per G.O. (Ms) No. 135 of Industries Department, dated 13.11.2009 and record the status of the compliance in the registers maintained at the sand quarry site.
- The Taluk Level Task Force has to submit its inspection report to the District Level Task Force chaired by the District Collector. The District Level Task Force has to be convened every month to discuss cases of illegal quarrying. An Environmentalist from reputed State / Central Institution and a legal expert on environmental matters may be part of the District Level Task Force. The District Level Task Force shall also dispose of the petitions on illegal sand quarrying after due enquiry and scrutiny, and pass orders within a period of two months from the date of receipt of the complaint. If any person is aggrieved with the orders passed by the District Level Task Force, an appeal may be preferred before the Appellate Forum.
- The District Collector shall take necessary steps to strengthen the existing District and Taluk Level Committees and act on the complaints received, if any, on illegal sand quarrying and take strict remedial measures to rectify the same in a time-bound manner. The District Level Task Force may send its monthly report to the Appellate Forum formed as per G.O. (Ms) No. 27 of Industries Dept. dated 17.02.2015.
- The Appellate Forum shall hear the appeals filed against the orders passed by the District Level Task Force. The Appellate Forum comprises

of the Secretaries to Government from Industries Department, Public Works Department, Revenue Department, Environment and Forests Department, Commissioner of Geology and Mining and an Expert from a reputed Government Institution.

- The Appellate Forum may convene once in 2 months to deliberate on the reports from the District Level Task Force and shall dispose of the appeals made by the petitioners aggrieved with the orders passed by the District Level Task Force.
- Periodical Capacity building and sensitization of PWD officials on the environmental and legal aspects of sand quarrying may be made mandatory. Continuous training and awareness programs shall be scheduled and conducted by IIT/Anna University for the PWD staff to keep themselves aware of the best practices in this field. It may be ensured that the enforcement officials from the Departments of Revenue, Police, Geology and Mining and Transport in the districts where quarries are situated are given adequate training and capacity building on their duties and responsibilities with respect to inspection of sand quarries and sand transporting vehicles at specified time intervals.
- No blasting shall be carried out any point in time.
- It is the obligation of the Public Works Department to run the quarry in an environmentally friendly and ecologically sustainable manner.
- The Hon'ble High Court-appointed Monitoring Committee shall inspect the sand quarries periodically and submit a report to the Hon'ble High Court.

- The PWD should explore/take necessary steps to introduce Mining Surveillance System (MSS) in line with MSS evolved by the Indian Bureau of Mines and Bhaskaracharya Institute for Space Applications and Geo-informatics (BISAG).

III. STEPS TO BE FOLLOWED AFTER EXECUTION:

- A Judicious mine closure plan may be formulated once the quarry is closed after exhaustion of the quantity of sand.
- Reclamation works may be factored into the contract agreement and strict monitoring by the PWD officials may be initiated to scrupulously follow up the mine closure plan.
- It may be ensured that the total quantity of sand permitted in the EC shall not be exceeded in any case.
- After the exhaustion of the quantity of sand, the sheds constructed at the quarry site may be removed. All the roads and pathways may be levelled so that there is no obstruction for the normal flow in the river.
- All the records/registers may be carefully maintained by the PWD for future reference.

ANNEXURE-5

**Honorable NGT Court Order OA 34 of
2022 29.09.2022 regarding DSR**

**BEFORE THE NATIONAL GREEN TRIBUNAL
WESTERN ZONE BENCH, PUNE**

(By Video Conferencing)

ORIGINAL APPLICATION NO.34 OF 2022 (WZ)

Subhash Bhai Ishwar Bhai Parmar,
Resi – 186, Mahayanshi Mohallo,
Karanj (V), Mandvi (T), Surat (D),
Gujarat - 394110

.....Applicant(s)

Versus

1. State of Gujarat,
Through Chief Secretary,
5th Floor, Block No.1,
Sardar Bhavan Sachivalaya,
Gandhi Nagar, Gujarat – 382010

2. State Environment Impact Assessment Authority (SEIAA),
Through Member Secretary,
Paryawaran Bhawan,
Sector – 10A, Gandhinagar,
Gujarat – 382010

3. Department of Industry & Mines,
Through Secretary,
Block No.05, 3rd Floor,
New Sachivalaya, Gandhi Nagar,
Gujarat – 382010

....Respondent(s)

**CORAM: HON’BLE MR. JUSTICE DINESH KUMAR SINGH, JUDICIAL MEMBER
HON’BLE DR. VIJAY KULKARNI, EXPERT MEMBER**

Applicant : Mr. Rahul Choudhary, Advocate
Respondent : Mr. Parth Bhatt, Advocate for R-1 and R-3
Mr. Maulik Nanavati, Advocate for R-2/SEIAA

=====

Reserved on	:	23.09.2022
Pronounced on	:	29.09.2022

=====

JUDGMENT

1. This application has been filed drawing our attention to issuing of auction notices of mining of sand and other minor minerals without

preparation of District Survey Report (for short, “DSR”) in violation of EIA Notification of 2006, as amended in 2016 and 2018, Sustainable Sand Mining Guidelines (SSMG), 2016, Enforcement and Monitoring Guidelines for Sand Mining (EMGSM), 2020, across the State of Gujarat. It is, therefore, prayed that such auction notices be declared null and void. It is further prayed that clear direction be issued that no auction notices for sand mining and mining of minor minerals be issued without preparation of DSR.

2. It is revealed from the contents of the application that the applicant has gathered information in this regard under the Right to Information Act. The applicant has given a tabular chart of such auctions notices, which is annexed as Annexure-A/1 to the application, which have been issued without preparing the DSR from the year 2018-2021. The auction notices are stated to be 106 and are annexed to the application as Annexure-A/7 (colly). It is further submitted that the main objection of the preparation of DSR is to ensure the identification of the areas of aggradations or deposition, where mining can be allowed and identification of areas of erosion and proximity to infrastructural structures and installations, where mining should be prohibited. The decisions in a large number of cases have been relied upon in this regard by the applicant such as **Anjani Kumar Vs. State of U.P. & Ors; (2017 SCC Online NGT 979**, orders dated 18.06.2018 and 19.06.2018 [**W.P. (PIL) No.1806 of 2015** (In the matter of Court on its **Own Motion Vs. The State of Jharkhand & others**) along with **W.P. (PIL) No.290 of 2013 (Hemant Kumar Shilkarwar Vs. the State of Jharkhand and others)** passed by the Hon’ble High Court of Jharkhand, wherein preparation of DSR is held to be mandatory for sand mining as well as mining of minor minerals. Reliance is also placed on the judgment of this

Tribunal in **Original Application No.360 of 2015 (National Green Tribunal Bar Association Vs. Virender Singh)**, wherein directions were issued to all States/Union Territories to strictly follow the SSMG-2016 read with EMGSM-2020 reinforced by mechanism for preparation of DSRs (in terms of directions of the Tribunal dated 14.10.2020) in **State of Bihar and Ors. Vs. Pawan Kumar and Ors.etc. (Civil Appeal No.3661-3662 of 2020) decided on 10.11.2021** and in **Rupesh Pethe Vs. State of M.P. and others (Original Application No.726/2018) decided on 26.02.2021** .

3. This application was admitted by us on 19.05.2022 and on that day, the learned counsel for respondent Nos.1 to 3 Mr. Maulik Nanavati was present.

4. The stand of respondent No.2 - State Environment Impact Assessment Authority (for short, "SEIAA") is as follows:-

5. The Gujarat Minor Mineral Concession Rules, 2017 (for short, "Rules, 2017") provide that the Government of Gujarat may grant quarry lease through an electronic auction in the manner specified in the Rules in areas where evidence of mineral resources has been established in accordance with the parameters prescribed in the Schedule to the Rules. Thus, grant of quarry lease by way of auction is performed by the State Government in accordance with the Rules, 2017. It is further submitted that the SEIAA is not directly involved in the process of holding auction for grant of quarry lease or sand mining lease as all such acts are performed solely and exclusively by the Department of Geology and Mining, Government of Gujarat. The answering respondent does not dispute or deny the need and necessity for preparation of DSR. One of the conditions for granting quarry lease is to obtain environmental clearance from SEIAA. It is only after clearance from SEIAA that written

order shall be passed by the Government granting quarry lease, whereafter actual work of excavation and/or extracting mineral can be lawfully performed by any person. It is further submitted that the applicant has not made it clear as to whether written order has been passed by the Government granting quarry lease to any successful bidder pursuant to the auction proceeding. He is also not sure whether Letter of Intent has expired or still survives. This information was necessary as the right to extract mineral may not have ripened in some cases and no mineral extraction work has actually begun in or over the leased area. In this background, the apprehension of the applicant that the completion of procedure for holding auction will result in violation of environmental laws or will have adverse effect on the environment, is misplaced. Even if the auction is found to have been hastily conducted, there does not exist any valid reason to declare the entire process to be bad as it involves public money.

6. The Enforcement & Monitoring Guidelines for Sand Mining, published in January, 2020 read with judicial decisions, mandate preparation of DSR prior to holding auction and granting quarry lease by the State Government. The work of preparing DSR is presently being undertaken by the concerned authority. There is implied acceptance of the fact that the DSRs had not been prepared and were not ready when the electronic auction process for grant of quarry lease was undertaken by the State Government under the provisions of Rules, 2017. The role of SEIAA is limited to examining any application that may be submitted before it by a Letter of Intent holder for grant of Environment Clearance, if permissible under law. In the present case, the answering respondent has received applications for grant of Environment Clearance from all the successful bidders of the auction process held by the State Government

under the auction notices appended to the application. In all the cases where applications have been received by the answering respondent, Terms of Reference were issued to the project proponent. In majority of cases, the work of preparing Environment Impact Assessment Report is being carried out at the instance of the project proponent and the final documents have not yet been submitted before the answering respondent for final evaluation leading to grant of Environment Clearance. In a handful of cases, the project proponent had submitted all the requisite documents. After evaluation, the answering respondent has granted Environment Clearance in some cases. In future, no application from any project proponent would be granted Environment Clearance in absence of DSR. Such application shall be kept in abeyance till the process of DSR is completed. In the cases where Environment Clearance has already been granted by the answering respondent, the State Government has declared that it shall not be issuing any order for grant of lease under Rule 8 Sub-Rule (4) of the Rules, 2017. Hence, in these circumstances, the successful bidder, despite possessing Environment Clearance, shall not be able to commence actual work of extracting minerals. The quashing of the auction notices, which are impugned in the present application and nullifying the auction process is not warranted as the action of the State Government is not outrightly illegal, at the best it can be treated to be irregular. A huge public money is spent in the conduct of electronic auction process under different advertisements impugned herein. The auction process under all the advertisements has been completed till the stage of Letters of Intent to successful bidders. In the event of quashing of auction notices, the public money would go waste and would lead to further legal complications, as rights stand created in favour of different parties by action of issuing of Letters of Intent to the successful bidders. All the

successful bidders have deposited their first instalment of 20% to the Government and have agreed to fulfill the conditions mentioned in the Letters of Intent. All these persons are not parties in the present proceeding. Therefore, the situation demands striking a balance to save the already concluded auction process while ensuring at the same time that no activity is undertaken under the said concluded auction process which is detrimental to environment or otherwise in violation of any law. It is suggested that in the interest of justice, an order may be passed restraining the commencement of actual mining activity till preparation and completion of DSR for each district, identifying blocks or areas where mining activity can be permitted without adversely impacting the environment. This would serve the ends of justice.

7. The Rules, 2017 clearly stipulate that no mining activities can be permitted without prior 'Environment Clearance Certificate' and 'Mining Plan'. Therefore, the order granting any lease for excavating minerals is issued only after process of lease-holder applying to acquire valid Environment Clearance as well as approval of the Mining Plan from the competent authority. Before issuing any notice for inviting tender for auction of any mineral, a detailed exploration of the proposed block is carried out in accordance with Schedule-I of the Rules, 2017, which are enacted in consonance with the United Nations Framework Classification (UNFC) Version-1997 and the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) Template. The Commissioner of Geology and Mining has established EC-Cell which has engaged regionwise NABET accredited agencies for obtaining Environment Clearance from the competent authority before carrying out any mining activity in the allocated blocks. These agencies have been given work to prepare DSR for each district in consultation with

concerned departments which is under process as the DSR is necessary document for issuance of Environment Clearance. The reliance is placed on the provisions of Section 15 of the Mines and Minerals (Development and Regulation) Act, 1957 which empowers the State Governments to frame policy/rules with respect to matters related to minor mineral and that ordinary sand is a minor mineral, making policy for its disposal falls in the ambit of the State Government. 95% of the revenue generated from the mining of sand is given to the Panchayat empowering local governance and ensuring development at the grass root level. Besides that the State of Gujarat collects 10% of the royalty as contribution towards District Mineral Foundation and the same is being utilized for the betterment of the Mining affected area in accordance with the Gujarat District Mineral Foundation Rules, 2016. Lastly it is submitted that there is no violation committed by the answering respondent of the judgment of the Apex Court since the auctioned blocks will be allowed to excavate after taking valid Environment Clearance from the competent authority.

8. The State of Gujarat has put up 2578 blocks for auction under Rules, 2017 after carrying out exploration under Schedule-I of the said Rules and out of those blocks, 1206 blocks have been issued Letters of Intent. In all for 64 blocks, grant order has been issued after all the clearances, including Environment Clearance. In this act, the State of Gujarat has incurred an amount of Rs.20,06,79,288/- towards exploration and auction of the blocks. As per Rules, 2017, no mining activity will be permitted without prior Environment Clearance. The grant is issued only after successful bidder gets the mining plan approved and after acquiring all the clearances and therefore, excavation of any mineral in the auctioned blocks will only be allowed after the

bidder acquires Environment Clearance and other mandatory clearance from the competent authority. The State of Gujarat is committed to protect the environment and no action in contravention or violation of the directions of the Apex Court would be allowed.

9. We have heard the arguments of the learned counsel for the parties and gone through the rival contentions of the parties, so also perused the record.

10. The learned counsel for the respondents has categorically admitted that there is no DSR prepared before issuing the auction notices and that the same is, in fact, in violation of the Enforcement and Monitoring Guidelines for Sand Mining (EMGSM), 2020, issued by the MOEF as well as against the judicial pronouncements to the effect that DSR is a condition precedent for issuing auction notice for any parcels or blocks for sand mining. He emphatically stated that huge amount to the tune of Rs.20,06,79,288/- has already been spent by the State of Gujarat in conducting the electronic auction process and in reaching the stage of issuing Letter of Intent to the successful bidders, which will all go waste in case the entire auction process is declared null and void or quashed. Therefore, the process which has been conducted till date should be protected as it does not result in any harm being caused to the environment as no actual mining has been permitted so far in any of the blocks. He further argued that this Tribunal may direct that no actual mining would be allowed till the DSR is prepared and pursuant thereto, the Environment Clearance has been granted to the successful bidders. In several cases, this kind of protection has been given by various judicial forums. In this case also, this kind of protection be granted.

11. As against above, the learned counsel for the applicant vehemently urged that in the light of the law laid down by the Apex Court in the case

of ***Deepak Kumar & Anr. Vs. State of Haryana & Ors.; (2012)4 SCC 629*** and also as per the Guidelines of 2020, there is a legal mandate that DSR has to be prepared in advance before issuing any auction notice for the sand mining. He also pointed out that there is a judicial pronouncement also to the effect that if any act is to be done in a particular manner, it must be done in the same manner and not otherwise. He also expressed his apprehension that in case protection is given to the process which has been conducted till now, that may lead to taking decision at the end by authorities in favour of those persons in whose favour Letters of Intent have already been issued. Therefore, all the auction notices which have so far been issued, for want of DSR, need to be quashed outrightly.

12. The learned counsel for the applicant further argued that the State of Gujarat had passed a resolution dated 05.03.2019 about Sustainable Sand Mining Management Guidelines, 2016 at the time of preparing sand blocks for auction. He has drawn our attention to the said resolution which is annexed by him with his reply-affidavit at pages 962 to 963 of the paperbook as Annexure-A-1 and in the light of this resolution, it is argued by him that even after giving an undertaking in 2019, electronic auction process has been undertaken by the State of Gujarat without preparing DSR, which shows that they do not have respect for their undertaking given before the judicial authority. Therefore, any undertaking which they now give before this Tribunal that the auction process should be protected and because of financial loss likely to be caused to the State of Gujarat, let the DSR proceeding be completed and fresh decision in accordance with law be allowed to be taken thereafter, should not be believed.

13. We are of the considered opinion that there are no two views about the fact that DSR is bound to be there before issuance of any e-tender for the purpose of sand mining as has been laid down in the Guidelines and following judgments :-

- (i) ***State of Bihar and Ors. Vs. Pawan Kumar and Ors.etc.***
(Civil Appeal No.3661-3662 of 2020) decided on 10.11.2021
- (ii) ***Anjani Kumar Vs. State of U.P. & Ors***
(2017 SCC Online NGT 979)

14. The Hon'ble Supreme Court of India in ***Pawan Kumar and Ors.*** (supra), considered the essentiality and prerequisite of DSR and held as follows:-

“7. It cannot be in dispute that though the developmental activities are not stalled, the environmental issues are also required to be addressed. A balanced approach of sustainable development ensuring environmental safeguards, needs to be resorted to. At the same time, it also cannot be ignored that when legal mining is banned, it gives rise to mushroom growth of illegal mining, resulting into clashes between sand mafias, criminalization and at times, loss of human lives. It also cannot be disputed that sand is required for construction of public infrastructural projects as well as public and private construction activities. A total ban on legal mining, apart from giving rise to illegal mining, also causes huge loss to the public exchequer.

8. Taking into consideration these aspects of the matter, we propose to issue certain interim directions.

9. The Tribunal, in the case of Satendra Pandey (supra), has found that the notification dated 15th January 2016, which provided Environmental Clearance to be given by the District Environment Impact Assessment Authority (hereinafter referred to as the “DEIAA”) was not in consonance with the judgment of this Court in the case of Deepak Kumar v. State of Haryana and Others. The Tribunal therefore in Satendra Pandey (supra), had directed Ministry of Environment, Forest and Climate Change (hereinafter referred to as “MoEF and CC) to take steps to revise the procedure laid down in the notification dated 15th January 2016. It is to be noted that MoEF and CC, in accordance with the directions of the Tribunal, had issued Enforcement and Monitoring Guidelines for Sand Mining (hereinafter to referred to as “the 2020 guidelines”) in the month of January 2020. Chapter 4 of the 2020 guidelines deals with identification of possible sand mining sources and preparation of DSR. It will be relevant to refer to Clause 4.1.1 (a), (o) and (p) of the 2020 guidelines:

“4.1 Identification of possible sand mining sources and preparation of District Survey Report (DSR)”

4.1.1 Preparation of District Survey Report.

District Survey Report for sand mining shall be prepared before the auction/e-auction/ grant of the mining lease/Letter of Intent (Loi) by Mining department or department dealing the mining activity in respective states.

o) Potential site for mining having its impact on the forest, protected area, habitation, bridges etc, shall be avoided. For this, a sub divisional committee may be formed which after the site visit shall decide its suitability for mining. The list of mining lease after the recommendation of the Committee needs to be defined in the following format given in as Annexure II. The Sub Divisional Committee after the site visit shall make a recommendation on the site for its suitability of mining and also records the reason for selecting the mining lease in the Patta land. The details regarding cluster and contiguous cluster needs to be provided as in Annexure III. The details of the transportation need to be provided as in Annexure IV.

*p) **Public consultation-** The Comments of the various stakeholders may be sought on the list of mining lease to be auctioned. The State Government shall give an advertisement in the local and national newspaper for seeking comments of the general public on the list of mining' lease included in the DSR. The DSR should be placed in the public domain for at least one month from the date of publication of the advertisement for obtaining comments of the general public. The comments so received shall be placed before the sub divisional committee for active consideration. The final list of sand mining areas [leases to be granted on riverbed & Patta land/Khatedari land, de-siltation location (ponds/lakes/dams), M-Sand Plants (alternate source of sand)] after the public hearing needs to be defined in the final DSR in the format as per Annexure-V. The details regarding cluster and contiguous cluster needs to be provided in Annexure-VI. The details of the transportation need to be provided in Annexure- VII.”*

10. It could thus be seen that in accordance with the 2020 guidelines, the DSR is required to be prepared before the auction/e-auction/ grant of mining lease by Mining Department or Department dealing with mining activity in the respective States. It is further provided that the potential site for mining having its impact on the forest, protected area, habitation and bridges should be avoided. For this, a sub divisional committee is required to be formed which, after the site visit, is required to decide regarding the suitability of the sites for mining. The sub divisional committee is further required to record its reasons for selecting the mining lease in the patta land. Various details are required to be given in the annexure appended to the said policy.

11. It is further to be noted that Appendix-X of the notification dated 15th January 2016, issued by MoEF and CC also provides for composition of the sub divisional committee:

“A Sub Divisional Committee comprising of Sub Divisional Magistrate, Officers from Irrigation department, State Pollution Control Board or Committee, Forest department, Geology or mining

officer shall visit each site for which environmental clearance has been applied for and make recommendation on suitability of site for mining or prohibition thereof.”

12. It is to be noted that with the advent of modern technology, various technological gadgets like Drones and satellite imaging etc. can be used for identification of the potential sites and preparation of the DSR and also to check misuse and unauthorized mining.

13. We further find that when the 2020 guidelines as well as the notification issued by MoEF and CC of 2016 itself provide for constitution of sub divisional committees comprising of the officers of the State Government from various Departments for identification of the potential sites for mining, there would be no necessity of the DSRs being prepared through private consultants as directed by the Tribunal in the impugned order. The sub divisional committee consists of various officers from Revenue Department, Irrigation Department, State Pollution Control Board, Forest Department and Geology Mining Department of the State Government. They are better equipped to visit the sites and prepare the draft DSR for the concerned district. Apart from that, preparation of DSR through private consultants would also unnecessarily burden the public exchequer. We are therefore of the view that the direction in that regard issued by the Tribunal requires to be modified. We are further of the considered view that until the DSRs are finalized and granted approval by SEAC and SEIAA, it is appropriate that certain necessary arrangements are permitted so that the State can continue with legal mining activities. This apart from preventing illegal mining activities, would also ensure that the public exchequer is not deprived of its share in legalized mining.

14. We therefore find it appropriate to substitute the directions issued by the Tribunal vide judgment and order dated 14th October 2020, with the following directions:-

(i) The exercise of preparation of DSR for the purpose of mining in the State of Bihar in all the districts shall be undertaken afresh. The draft DSRs shall be prepared by the sub divisional committees consisting of the Sub-Divisional Magistrate, Officers from Irrigation Department, State Pollution Control Board or Committee, Forest Department, Geological or mining officer. The same shall be prepared by undertaking site visits and also by using modern technology. The said draft DSRs shall be prepared within a period of 6 weeks from the date of this order. After the draft DSRs are prepared, the District Magistrate of the concerned District shall forward the same for examination and evaluation by the SEAC. The same shall be examined by the SEAC within a period of 6 weeks and its report shall be forwarded to the SEIAA within the aforesaid period of 6 weeks from the receipt of it. The SEIAA will thereafter consider the grant of approval to such DSRs within a period of 6 weeks from the receipt thereon;

(ii) Needless to state that while preparing DSRs and the appraisal thereof by SEAC and SEIAA, it should be ensured that a strict adherence to the procedure and parameters laid down in the policy of January 2020 should be followed;

(iii) Until further orders, we permit the State Government to carry on mining activities through Bihar State Mining Corporation for which it may employ the services of the contractors. However, while doing so, the State Government shall ensure that all environmental concerns are taken care of and no damage is caused to the environment.”

15. This Tribunal in the case of **Anjani Kumar** (supra), while holding that a District Survey Report (DSR) is a pre-requisite and condition precedent before the grant of any mining lease of sand and bajri, has observed thus :-

“31. From the extracted portion, it could well be understood that to begin with the process prescribed for preparing of survey document mapping the status of the sand sources in a District is an integral but an essential part. The Survey has to be conducted and report be prepared for each District. It must also be noticed that while taking into consideration the fact that rivers cut across districts and States and every river is an ecosystem in itself but keeping in mind the fact that district is a most established unit of administration conduct of survey, planning and monitoring can be ensured effectively, the scheme proposed that every district will prepare this document (District Survey Report) taking river stretch in that district as an ecological and inventorising other sources of sand in the district...”

65. Thus there is merit in the contention of the applicant that the District Survey Report is not only an important act but it should be conducted prior to sanctioning of the permission/concession.

71. In other words it is evident that absence of the factual District Survey Report after due inspection grant of mining lease will be in conflict of the environmental laws as sand mining lease could be granted in an area only when aspect of replenishment of miner mineral especially in river sand is clearly established.

96. It is true that under the Mining Policy, Rules, the State is empowered to conduct survey for the purpose of inviting bids opine. The preparation of DSR and obtaining of Environmental Clearance is also a condition precedent to carrying on mining activity. It is for the State Government to ensure that there is no conflict between two and they are balanced so as to ensure that neither there is scope for illegal mining nor there should be environmental degradation.”

16. The learned counsel for respondent Nos.1 to 3 has fairly admitted that DSR has not been prepared in this case and the electronic auction

for sand mining has been done in respect of the blocks which have been detailed in the application. He, however, states that the process which has been completed till now should be protected for want of financial loss. We are not inclined to accept this argument because there is specific breach of the provisions of law which was settled as back as in the year 2016 and the same has been reiterated in Guidelines of 2020, so also in the law affirmed by various judgments as well as this Tribunal. We also find that the Rules, 2017 in respect of State of Gujarat, relied upon by respondent Nos.1 to 3, which do not provide for prior DSR to be conducted, is not found to be in consonance of the law has has been laid down in **Anjani Kumar** (supra).

17. The learned counsel for respondent Nos.1 to 3 has placed reliance upon the decisions in the cases of **Pahwa Plastics Pvt. Ltd. and Another Vs. Dastak NGO and others; 2022 SCC OnLine SC 362, Electrosteel Steels Limited Vs. Union of India and others; 2021 SCC OnLine SC 1247** and the judgment of the Apex Court passed in **Civil Appeal No.3132 of 2018 (D. Swamy Vs. Karnataka State Pollution Control Board and others)**, delivered on **22.09.2022** and argued that based on the principle laid down in above cases the *ex post facto* EC may be granted in specific cases where facts would require such decision to be taken. Therefore, it is argued that in the present case, looking to the fact that DSR process is going on, the proceeding in regard to grant of mining leases till date should be protected as already a huge amount has been spent, in the interest of justice.

18. We have gone through the aforecited judgments. The main thrust in these judgments is in respect of *ex post facto* EC being granted in appropriate cases and not to adopt pedantic rigid approach regardless of the consequences of stopping the operations. We find that the facts in

the cases cited supra are totally different from the facts in the present case and particularly from the judgment of the Apex Court in **Pawan Kumar and Ors.** (supra) wherein the matter of DSR was considered thoroughly and the same was found to be essential before initiating e-tendering process, we would like to follow the principle laid down in the said judgment instead of the judgments relied upon by the learned counsel for respondent Nos.1 to 3.

19. In view of the above discussion and the law laid down by the Apex Court and this Tribunal, we think that all the impugned auction notices need to be quashed and are accordingly quashed, with the direction that no proceeding/e-tendering be done in respect of sand mining without preparation of DSR first.

20. The Original Application stands disposed of. No cost.

Dinesh Kumar Singh, JM

Dr. Vijay Kulkarni, EM

21. After pronouncement of the above order, Mr. Parth Bhatt, learned counsel for respondent Nos. 1 and 3 prays for grant of stay to the effect of the above order for a period of four weeks. At his request, the effect of the above judgment and order shall stand stayed for four weeks from today.

Dinesh Kumar Singh, JM

Dr. Vijay Kulkarni, EM

September 29, 2022
OA 34/2022
NPJ

ANNEXURE-6

**Office Memorandum F. No. IA-Z-
11013/156/2023-IA-II (NCM) dated 18th
September 2023 published by Ministry
of Environment, Forest and Climate
Change**

F.No. IA-Z-11013/156/2023-IA-II(NCM)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhavan,
Vayu Wing, 3rd Floor,
Aliganj, Jor Bag Road
New Delhi -110 003.
Dated: 18th September 2023

To

The Member Secretary,
State Environment Impact Assessment Authority,
Paryavaran Bhawan, Sector- 10 A,
Gandhinagar-382 010, Gujarat.

Subject- Whether requirement of DSR is mandatory for granting of Environment Clearance for Major Mineral proposals.

Sir,

This is with reference to your letter no. No. SEIAA/GUJ/EC/1(a)/HP Thanki (2403)/1132 dated 01.09.2023 on the subject mentioned above.

2. It is to clarify that Ministry's Notification dated 25.07.2018 is only applicable to minor minerals. There is no requirement of District Survey Report (DSR) for major minerals.

3. This issues with the approval of Competent Authority.

Encl: As Above.

Yours faithfully,



(Pankaj Verma)
Scientist 'E'



भारत का राजपत्र The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)

PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं. 2827]

नई दिल्ली, बुधवार, जुलाई 25, 2018/श्रावण 3, 1940

No. 2827]

NEW DELHI, WEDNESDAY, JULY 25, 2018/SHRAVANA 3, 1940

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 25 जुलाई, 2018

का.आ. 3611(अ).—भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की अधिसूचना सं. का.आ. 1533(अ) तारीख 14 सितंबर, 2006, भारत के राजपत्र, असाधारण, भाग II, खंड 3, उपखंड (ii) में (जिसे इसमें इसके पश्चात् उक्त अधिसूचना कहा गया है) प्रकाशित की गई थी, जिसके द्वारा पूर्व पर्यावरण निकासी के संबंध में निदेश जारी किए गए हैं;

और पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय में उक्त अधिसूचना को का.आ. 141(अ) तारीख 15 जनवरी, 2016 द्वारा संशोधित किया है, जिसमें गौण खनिजों के लिए जिला सर्वेक्षण रिपोर्ट तैयार करने की प्रक्रिया को विहित किया गया है;

और रांची स्थित माननीय झारखंड उच्च न्यायालय ने 2015 की रिट याचिका (पीआईएल) संख्या 1806, स्वप्रेरणा बनाम झारखंड राज्य एवं अन्य के मामले में रिट याचिका (पीआईएल) सं. 2013 की 290, हेमंत कुमार शिल्कारवर बनाम झारखंड राज्य एवं अन्य के मामले में, अन्य बातों के साथ, तारीख 11 अप्रैल, 2018 और 19 जून, 2018 के आदेश में बालू और रेत से भिन्न गौण खनिजों के लिए जिला सर्वेक्षण रिपोर्ट तैयार करने या बालू और रेत से भिन्न गौण खनिजों की जिला सर्वेक्षण रिपोर्ट तैयार करने के लिए शक्तियों का प्रत्यायोजन करने के लिए राज्य सरकार और/या जिला पर्यावरण संघात निर्धारण प्राधिकरण और जिला विशेषज्ञ मूल्यांकन समिति को निदेश दिया है;

और केंद्रीय सरकार लोक हित में पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) के खंड (क) के अधीन सूचना देने की अपेक्षा से अभिमुक्ति प्रदान करती है;

और केंद्रीय सरकार, पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (4) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उपधारा (1) और उपधारा (2) के खंड (v) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की अधिसूचना सं. का.आ. 1533(अ) तारीख 14 सितंबर, 2006 में निम्नलिखित और संशोधन करती है, अर्थात्:—

उक्त अधिसूचना में परिशिष्ट 10 के स्थान पर निम्नलिखित रखा जाएगा, अर्थात् :-

परिशिष्ट 10

[पैरा 7 (III) (क) देखें]

1. बालू खनन या नदी तल खनन के लिए जिला सर्वेक्षण रिपोर्ट तैयार करने के लिए प्रक्रिया

जिला सर्वेक्षण रिपोर्ट तैयार करने का मुख्य उद्देश्य (भरणीय बालू खनन के लिए मार्गदर्शक सिद्धांतों के अनुसार) निम्नलिखित को सुनिश्चित करना है :-

उच्चयन या जमाव के क्षेत्रों की पहचान, जहाँ खनन को अनुज्ञात किया जा सकता है ; और भूक्षयण के क्षेत्रों की पहचान तथा अवसंरचना ढांचों और प्रतिष्ठापनों से निकटतम जहाँ खनन को प्रतिषिद्ध किया जाना चाहिए और भराई की वार्षिक दर की गणना तथा उस क्षेत्र में खनन के पश्चात् भराई के लिए समय को अनुज्ञात करना ।

रिपोर्ट के निम्नलिखित संघटक होंगे :

- (1) प्रस्तावना ;
- (2) जिले में खनन कार्यकलापों का विहंगावलोकन ;
- (3) अवस्थिति क्षेत्र और वेधता की अवधि सहित जिले में खनन पट्टों की सूची ;
- (4) पिछले तीन वर्ष में प्राप्त स्वामिस्व या राजस्व के ब्यौरे ;
- (5) पिछले तीन वर्ष के दौरान बालू या रेत या गौण खनिज के उत्पादन के ब्यौरे ;
- (6) जिले की नदियों में तलछट के जमा होने की प्रक्रिया ;
- (7) जिले का साधारण प्रोफाइल ;
- (8) जिले में भू उपयोग का पैटर्न : वन, कृषि, उद्यान कृषि, खनन आदि ;
- (9) जिले की भूगर्भीय स्थिति ;
- (10) मासवार वर्षा ;
- (11) भूगर्भ और खनीज संपदा ।

पूर्वोक्त के अतिरिक्त रिपोर्ट में निम्नलिखित अंतर्विष्ट होंगे :

- (क) जिलावार नदी या धारा और अन्य रेत के स्रोत के ब्यौरे ;
- (ख) जिलावार रेत या कंकड़ या समग्र संसाधनों की उपलब्धता ;
- (ग) जिलावार विद्यमान रेत के खनन पट्टों के ब्यौरे और समग्र ।

जिला पर्यावरण संघात निर्धारण प्राधिकरण द्वारा भूविज्ञान विभाग या सिंचाई विभाग या वन विभाग या लोक निर्माण विभाग या भू-जल बोर्ड या सुदूर संवेदन विभाग या खनन विभाग आदि की सहायता से जिले में सर्वेक्षण किया जाएगा ।

मुख्य नदियों के विवरण सहित निकासी प्रणाली

क्रम सं.	नदी का नाम	निष्कासन क्षेत्र (वर्ग किलोमीटर)	जिले में प्रतिशत निष्कासित क्षेत्र
(1)			
(2)			

महत्वपूर्ण नदियों और धाराओं की मुख्य विशेषताएं :

क्रम सं.	नदी या धारा का नाम	जिले में कुल लंबाई (किलोमीटर में)	उद्भव का स्थान	उद्भव के स्थान पर ऊंचाई
(1)				
(2)				

खनिज छूट के लिए सिफारिश किया गया नदी या धारा का भाग	खनिज छूट के लिए सिफारिश किए गए क्षेत्र की लंबाई (किलोमीटर में)	खनिज छूट के लिए सिफारिश किए गए क्षेत्र की औसत चौड़ाई (मीटर में)	खनिज छूट के लिए सिफारिश किया गया क्षेत्र (वर्ग मीटर में)	खनन योग्य खनिज क्षमता (मीट्रिक टन में) (कुल खनिज क्षमता का 60 प्रतिशत)

खनिज क्षमता

बोल्डर (मीट्रिक टन)	रेत (मीट्रिक टन)	बालू (मीट्रिक टन)	कुल खनन योग्य खनिज क्षमता (मीट्रिक टन)

वार्षिक जमाव

क्रम सं.	नदी या धारा	खनिज छूट के लिए सिफारिश किया गया नदी या धारा का भाग	खनिज छूट के लिए सिफारिश किए गए क्षेत्र की लंबाई (किलोमीटर में)	खनिज छूट के लिए सिफारिश किए गए क्षेत्र की औसत चौड़ाई (मीटर में)	खनिज छूट के लिए सिफारिश किया गया क्षेत्र (वर्ग मीटर में)	खनन योग्य खनिज क्षमता (मीट्रिक टन में) (कुल खनिज क्षमता का 60 प्रतिशत)
(1)						
(2)						
जिले के लिए योग						

उप प्रभागीय समिति, जो (i) उप प्रभागीय मजिस्ट्रेट (ii) निम्नलिखित विभागों के अधिकारियों (क) सिंचाई विभाग (ख) राज्य प्रदूषण नियंत्रण बोर्ड या समिति (ग) वन विभाग (घ) भू-विज्ञान या खनन अधिकारी से मिलकर बनेगी, खनन के लिए उपयुक्तता या खनन को प्रतिषिद्ध करने के लिए प्रत्येक स्थान का, जिसके लिए पर्यावरण निकासी का आवेदन किया गया है, भ्रमण करेगी।

खनन क्षमता की संगणना करने के लिए अंगीकृत विधि :

खनन क्षमता की संगणना स्थान की जांच और नदी या धारा के आवाह क्षेत्र के भू-विज्ञान के आधार पर की जाएगी। स्थल स्थिति और अवस्थिति, खनन योग्य खनिजों को परिभाषित किया जाएगा। किसी नदी या धारा में खनिजों के खनन का विनिश्चय भू-आकृति विज्ञान और अन्य कारकों के आधार पर किया जा सकता है, यह किसी विशिष्ट नदी या धारा के क्षेत्र का 50 से 60 प्रतिशत हो सकता है। उदाहरणार्थ कुछ पहाड़ी राज्यों में खनिज संघटक, जैसे बोल्डर, नदी से उत्पन्न रेत, बालू को एक मीटर तक संसाधन खनिज माना जाता है। अन्य संघटक जैसे बत्ते और तलछट को किसी विशिष्ट नदी या धारा की खनिज क्षमता की संगणना करते समय अपशिष्ट माना जाता है।

जिला सर्वेक्षण रिपोर्ट जिले में तैयार की जाएगी और उसके प्रारूप को पब्लिक डोमेन में कलेक्टर के कार्यालय में

उसकी एक प्रति रखकर रखा जाएगा तथा उसे 21 दिन के लिए जिले की वेबसाइट पर भी पोस्ट किया जाएगा। प्राप्त टिप्पणियों पर विचार किया जाएगा तथा यदि सही पाया जाता है तो जिला पर्यावरण संघात निर्धारण प्राधिकरण द्वारा छह मास के भीतर तैयार की जाने वाली अंतिम रिपोर्ट में उसे सम्मिलित किया जाएगा।

जिला सर्वेक्षण रिपोर्ट पर्यावरण निकासी, रिपोर्टों और मूल्यांकन परियोजनाओं को तैयार करने का आधार बनेगी। रिपोर्ट को प्रत्येक पांच वर्ष में एक बार अद्यतन किया जाएगा।

II. बालू खनन या नदी तल खनन से भिन्न गौण खनिजों के लिए जिला सर्वेक्षण रिपोर्ट तैयार करने की प्रक्रिया

जिला सर्वेक्षण रिपोर्ट को जिले में प्रत्येक गौण खनिज के लिए पृथक् रूप से तैयार किया जाएगा और उसके ड्राफ्ट को पब्लिक डोमेन में कलेक्टर के कार्यालय में उसकी एक प्रति रखकर रखा जाएगा तथा उसे 21 दिन के लिए जिले की वेबसाइट पर भी पोस्ट किया जाएगा। प्राप्त टिप्पणियों पर विचार किया जाएगा तथा यदि सही पाया जाता है तो जिला पर्यावरण संघात निर्धारण प्राधिकरण द्वारा छह मास के भीतर तैयार की जाने वाली अंतिम रिपोर्ट में उसे सम्मिलित किया जाएगा।

बालू खनन या नदी तल खनन से भिन्न गौण खनिजों के लिए जिला सर्वेक्षण रिपोर्ट नीचे वर्णित संघटकों के अनुसार होगी :--

बालू खनन या नदी तल खनन से भिन्न गौण खनिजों के लिए जिला सर्वेक्षण रिपोर्ट तैयार करने का प्रारूप

- (1) प्रस्तावना ;
- (2) जिले में खनन कार्यकलापों का विहंगावलोकन ;
- (3) जिले का साधारण प्रोफाइल ;
- (4) जिले की भूगर्भीय स्थिति ;
- (5) सिंचाई निष्कासन पैटर्न ;
- (6) जिले में भू उपयोग का पैटर्न : वन, कृषि, उद्यान कृषि, खनन आदि ;
- (7) जिले में सतह जल और भूमिगत जल का परिदृश्य ;
- (8) जिले में वर्षा वृत्ति और जलवायु स्थिति ;
- (9) निम्नलिखित प्रारूप के अनुसार जिले में खनन पट्टों के ब्यौरे :--

क्रम सं.	खनिज का नाम	पट्टेदार का नाम	पट्टेदार का नाम और संपर्क संख्या	खनन पट्टा अनुदान आदेश संख्या एवं तारीख	खनन पट्टे का क्षेत्र (हेक्टेयर में)	खनन पट्टे की अवधि (प्रारंभिक)		खनन पट्टे की अवधि (पहला/दूसरा नवीकरण)	
						से	तक	से	तक
1	2	3	4	5	6	7	8	9	10

खनन प्रचालन के प्रारंभ होने की तारीख	प्रास्थिति (कार्यशील/गैर-कार्यशील पारेषण आदि के लिए स्थायी रूप से कार्यशील)	कैप्टिव/गैर-कैप्टिव	पर्यावरणीय निकासी अभिप्रास (हां/नहीं) यदि हां तो पर्यावरण निकासी अनुदत्त करने की तारीख सहित पत्र संख्या	खनन पट्टे की अवस्थिति (अक्षांश देशांतर) एवं	खनन की विधि (खुली/भूमिगत)
11	12	13	14	15	16

- (10) पिछले तीन वर्ष के दौरान प्राप्त स्वामिस्व या राजस्व
 (11) पिछले तीन वर्ष के दौरान उत्पादन किए गए गौण खनिज के ब्यौरे
 (12) जिले का खनिज मानचित्र
 (13) निम्नलिखित प्ररूप के अनुसार जिले में आशय पत्र के धारकों की उसकी वैधता सहित सूची :-

क्रम सं.	खनिज का नाम	पट्टेदार का नाम	आशय पत्र धारक का पता एवं संपर्क संख्या	आशय पत्र आदेश की संख्या एवं तारीख	आबंटित किए जाने वाले खनन पट्टे का क्षेत्र	आशय पत्र की वैधता	उपयोग (कैप्टिव/ गैर-कैप्टिव)	खनन पट्टे की अवस्थिति (अक्षांश एवं देशांतर)
1	2	3	4	5	6	7	8	9

- (14) जिले में उपलब्ध कुल खनिज भंडार ;
 (15) जिले में उपलब्ध खनिज की क्वालिटी / ग्रेड ;
 (16) खनिज का उपयोग ;
 (17) पिछले तीन वर्षों के दौरान खनिज की मांग और पूर्ति ;
 (18) जिले के मानचित्र पर चिह्नांकित खनिज पट्टे ;
 (19) उस क्षेत्र के ब्यौरे, जहां खनिज पट्टों का समूह है, अर्थात् खनिज पट्टों की संख्या, अवस्थिति (अक्षांश और देशांतर) ;
 (20) जिले में पारिस्थितिकी संवेदनशील क्षेत्र, यदि कोई हो ;
 (21) पर्यावरण (वायु, जल, ध्वनि, मृदा, वनस्पति और प्राणी, भू-उपयोग, कृषि, वन आदि) पर खनन कार्यकलाप का संघात ;
 (22) पर्यावरण पर खनन संघात को कम करने के लिए उपचारात्मक उपाय ;
 (23) खनन किए गए क्षेत्र को पुनः प्राप्त करना (जिले में नियमों और विनियम, प्रस्तावित पुनः प्राप्ति योजना के अनुसार) सर्वोत्तम व्यवहार को पहले ही कार्यान्वित किया गया है ;
 (24) जोखिम निर्धारण एवं आपदा प्रबंधन योजना ;
 (25) जिले में व्यवसायिक सुरक्षा मुद्दों के ब्यौरे (सिलिकोसिस एवं तपेदिक के रोमियों के पिछले पांच वर्ष के डाटा को प्रस्तुत करने की आवश्यकता है) ;
 (26) जिले में पहले ही अनुदत्त पट्टों के संबंध में पौधा रोपण और हरित पट्टी विकास ;
 (27) कोई अन्य सूचना ।

जिला पर्यावरण संघात निर्धारण प्राधिकरण (डीईआईएए) जिले में गौण खनिज की किस्म की प्रकृति के आधार पर संबंधित राज्य सरकार के खनिज और भू-विज्ञान विभाग के परामर्श से जिला सर्वेक्षण रिपोर्ट में अतिरिक्त मानकों को सम्मिलित कर सकेगी ।

जिला सर्वेक्षण रिपोर्ट पर्यावरणीय निकासी, रिपोर्टों को तैयार करने और परियोजनाओं के मूल्यांकन के लिए आधार होगी । रिपोर्ट को प्रत्येक पांच वर्ष में एक बार अद्यतन किया जाएगा ।"

[फा. सं. एल-11011/26/2018-आईए-II(एम)]

जानेश भारती, संयुक्त सचिव

टिप्पण : मूल अधिसूचना भारत के राजपत्र, असाधारण, भाग II, खंड 3, उप-खंड (ii) में सं. का.आ. 1533(अ) तारीख 14 सितंबर 2006 द्वारा प्रकाशित की गई थी और तत्पश्चात् उसे निम्नानुसार संशोधित किया गया :-

1. का. आ. 1949 (अ), तारीख 13 नवंबर, 2006;
2. का. आ. 1737 (अ), तारीख 11 अक्टूबर, 2007;
3. का. आ. 3067 (अ), तारीख 1 दिसंबर, 2009;
4. का. आ. 695 (अ), तारीख 4 अप्रैल, 2011;
5. का. आ. 156 (अ), तारीख 25 जनवरी, 2012;
6. का. आ. 2896 (अ), तारीख 13 दिसंबर, 2012;
7. का. आ. 674 (अ), तारीख 13 मार्च, 2013;
8. का. आ. 2204 (अ), तारीख 19 जुलाई 2013;
9. का. आ. 2555 (अ), तारीख 21 अगस्त, 2013;
10. का. आ. 2559 (अ), तारीख 22 अगस्त, 2013;
11. का. आ. 2731 (अ), तारीख 9 सितंबर, 2013;
12. का. आ. 562 (अ), तारीख 26 फरवरी, 2014;
13. का. आ. 637 (अ), तारीख 28 फरवरी, 2014;
14. का. आ. 1599 (अ), तारीख 25 जून, 2014;
15. का. आ. 2601 (अ), तारीख 7 अक्टूबर, 2014;
16. का. आ. 2600 (अ), तारीख 9 अक्टूबर, 2014;
17. का. आ. 3252 (अ), तारीख 22 दिसंबर, 2014;
18. का. आ. 382 (अ), तारीख 3 फरवरी, 2015;
19. का. आ. 811 (अ), तारीख 23 मार्च, 2015;
20. का. आ. 996 (अ), तारीख 10 अप्रैल, 2015;
21. का. आ. 1142 (अ), तारीख 17 अप्रैल, 2015;
22. का. आ. 1141 (अ), तारीख 29 अप्रैल, 2015;
23. का. आ. 1834 (अ), तारीख 6 जुलाई, 2015;
24. का. आ. 2571 (अ), तारीख 31 अगस्त, 2015;
25. का. आ. 2572 (अ), तारीख 14 सितंबर, 2015;
26. का. आ. 141 (अ), तारीख 15 जनवरी, 2016;
27. का. आ. 648 (अ), तारीख 3 मार्च, 2016;
28. का. आ. 2269 (अ) तारीख 1 जुलाई, 2016;
29. का. आ. 2944 (अ), तारीख 14 सितंबर, 2016;
30. का. आ. 3518 (अ) तारीख 23 नवंबर 2016;
31. का. आ. 3999 दिसंबर (अ) तारीख 9 दिसंबर, 2016; और
32. का. आ. 4241 (अ) तारीख 30 दिसंबर, 2016

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 25th July, 2018

S.O. 3611(E).—Whereas by notification of the Government of India in the erstwhile Ministry of Environment and Forest issued *vide* number S.O. 1533(E), dated the 14th September, 2006 published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) (hereinafter referred to as the said notification) directions have been given regarding the prior environmental clearance;

And whereas, the Ministry of Environment, Forest and Climate Change has amended the said Notification *vide* S.O. 141 (E) dated 15th January, 2016 wherein the procedure for preparation of District Survey Report for minor mineral has been prescribed;

And whereas, the Hon'ble High Court of Jharkhand at Ranchi in its orders dated the 11th April, 2018 and 19th June, 2018 in W.P. (PIL) No. 1806 of 2015, in the matter of Court on its Own Motion Versus the State of Jharkhand & Others with W.P. (PIL) No. 290 of 2013, in the matter of Hemant Kumar Shilkarwar Versus the State of Jharkhand & Others, has *inter-alia* directed the preparation of District Survey Report for minor minerals other than Sand and Bajri or delegation of the powers for preparation of format of District Survey Report of minor minerals other than sand and bajri to the State Government and/or District Environment Impact Assessment Authority and District Expert Appraisal Committee;

And whereas, the Central Government hereby in the public interest dispense with the requirement of notice under clause (a) of sub-rule (3) of rule 5 of the Environment Protection Rules, 1986,

Now, therefore in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with sub-rule (4) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following further amendments to the notification of the Government of India, in the erstwhile Ministry of Environment and Forests *vide* number S.O. 1533(E), dated the 14th September, 2006, namely: -

In the said notification, for Appendix X, the following shall be substituted, namely: -

“APPENDIX - X

[See paragraph 7 (iii) (a)]

I. PROCEDURE FOR PREPARATION OF DISTRICT SURVEY REPORT FOR SAND MINING OR RIVER BED MINING

The main objective of the preparation of District Survey Report (as per the Sustainable Sand Mining Guideline) is to ensure the following: -

Identification of areas of aggradations or deposition where mining can be allowed; and identification of areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited and calculation of annual rate of replenishment and allowing time for replenishment after mining in that area.

The report shall have the following structure:

- (1) Introduction;
- (2) overview of Mining Activity in the District;
- (3) the List of Mining Leases in the District with location, area and period of validity;
- (4) details of Royalty or Revenue received in last three years;
- (5) detail of Production of Sand or Bajri or minor mineral in last three years;
- (6) process of Deposition of Sediments in the rivers of the District;
- (7) general Profile of the District;
- (8) land Utilization Pattern in the district: Forest, Agriculture, Horticulture, Mining etc.;
- (9) physiography of the District;

(10) rainfall: month-wise;

(11) geology and Mineral Wealth.

In addition to the above, the report shall contain the following:

- (a) District wise detail of river or stream and other sand source;
- (b) District wise availability of sand or gravel or aggregate resources;
- (c) District wise detail of existing mining leases of sand and aggregates.

A survey shall be carried out by the District Environment Impact Assessment Authority with the assistance of Geology Department or Irrigation Department or Forest Department or Public Works Department or Ground Water Boards or Remote Sensing Department or Mining Department etc. in the district.

Drainage system with description of main rivers

S. No.	Name of the River	Area drained (Sq. Km)	% Area drained in the District
(1)			
(2)			

Salient Features of Important Rivers and Streams:

S. No.	Name of the River or Stream	Total Length in the District (in Km)	Place of origin	Altitude at Origin
(1)				
(2)				

Portion of the River or Stream Recommended for Mineral Concession	Length of area recommended for mineral concession (in kilometer)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable mineral potential (in metric tonne) (60% of total mineral potential)

Mineral Potential

Boulder (MT)	Bajari (MT)	Sand (MT)	Total Mineable Mineral Potential (MT)

Annual Deposition

S. No.	River or Stream	Portion of the river or stream recommended for mineral concession	Length of area recommended for mineral concession (in kilometer)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable mineral potential (in metric tonne) (60% of total mineral potential)
(1)						
(2)						
Total for the District						

A Sub-Divisional Committee comprising of (i) Sub-Divisional Magistrate, (ii) Officers from (a) Irrigation department, (b) State Pollution Control Board or Committee, (c) Forest department, (d) Geology or mining officer shall visit each site for which environmental clearance has been applied for and make recommendation on suitability of site for mining or prohibition thereof.

Methodology adopted for calculation of Mineral Potential:

The mineral potential is calculated based on field investigation and geology of the catchment area of the river or streams. As per the site conditions and location, depth of minable mineral is defined. The area for removal of the mineral in a river or stream can be decided depending on geo-morphology and other factors, it can be 50 % to 60 % of the area of a particular river or stream. For Example, in some hill States mineral constituents like boulders, river born Bajri, sand up to a depth of one meter are considered as resource mineral. Other constituents like clay and silt are excluded as waste while calculating the mineral potential of particular river or stream.

The District Survey Report shall be prepared in the district and its draft shall be placed in the public domain by keeping its copy in Collectorate and posting it on the district's website for twenty-one days. The comments received shall be considered and if found correct, shall be incorporated in the final Report to be finalised within six months by the District Environment Impact Assessment Authority.

The District Survey Report shall form the basis for application for environmental clearance, preparation of reports and appraisal of projects. The Report shall be updated once every five years.

II. PROCEDURE FOR PREPARATION OF DISTRICT SURVEY REPORT OF MINOR MINERALS OTHER THAN SAND MINING OR RIVER BED MINING

The District Survey Report shall be prepared for each minor mineral in the district separately and its draft shall be placed in the public domain by keeping its copy in Collectorate and posting it on district's website for twenty-one days. The comments received shall be considered and if found fit, shall be incorporated in the final Report to be finalised within six months by the DEIAA.

The District Survey Report for minor minerals other than sand mining or River bed mining shall be as per structure mentioned below: -

FORMAT FOR PREPARATION OF DISTRICT SURVEY REPORT FOR MINOR MINERALS OTHER THAN SAND MINING OR RIVER BED MINING

- (1) Introduction;
- (2) overview of Mining Activity in the District;
- (3) general Profile of the District;
- (4) geology of the District;
- (5) drainage of Irrigation pattern;
- (6) land Utilisation Pattern in the District: Forest, Agricultural, Horticultural, Mining etc.;
- (7) surface Water and Ground Water scenario of the district;

(8) rainfall of the district and climatic condition;

(9) details of the mining leases in the District as per the following format: -

Sl. No.	Name of the Mineral	Name of the Lessee	Address & Contact No. of Lessee	Mining lease Grant Order No. & date	Area of Mining lease (ha)	Period of Mining lease (Initial)		Period of Mining lease (1 st /2 nd ...renewal)	
						From	To	Form	To
1	2	3	4	5	6	7	8	9	10

Date of commencement of Mining Operation	Status (Working/Non-Working/Temp. Working for dispatch etc.)	Captive/ Non-Captive	Obtained Environmental Clearance (Yes/No), If Yes Letter No with date of grant of EC.	Location of the Mining lease (Latitude & Longitude)	Method of Mining (Opencast/Underground)
11	12	13	14	15	16

(10) details of Royalty or Revenue received in last three years;

(11) details of Production of Minor Mineral in last three years;

(12) mineral Map of the District;

(13) list of Letter of Intent (LOI) Holders in the District along with its validity as per the following format :-

(14) total Mineral Reserve available in the District;

Sl. No.	Name of the Mineral	Name of the Lessee	Address & Contact No. of Letter of Intent Holder	Letter of Intent Grant Order No. & date	Area of Mining lease to be allotted	Validity of Lol	Use (Captive/ Non-Captive)	Location of the Mining lease (Latitude & Longitude)
1	2	3	4	5	6	7	8	9

(15) quality /Grade of Mineral available in the District;

(16) use of Mineral;

(17) demand and Supply of the Mineral in the last three years;

(18) mining leases marked on the map of the district;

(19) details of the area of where there is a cluster of mining leases viz. number of mining leases, location (latitude and longitude);

(20) details of Eco-Sensitive Area, if any, in the District;

- (21) impact on the Environment (Air, Water, Noise, Soil, Flora & Fauna, land use, agriculture, forest etc.) due to mining activity;
- (22) remedial Measures to mitigate the impact of mining on the Environment;
- (23) reclamation of Mined out area (best practice already implemented in the district, requirement as per rules and regulation, proposed reclamation plan);
- (24) risk Assessment & Disaster Management Plan;
- (25) details of the Occupational Health issues in the District. (Last five-year data of number of patients of Silicosis & Tuberculosis is also needs to be submitted);
- (26) plantation and Green Belt development in respect of leases already granted in the District;
- (27) any other information.

The District Environment Impact Assessment Authority (DEIAA) based on the nature and type of minor mineral in the District may include the additional parameters in the District Survey Report in consultation with the Department of Mines and Geology of the concerned State Government.

The District Survey Report shall form the basis for application for environmental clearance, preparation of reports and appraisal of projects. The Report shall be updated once every five years”;

[F.No. L-11011/26/2018-IA-II (M)]

GYANESH BHARTI, Jt. Secy.

Note : The principal notification was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) *vide* number S.O. 1533 (E), dated the 14th September, 2006 and subsequently amended by :-

1. S.O. 1949 (E), dated the 13th November, 2006;
2. S.O. 1737 (E), dated the 11th October, 2007;
3. S.O. 3067 (E), dated the 1st December, 2009;
4. S.O. 695 (E), dated the 4th April, 2011;
5. S.O. 156 (E), dated the 25th January, 2012;
6. S.O. 2896 (E), dated the 13th December, 2012;
7. S.O. 674 (E), dated the 13th March, 2013;
8. S.O. 2204 (E), dated the 19th July 2013;
9. S.O. 2555 (E), dated the 21st August, 2013;
10. S.O. 2559 (E), dated the 22nd August, 2013;
11. S.O. 2731 (E), dated the 9th September, 2013;
12. S.O. 562 (E), dated the 26th February, 2014;
13. S.O. 637 (E), dated the 28th February, 2014;
14. S.O. 1599 (E), dated the 25th June, 2014;
15. S.O. 2601 (E), dated the 7th October, 2014;
16. S.O. 2600 (E), dated the 9th October, 2014;
17. S.O. 3252 (E), dated the 22nd December, 2014;
18. S.O. 382 (E), dated the 3rd February, 2015;
19. S.O. 811 (E), dated the 23rd March, 2015;
20. S.O. 996 (E), dated the 10th April, 2015;

21. S.O. 1142 (E), dated the 17th April, 2015;
22. S.O. 1141 (E), dated the 29th April, 2015;
23. S.O. 1834 (E), dated the 6th July, 2015;
24. S.O. 2571 (E), dated the 31st August, 2015;
25. S.O. 2572 (E), dated the 14th September, 2015;
26. S.O. 141 (E), dated the 15th January, 2016;
27. S.O. 648 (E), dated the 3rd March, 2016;
28. S.O. 2269 (E) dated the 1st July, 2016;
29. S.O. 2944 (E) dated the 14th September, 2016;
30. S.O. 3518 (E) dated the 23rd November 2016;
31. S.O. 3999 (E) dated the 9th December, 2016; and
32. S.O. 4241 (E) dated the 30th December, 2016.

RAKESH
SUKUL

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and Published by the Controller of Publications, Delhi-110054.

ANNEXURE-7

Assam Minor Mineral Concession Rules 2013



অসম ৰাজপত্ৰ

সত্যমেব জয়তে

THE ASSAM GAZETTE

অসাধাৰণ

EXTRAORDINARY

প্ৰাপ্ত কৰ্তৃত্ব দ্বাৰা প্ৰকাশিত

PUBLISHED BY THE AUTHORITY

নং 100 দিশপুৰ, শনিবাৰ, 16 মাৰ্চ, 2013, 25 ফাল্গুন, 1934 (শক)

No.100 Dispur, Saturday, 16th March, 2013, 25th Phalguna, 1934 (S.E.)

GOVERNMENT OF ASSAM

ORDERS BY THE GOVERNOR

POWER (E), MINES AND MINERALS DEPARTMENT

NOTIFICATION

The 16th March, 2013

No. PEM 83/2009/pt -1/627.— In exercise of the powers conferred by sub-section (1) of section 15 and section 23C of the Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957), the Governor of Assam hereby makes the following rules for regulating the grant of various forms of mineral concessions and for prevention of illegal mining, namely:-

Part – I (General)

Chapter – 1

Preliminary

Short title and
commencement

1. (1) These rules may be called the Assam Minor Mineral Concession Rules, 2013.

(2) They shall come into force on the date of their publication in the Official Gazette

Definitions

2. (1) In these rules, unless the context otherwise requires –

- (a) “Act” means the Mines and Minerals (Development and Regulation) Act, 1957 (Central Act 67 of 1957);
- (b) “boundary pillar” means cemented pillar of size sixty centimetre x sixty centimetre with one metre height and fifty centimeter foundation with the yellow paint and marked lease/ contract number and pillar number along with Global Positioning System (in short GPS) readings in black paint;
- (c) “carrier” means any mode of transport or facility by which mineral or its products are transported either in raw or processed form from the place of raising or from one place to another and includes any mechanized device, person, animal or cart;
- (d) “competitive bid” means an amount offered by the participant in the open auction or tender process under these rules.

- (e) **"competent authority"** means the Director of Geology and Mining, Assam in respect of minor minerals as listed in Schedule 'X' or the Principal Chief Conservator of Forests and Head of Forest Force, Assam in respect of minor minerals as listed in Schedule 'Y' or any other authority specified by any Government Notification for exercise of such powers and carrying out of such functions as specified in these rules;
- (f) **"contractor"** means a person holding a mining contract under these rules;
- (g) **"contract money"** means the amount to be paid by the contractor(s) of minor minerals for raising the mineral(s) from the area granted on contract;
- (h) **"dead rent"** means the minimum amount payable in a year by the person granted a mining lease under these rules irrespective of the fact as to whether or not he operates/ could operate the area fully or partly;
- (i) **"Department"** means the Department of Mines and Minerals, Assam in respect of minerals under Schedule - 'X' and the Department of Environment and Forest in respect of minerals under Schedule - 'Y';
- (j) **"Director"** means the Director of Geology and Mining, Assam;
- (k) **"form"** means a form appended to these rules;
- (l) **"fund"** means the Mines and Mineral Development, Restoration and Rehabilitation Fund created and established under these rules;
- (m) **"Government"** means the Government of Assam;
- (n) **"lessee"** means a person holding a valid grant of lease for mining the minerals from the area granted on lease and would include the plural thereof;
- (o) **"letter of intent" (LoI)** means a 'Letter of Intent' issued to the successful bidder on acceptance of the bid for grant of a mining lease or contract or permit or a mineral concession under these rules;
- (p) **"licensee"** means holder of a prospecting license granted under these rules wherein a licensee is required to pay fixed annual license fee exclusive of royalty;
- (q) **"mineral concession"** means a mining lease or a mining contract or permit in respect of minor mineral and includes quarrying permits and any other mineral concession, permitting the mining of minor mineral in accordance with the provisions of these rules;
- (r) **"mining contract"** means a mining contract given on behalf of the Government to carry, win, work and carry away any minor mineral(s) specified therein through a competitive bidding process;
- (s) **"mining dues"** means and includes any of the dues on account of royalty, dead rent, contract money, amount payable towards the Mines and Mineral Development, Restoration and Rehabilitation Fund, interest on delayed payments or any fee or any other sum in respect of a mineral concession granted under these rules;

- (t) **"mining lease"** means a lease granted under these rules to mine, search, undertake excavation for winning of mineral and to carry away any minor mineral(s) specified therein;
- (u) **"mining operations"** means any operation carried out for the purpose of winning any mineral except mineral oils;
- (v) **"mining plan"** means a plan prepared by a recognized qualified person (RQP) on behalf of mineral concession holder of minor mineral and includes progressive and final mine closure plans;
- (w) **"mineral product"** means minerals in any processed form, bricks, dressed stone, rock aggregates, chips, ballast, stone dust, and/ or any product to be prepared from minerals without involving any chemical changes;
- (x) **"mineral transit pass"** means a document issued by the competent authority to the lessee/ contractor/ permit holder for lawful dispatch and transportation of any mineral(s) raised;
- (y) **"mining permit"** means a mineral concession, other than a lease granted for a specified quantity of minor minerals to be extracted/ collected within a specified period not exceeding two years in specified cases on payment of advance royalty;
- (z) **"processing"** means all physical processes such as pulverizing and/ or grinding and/ or powdering or washing of minerals in such a way that no chemical change takes place by that process and includes cutting and polishing process of slate, granite blocks or marble blocks or blocks of any other types of rocks;
- (aa) **"producer"** means any person carrying on the business of extracting/ producing/ collecting minerals or mineral aggregates in raw or processed form including the licensee of a registered metal mineral unit, as the case may be, in accordance with the provisions of the Act or rules made there under;
- (bb) **"rules"** means the rules made under the Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957);
- (cc) **"Schedule"** means a Schedule appended to these rules;
- (dd) **"scheme of mining"** means a scheme prepared by a recognized qualified person (RQP) on behalf of mineral concession holder for systematic and scientific mining of minor mineral;
- (ee) **"scientific mining"** means and refers to mining operations consistent with the approved mining plan/ scheme of mining, clearances/ permissions granted by the authority;

- (ff) "un-authorized mining" means any mining operation undertaken without any valid mineral concession granted under these rules;
- (gg) "unscientific mining" means and refers to the manner of undertaking mining operations not consistent with the mining plan/scheme of mining approved, clearances/permissions granted by the authority.

(2) All other words and expressions used in these rules, and not defined herein but defined in the Act, shall have the same meanings respectively assigned to them in the Act.

Power to grant mining lease or mining contract or any other concession or license or transit pass or permit etc.

3. A mining lease or a mining contract or permit or any other concession or license or transit pass or permit or license or control or regulation of mining or other actions under these rules, etc. shall be granted/ taken by:-

(a) The Director in respect of minor minerals for industrial and specific uses as specified in Schedule 'X';

(b) The Principal Chief Conservator of Forests and Head of Forest Force, Assam or any officer authorized by the Government by notification in this behalf in respect of minor minerals for uses other than in industry as specified in Schedule 'Y';

Relaxations in certain cases

4. (1) No royalty or permit fee shall be charged or transit permit required for, -
- (i) extraction of ordinary clay or ordinary sand by hereditary artisans for use in manufacturing of earthen pots/ artifacts on a cottage industry basis;
 - (ii) mining, transportation or storage of clay or sand by hereditary artisans or a co-operative society of artisans for making pots or earthen images, etc. by traditional means but not by the process of manufacture in kilns or by way of any mechanical device;
 - (iii) levelling of any agricultural fields by a landowner within his own land.

- (2) No royalty shall be charged for removal of any ordinary earth by a person from his own land for meeting personal land-fill requirements either in another agricultural field or for meeting his personal bonafide requirements.
- (3) The relaxations granted under this rule shall not be available for excavation of mineral in any area where use of explosive is inevitable, whether being mined by a concession holder or not.

Provided that the aforesaid relaxation do not afford immunity from any action which might be taken under the provisions of any existing rules or Acts of the State or the Central Government for unauthorized removal of minor mineral from any Government land by private persons, without the permission of the competent authority or the State Government or any officer authorized by it in this behalf.

Quarrying of minor
minerals by
Government
Departments/
Agencies/
Contractors
engaged by
Government
Departments or
Agencies

5. (1) An application for the grant of mining permit for quarrying of any minor mineral by the notified Departments of State or Central Government or any of their agencies for any work/project, shall be made by an officer authorised by the concerned Department to the competent authority.

(2) The contractors engaged for the works/projects of the Government Departments/Agencies shall be granted mining permit for the required quantity as specified in the detailed project report for execution of the works/projects on making an application under sub-rule (1) above.

(3) The Department or the agency or the contractor granted a permit under sub-rule (1) above, shall be liable to pay royalty/ dead rent/ fee etc. in advance as notified by the Government and shall abide by the terms and conditions of such grant and other laws as applicable to the lessee or any other concession holder(s) unless specifically relaxed.

Chapter – 2

General Restrictions

Mining
operations
under a
mineral
concession.

6. No person shall undertake any prospecting or mining operation activity in respect of any mineral(s) in any part of the State, except under and in accordance with the terms and conditions of a permit or a prospecting licence or a mining lease or a mining contract or a permit, or a concession in any other form, as the case may be, granted:

Provided that nothing in this sub-rule shall apply to any prospecting operations undertaken by the Geological Survey of India, the Indian Bureau of Mines, the Atomic Minerals Directorate for Exploration and Research of the Central Government, the Directorate of Geology and Mining, Assam or the Mineral Exploration Corporation Limited.

Restrictions
on grant of
mining lease/
contract/
permit.

7. (1) No mining lease/ contract/ permit shall be granted in respect of any land within a distance of:-

- (i) fifty metres from the outer periphery of the defined limits of any village habitation, National Highway, State Highway and other roads where such excavation does not require use of explosives;
- (ii) two hundred fifty metres from the outer periphery of the defined limits of any village habitation, National Highway, State Highway and other roads where use of explosives is required;
- (iii) five hundred metres from major structures like R.C.C Bridges, Guide bund etc.:

Provided that the Government may relax the above distance parameters, wherever required in the interest of workings, mineral conservation or for any unforeseen reasons subject to such conditions as may be imposed under the said relaxation.

(2) No mining lease/ contract/ permit or other mineral concession shall be granted in respect of any such minor mineral or in respect of any specific or general area which the government may notify.

Part - II

Grant of Mineral Concessions

Chapter - 3

Grant of a Mining Lease

Grant of a
Mining
Lease
through
competitive
bidding.

8. (1) No mining lease shall be granted by the competent authority unless it is satisfied that there is evidence to show that the area for which grant of mining lease is considered has been prospected earlier for minor minerals or the existence of minor minerals therein has been established otherwise.

(2) Any minor mineral deposits, where the competent authority decides such areas to be operated under a lease, may be granted on mining lease; subject to rule 5, for a period ordinarily not less than 10 years but not exceeding 20 years following a competitive bid process as provided under Chapter 6 of these rules:

Provided that the competent authority may, wherever it deems necessary, pre-qualify the bidders, with the pre-qualification criteria determined upfront, by inviting expressions of interest through a public notice, and limit the bidding process among such pre-qualified bidders.

(3) In case the competent authority accepts the bid, the payment of earnest money, initial bid security, security and advance instalment shall be made in accordance with the provisions contained in Chapter 6 of these rules.

(4) The highest bid received shall become the 'annual dead rent' amount payable by the lessee. The rate of annual dead rent initially determined on the basis of competitive bids/ auctions shall be increased @ 25% on completion of each block of three years.

Explanation: If the initially determined amount of annual dead rent is Rs.100/-, it shall be increased to Rs.125/- with the commencement of the fourth year and to Rs.156.25 with the commencement of the 7th year and so on and so forth for the next each block of three years.

(5) A lease deed shall be executed by the successful bidder with the competent authority in the prescribed Form ML-1, appended hereto, within the period as prescribed under rule 17 of these rules.

(6) The lessee shall pay royalty in advance in respect of each of the minor minerals extracted or removed or consumed by him or by his agent, manager, employee etc. The royalty shall be payable at the rates prescribed in the First Schedule appended to these rules.

Register of applications and Mining Lease.

9. (1) A register of applications for grant or renewal of mining leases shall be maintained in Form ML-2.

(2) A register of mining leases granted under these rules shall be maintained in Form 'ML-3'.

Inspection of Register

10. The register of applications for grant of mining leases and the register of grant of mining leases shall be open to inspection by any person on payment of a fee of Rs.100/- on any working day.

Compact area and minimum area of lease in case of isolated deposits.

11. The area for any mining lease should be compact and contiguous as far as possible. However, no mining lease shall be granted for an area of less than one hectare in case of isolated and small deposits.

Transfer of a mining lease or contract.

12. (1) The lessee or contractor shall not assign, sublet, mortgage, or in any other manner transfer the lease or contract or any right, title or interest therein, to any person without prior approval of the competent authority.

(2) When a lease is granted following the system of pre-qualification of lessees, the competent authority may specify a lock-in period within which no transfer of such lease shall be permissible. A lessee may, however, in such cases be permitted to induct other partners/ share holders to the extent of forty nine percent of the total shareholding of the original grantee.

(3) Any application for transfer of a mining lease or contract shall be accompanied with a non-refundable fee of Rs.10,000/- per hectare, subject to a minimum of Rs.2,00,000/-. The said application shall be signed by the lessee himself in the case of an individual, each of the partners in case of a partnership firm and by the person authorised by a special resolution of the Board of Directors, in the case of a company.

(4) No consent to the transfer of mining lease or contract shall be accorded unless the applicant has paid all the outstanding mining dues in respect of the lease or contract and the transferee has accepted all the terms and conditions and the liabilities enjoined upon the transferor in respect of such mining lease or contract.

(5) The transferor shall make the original or certified copies of all plans of abandoned workings in the area available to the transferee.

(6) The transferor-lessee or contractor shall not charge or accept from the transferee any premium in addition to the sum spent by him in obtaining the lease or contract and for conducting all or any of the operations in or over the lease granted to him.

(7) The transferee shall be required to furnish an undertaking that he has filed up-to-date income tax returns, paid income tax assessed on him or on the basis of self-assessment as provided in the Income Tax Act, 1961.

(8) Subject to submission of the transfer application, complete in all respects, the competent authority may allow the transfer of such lease or contract and prescribe such additional conditions, as it may deem appropriate.

(9) The competent authority may refuse to allow such transfer, wherever deemed appropriate, for reasons to be recorded in writing, after giving an opportunity of representation to the applicant.

(10) Where the competent authority gives its consent for transfer of such lease or contract on an application for transfer of mining lease under sub-rule (2), a transfer lease deed shall be executed within ninety days of the date of the consent in Form ML-4 failing which, the consent shall be deemed to have lapsed, unless the period is extended on the request of the lessee made prior to the expiry of such period of ninety days.

(11) Where it comes to the notice of the competent authority that any lessee or contractor has violated the conditions prescribed in sub-rule (1) above, it may terminate such lease by an order in writing at any time. However, no such order shall be passed without giving a reasonable opportunity of show cause to the lessee or the contractor for stating his case.

Renewal
of lease

13. (1) A mining lease, originally granted under rule 9, may be renewed only once over and above the original lease period, for such period as considered appropriate but not exceeding ten years on expiry of the original lease period, subject to strict compliance of the terms and conditions of the grant, lease agreement and other approvals or permission for mining granted by Central or State agencies.

(2) The lessee shall submit application for renewal of mining lease twenty four months before the date of expiry of lease period in the prescribed Form ML-5 to the competent authority giving complete details of the mineral excavated, royalty paid, mineral reserves available, details of explorations undertaken, if any, along with the details of the areas reclaimed or restored, the sites of overburden, restoration works undertaken etc. The details regarding compliance of other statutory requirements such as environmental clearance, safety provisions as per Mines Act, 1952 and the rules and regulations framed thereunder etc. shall also be provided.

(3) No application for renewal of a mining lease shall be considered in a case where the lessee has been found to be indulging in any violation of the conditions of original lease grant or has been penalised or held accountable for such violations.

(4) Every application for renewal of a mining lease shall be accompanied with a non-refundable fee of Rs.1,000/- per hectare or part thereof, subject to a minimum of Rs.1,00,000/-. Besides, the application shall be accompanied with the following supporting documents:-

- (i) a valid clearance certificate for payment of mining dues on all accounts, such as royalty or dead rent or contract money or the Fund, and the surface rent payable to the landowners under the Act or the rules made thereunder, in respect of the original mining lease or any other mineral concession held by him in the State from the competent authority;
- (ii) in case of a firm or a company or association of persons, a valid clearance certificate shall be submitted in respect of the firm, company or association of persons as well as the other firms in which partners in the applicant firm are partners or directors:

Provided that the grant of a clearance certificate shall not discharge the holder(s) of such certificate from the liability to pay the mining dues which may subsequently be found to be payable by such applicant under the Act or rules made thereunder.

- (iii) where any injunction has been granted by a court of law or any other authority, staying the recovery of any such outstanding mining dues or income tax, non-payment thereof shall not be treated as a disqualification for the purpose of renewing the said mining lease;
- (iv) a declaration stating that the applicant has filed up-to-date income-tax returns, paid the income-tax assessed on him, or on the basis of self-assessment, as provided in the Income Tax Act, 1961 on the project.

(5) The competent authority shall issue notice within thirty days from the date of receipt of application to make up the deficiencies in the application, if any, or for furnishing any additional information as may be required by the competent authority, requiring the applicant(s) to supply the requisite information within a period of thirty days from the date of issue of such notice. In case the said information is not furnished within such specified period, the application shall be decided on the basis of information already submitted along with application.

(6) The renewal of a lease shall be considered only in cases where the lease has been granted after the commencement of these rules.

Acknowledgement of application.

14. The receipt of an application of renewal of a mining lease under rule 14, if delivered personally, shall be acknowledged forthwith in Form ML-6 and if the application is received by post, the same shall be acknowledged within seven days of the receipt thereof.

15. (1) An application for renewal of a mining lease shall be decided by the competent authority within a period of six months of the receipt of complete application in all respects keeping in view the following parameters:-

- (i) the lessee has complied with all the terms and conditions of the original lease grant and other permissions for undertaking mining operations;
- (ii) the mining operations under the original lease grant have been carried out in a scientific manner;
- (iii) The mined out area has been restored/ reclaimed/ rehabilitated as per the progressive mine closure plan;
- (iv) the lessee has not defaulted in submission of all details with regard to the production, payment of mining dues in time and has not been found wanting in taking adequate measures for the labour safety;
- (v) the lessee has not been penalised for non-compliance of the environmental safeguards, or for any other reason, including suspension of the mining operations, for whatsoever reasons, during the original lease period;
- (vi) substantial investment has been made by the lessee in the development of mine, plant and machinery with a long term perspective and optimal benefit of the same could not have been derived during the original lease period; and
- (vii) such other matters as may be considered necessary.

(2) The competent authority may reduce the area of mining lease at the time of renewal for reasons to be recorded in writing:

Provided that the reduction in the area of the mining lease shall not result in any prorated reduction in the dead rent.

(3) Where the competent authority accords its approval to the renewal of a mining lease, the annual dead rent shall be increased by an amount of twenty five percent over the amount of dead rent payable in the last year of the original lease grant. Further, future increase in such dead rent, on the expiry of each block of three years, shall be regulated on the same terms and conditions as applicable in the case of any mining lease granted on the first occasion;

Provided that in case the lessee makes an application for surrender of part area of the lease, it shall not result in any prorated reduction of the dead rent and the rate of dead rent payable and applicable for the entire area at the time of such application shall remain intact.

Surrender of a
mining lease

16. (1) The Government may accept the request of a lease holder for surrender of a lease or part thereof in cases where it is established that it has not been found feasible to operate the mining lease grant, for whatsoever reasons, subject to the condition that the lessee,-

- (i) has been regular in furnishing the production returns as required in terms of the lease agreement;
- (ii) has been taking the requisite steps for the progressive mine closure plan as per the conditions of the lease grant;
- (iii) is not in default of payment of any mining dues on account of any mineral concession as on the date of making such application and undertakes to pay all such dues till the date of expiry of the notice period either in advance or by way of adjustment of the security or both.

(2) In case the lessee makes an application for surrender of part area of the lease, it shall not result in any prorated reduction of the dead rent and the rate of dead rent payable and applicable for the entire area at the time of such application shall remain intact.

Execution of
mining lease
Agreement.

17. (1) Where a mining lease is granted or renewed, the lease deed shall be executed in Form ML-1 within a period of ninety days of the date of order of grant or renewal of the mining lease and duly registered.

(2) If the lease deed is not executed within the aforesaid period, the order sanctioning the mining lease shall be deemed to have been revoked and the 'advance dead rent' and 'security amount' deposited at the time of auction shall stand forfeited.

Provided that where the competent authority is satisfied that the Lol holder/ lessee is not responsible for the delay in the execution of the lease deed, the competent authority may, for reasons to be recorded in writing, permit the execution of the lease deed beyond a period of ninety days but not exceeding one hundred twenty days of the expiry of the aforesaid period.

(3) The Lol holder/ lessee shall also furnish a solvent surety for a sum equal to the annual bid amount for execution of the agreement. In case the surety offered by the lessee during the subsistence of the mining lease is not found solvent, the lessee shall offer another solvent surety and a supplementary deed to this effect shall be executed.

Chapter – 4**Grant of Mining Contracts**

Grant of
mining
contracts by
competitive
bidding.

18. (1) The minor mineral deposits, where the competent authority decides to grant the mineral concession in respect of such area in the form of a contract, may be granted on mining contract, subject to rule 5, for a specified annual quantity (or part(s) thereof) of minor mineral for period ordinarily not less than seven years but not exceeding ten years following a competitive bidding process as prescribed under chapter 6 of these rules.

(2) No bid shall be regarded as successful unless accepted by the competent authority. The amount of the successful bid shall become the annual contract money payable by the contractor. The annual contract money determined at the time of initial grant shall be increased at the rate of twenty five percent on completion of each block of three years.

(3) The mining contract deed shall be executed by the successful bidder with the competent authority in the prescribed Form MC-1.

(4) Other terms and conditions of the contract shall be in accordance with provisions as contained in chapter 7.

Renewal of
mining
contract.

19. (1) The contractor shall submit an application to the competent authority for renewal of the mining contract eighteen months prior to the date of expiry of contract period in the prescribed Form MC-2, containing complete details of the mineral excavated, royalty paid, mineral reserves available, details of explorations undertaken, if any, along with the details of the areas reclaimed/ restored, the sites of overburden, restoration works undertaken etc. The details regarding compliance of other statutory requirements such as environmental clearance, safety provisions as per Mines Act, 1952 and the rules and regulations framed thereunder etc. shall also be provided.

(2) No application for renewal of a mining contract shall be considered in a case where the contractor has been found to be indulging in any violation of the conditions of original contract grant or the conditions accompanying the environmental clearances, and penalised or held accountable for any such violations.

(3) Every application for renewal of a mining contract shall be accompanied with a non-refundable fee of Rs.1,000/- per hectare or part thereof, subject to a minimum of Rs.1,00,000/- along with the following supporting documents:-

- (i) a valid clearance certificate regarding payment of mining dues on all accounts (such as royalty or dead rent or contract money or Fund and surface rent payable to the landowners under the Act or the rules made thereunder) in

respect of the original contract or any other mineral concession held by him in the State;

- (ii) in case of a firm or a company or association of persons, a valid clearance certificate shall have to be submitted in respect of the firm, company or association of persons as well as the other firm in which the partners in the applicant firm are partners or directors:

Provided that the grant of a clearance certificate shall not discharge the holder(s) of such certificate from the liability to pay the mining dues which may subsequently be found to be payable by such applicant under the Act or rules made thereunder.

- (iii) where any injunction has been granted by a court of law or any other authority, staying the recovery of any such outstanding dues, non-payment thereof shall not be treated as a disqualification for the purpose of renewal of the said mining contract;
- (iv) a self-declaration stating that the applicant has filed up-to-date income-tax returns, paid the income-tax assessed on him or on self-assessment as provided in the Income Tax Act, 1961 on the project.

(4) The competent authority shall communicate the discrepancies in the application, if any, or requirement of any additional information within thirty days from the date of receipt of application, requiring the applicant(s) to make up the deficiencies and/ or provide such additional information within a period of thirty days from the date of issue of such notice. In case the required information is not submitted within such specified period, the application shall be decided on the basis of information already submitted.

(5) No renewal shall be granted for the mining contracts exempted under section 3 of the Mines Act, 1952.

(6) The renewal of a contract shall be considered only in cases where the contract has been granted after the commencement of these rules.

(7) A contract for minor minerals granted under rule 18 may be renewed only once by the competent authority for a period not exceeding five years, after having satisfied itself that the contractor has undertaken mining operations strictly in accordance with the terms and conditions of grant, contract agreement and other approvals/ permissions for mining granted by Central/ State agencies.

Decision on
the application
for renewal of
Mining
Contract.

20. (1) The application for renewal of a mining contract shall be decided on satisfaction of the competent authority with regard to the following:-

- (i) The contractor has complied with all the terms and conditions of the contract agreement and other permissions for undertaking mining operations;
- (ii) The mining operations under the original contract grant have been carried out in a scientific manner;
- (iii) The mined out area has been restored/ reclaimed/ rehabilitated as per the progressive mine closure plan;
- (iv) The contractor has not been in default of submission of any returns with regard to the production, payment of contract money in time and has not been found wanting in taking adequate measures for the labour safety;
- (v) The contractor has not been penalised in any manner, including suspension of the mining contract, for whatsoever reasons, during the original contract period;
- (vi) Substantial investment has been made by the contractor in the development of mine and plant and machinery with a long term perspective and optimal benefit of the same could not have been derived during the original contract period; and
- (vii) Such other matters as may be considered.

(2) The competent authority may reduce the area of contract at the time of renewal for reasons to be recorded in writing.

(3) Where the competent authority accords its approval to the renewal of a contract, the annual contract amount shall be increased by an amount of 25% over the amount of contract money payable in the last year of the original contract grant. Further, future increase in such contract amount, on the expiry of each block of three years, shall be regulated on the same terms and conditions as applicable in the case of any contract granted on the first occasion.

Surrender of a
mining
contract.

21. The Government may accept the contractor's request for surrender of a contract or part thereof in cases where it is established that it has not been found feasible to operate the contract grant for whatsoever reasons subject to the condition that the contractor, -

- (i) has been regular in furnishing the production returns as required in terms of the contract agreement;

- (ii) has been taking the requisite steps for the progressive mine closure plan as per the conditions of the contract grant;
- (iii) is not in default of payment of any dues of the Government as on the date of making such application and undertakes to pay all such dues till the date of expiry of the notice period either in cash in advance or by way of adjustment of the security or both.

Provided that in case the contractor makes an application for surrender of part of the contract area, it shall not result in any prorated reduction of the contract money and the rate of contract amount payable and applicable for the entire area at the time of making such application shall remain intact.

Execution of
Contract
Agreement
within ninety
days.

22. (1) Where a mining contract is granted or renewed, the agreement deed shall be executed in Form 'MC-1' within a period of 90 days of the date of order of grant/ renewal of the contract and shall be duly registered;

(2) If the contract agreement is not executed within the aforesaid period, the order sanctioning the contract shall be deemed to have been revoked and the 'advance contract money' and the 'security amount' deposited at the time of auction shall be forfeited to the Government:

Provided that where the competent authority is satisfied that the LoI holder/ contractor is not responsible for the delay in the execution of the contract agreement, the competent authority may, for the reasons to be recorded in writing, permit the execution of the contract agreement deed beyond a period of 90 days but not exceeding 120 days of the expiry of the aforesaid period.

(3) The LoI holder/contractor shall also furnish a solvent surety for a sum equal to the amount of the annual bid for execution of the agreement. In case the surety offered by the contractor(s) during the subsistence of the contract is not found solvent, the contractor(s) shall offer another solvent surety and a supplementary deed to this effect shall be executed.

(4) In case the contractor is not able to remove the whole or any part of the mineral for which he obtained the contract within the permissible time for any reasons, whatsoever, within the validity of the contract he shall not be entitled to claim the refund of contract amount or any part thereof.

Chapter – 5**Grant of Mining or Quarrying Permits**

Grant of
Mining/
quarrying
Permits

23. (1) Subject to rule 5, mining or quarrying may be granted by the competent authority in respect of any area not covered under any mineral concession already granted under these rules in the following cases:-

- (i) mining in respect of areas ordinarily less than five hectares for a specified annual quantity [or part(s) thereof] of minor mineral;
- (ii) removal of salt petre;
- (iii) excavation of Brick Earth by the Brick Kiln Owners;
- (iv) extraction of ordinary clay/ earth;
- (v) permits for specific Government works under emergency conditions.

(2) All mining/ quarrying permits in respect of sub clauses (i) and (ii) mentioned under sub-rule (1) shall be granted following a competitive bid process, unless specifically decided otherwise by the Government in any specific case.

(3) The mining/ quarrying permits in respect of (iii) to (v) above shall be granted on the basis of application submitted under rules 26, 27 and 28 respectively.

(4) A mining permit under these rules may be granted for a period as considered appropriate by the competent authority, but not exceeding two years, on such terms and conditions as may be stipulated therein.

(5) The competent authority, may refuse the application to grant permits in respect of sub-clauses (ii) and (iv) mentioned under sub-rule (1) of this rule for reasons to be recorded in writing.

Grant of
permits for
mining over
area less than
five hectares.

24. (1) Subject to sub-rule (2) of rule 23, permits for mining of minor minerals may be granted by the competent authority for extraction of minor minerals in respect of area ordinarily less than five hectares.

(2) Permits under this rule shall be granted only in cases where the competent authority decides such areas to be operated for short periods under special circumstances and with adequate environmental safeguards, precautions and applicable clearances.

(3) In case more than one individual/ agency shows interest in taking the permit, it shall be granted in favour of the individual/ agency offering the highest bid.

(4) In case of permit granted under this rule, the permit holder shall execute an agreement in Form MPS-1 with the competent authority within a period of ninety days from the date of grant and shall be duly registered.

(5) The permit holder shall submit monthly production returns in Form MMP-1.

Grant of permits for removal of saltpetre.

25. (1) Subject to sub-rule (2) of rule 23, the permit for excavation of saltpetre, a minor mineral, may be granted along with suitable restrictions regarding the depth of excavation which shall generally not exceed 12 inches.

(2) In case more than one individual/agency shows interest in taking the permit it shall be granted in favour of the individual/agency offering the highest bid.

(3) In case of permit granted under this rule, the permit holder shall execute an agreement in Form MPS-2 with the competent authority within a period of ninety days from the date of such grant and shall be duly registered.

(4) The permit holder shall submit monthly production returns in Form MMP-1.

Permits for excavation of Brick Earth by the Brick Kiln Owners.

26. (1) A permit for excavation of brick earth may be granted by the competent authority in favour of the Brick Kiln Owner only for the purposes of manufacturing of bricks.

(2) The initial permit shall be granted for a period that co-terminates with the close of the next financial year so that the further renewal thereof is allowed on bi-annual basis.

(3) The excavation of brick earth under this permit shall not be permissible beyond a depth of nine feet measured from the natural ground level of the area.

(4) The application for lifting of brick earth shall be made to the competent authority in form PIM-1 along with the following supporting documents:-

- (i) The particulars/details of the land from where he proposes to extract/ remove the brick earth;
- (ii) Lay out Plan of the area from where brick earth is to be removed;

- (iii) Written consent of the land owner(s) along with certified copy of the agreement signed between the landowner and the applicant after mutual settlement of compensation between the parties;
- (iv) A copy of the partnership deed or Articles of Memorandum in case the applicant is a partnership firm or a company, as the case may be.

(5) The existing brick kiln owner shall apply ninety days before the expiry of permit already held by him for fresh grant in cases where the extraction of brick earth has reached the maximum permissible level in respect of area of the permit already held;

In case the excavation of the brick earth is to be carried out in the same area earlier held on permit, the brick kiln owner shall apply for renewal of the permit ninety days before the expiry of permit already held.

(6) The royalty on account of excavation of brick earth shall be charged as per rates prescribed in the First Schedule appended to these rules. The payment in these cases shall be made in advance for the complete financial year or part thereof.

(7) An application for renewal of permit/ fresh grant under this rule shall be submitted within the period prescribed above along with the payment towards applicable royalty for the ensuing year and a surety for the remaining period of the permit.

(8) A permit for excavation of brick earth shall be granted in form PIM-2.

Permits for
extraction of
ordinary
clay/ earth.

27. (1) Save in the cases covered under sub-rule (2) of rule 26, the competent authority may grant permit for lifting of ordinary earth from an area not already granted on any mineral concession to the landowner or the person having consent of the landowner on submission of an application.

(2) The permit for extraction of ordinary earth shall be granted only up to a maximum depth of nine feet measured from the natural ground level of said area.

(3) The permit for extraction of ordinary earth/ clay in respect of any land of which the ownership or management vests in a Gram Panchayat shall be granted only if a resolution is passed to that effect by the Gram Panchayat and approval of the concerned Deputy Commissioner is obtained by the applicant or the Gram Panchayat.

(4) The royalty shall be charged on lump-sum basis on the basis of quantity/ volume of the earth for which the permit is applied/ granted as per

rates prescribed in the First Schedule. The payment of royalty in these cases shall be made in advance for the complete financial year or part thereof.

(5) An application for grant of permit shall be submitted in model form PIM-3. The application shall be submitted along with following documents:-

- (i) The particulars/details of the land from where he proposes to extract/ remove the brick earth;
- (ii) Lay out Plan of the area from where earth is to be removed;
- (iii) Written consent of the land owner(s) or a certified copy of the agreement signed between the landowner and the applicant after mutual settlement of compensation between the parties;
- (iv) A copy of the partnership deed or Articles of Memorandum in case the applicant is a partnership firm or a company, as the case may be.

(6) A permit for excavation of ordinary earth shall be granted on model form PIM-4.

Permits for specific emergency situations.

28. The competent authority may, on a requisition from the Deputy Commissioner of the District concerned, grant permit for extraction of minor minerals from any area including the areas where mineral concession have been granted to such Government Department or any other Government Agency requiring mineral for execution of works relating to emergent flood protection works or any other natural calamity or other pressing circumstances for safety of human and cattle life under emergency conditions:

Provided that the Government may decide the terms and conditions of grant of such permits under emergency situations in advance or ex-post-facto.

Application fee for permits

29. The permits, other than those given through competitive bidding process, may be granted on application made to the competent authority on Forms submitted along with non-refundable application fee of Rs.500/-:

Provided that a Government Department/ Agency seeking a permit under Rule - 29 shall be exempted from payment of the application fee.

Conditions on which the Permit for mining/ quarrying shall be granted.

30. (1) Any mining operations in the case of mining of brick earth or ordinary clay or alluvial deposits below a depth of 1.5 meters shall necessarily require formation of benches for safe mining. The benches would be formed in a manner that the width of the bench is not lesser than the height of the bench.

(2) Any quarrying permit granted under these rules shall contain information with regard to the following:—

- (i) manner, mode and place of payment of rent, royalties, permit money, Rehabilitation and Restoration Fund amount and interest on delayed payments or any other dues as admissible under these rules;
- (ii) particulars of the receipt heads of the Government to which the payments are to be credited;
- (iii) rent, compensation of damage to the landowners for the land covered by the permit;
- (iv) felling of trees, pumping of ground water;
- (v) restriction of surface operations in any area prohibited by any authority;
- (vi) entering and working in any forest area;
- (vii) reporting all accidents, use of explosives;
- (viii) indemnity to the Government against claim of third parties;
- (ix) mineral to be stacked, measured and dispatched;
- (x) applicability of the provisions of all other statutes/ rules framed by the Central and State Governments;
- (xi) reclamation or restoration of the mining areas and security thereof;
- (xii) development and conservation of minerals and environment and ecology of the area;
- (xiii) extent of the area or land from where the minor mineral shall be extracted;
- (xiv) period within which the minor mineral shall be extracted and removed and delivery of possession of land on the expiry of such period or on removal of the quantity of the minor mineral for which the permit is valid/ granted;

- (xv) release of security by the authority issuing permit after having satisfied that the permit holder has fulfilled all the conditions of the permit satisfactorily;
- (xvi) any other condition, as may be found expedient by the competent authority to grant the permit, may be imposed in the interest of scientific mining, mineral conservation and mineral development.

(3) In case the permit holder is not able to remove the whole or any part of the mineral for which he obtained the permit within the permissible time for any reasons, whatsoever, he shall not be entitled to claim the refund of permit amount/ royalty/ or any part thereof.

(4) The permit holders for the brick kilns shall furnish a solvent surety within fifteen days of the issue of the permit by submitting an undertaking of such surety that he would be responsible for deposit of all dues in case the permit holder fails to deposit the same.

Forfeiture of
property left
after
cancellation
of the permit.

31. In case of breach of any of the conditions of the grant of permit, the competent authority may cancel the permit by passing orders after giving thirty days notice to the permit holder and for reasons to be recorded in writing. On cancellation of the permit, unless specifically ordered otherwise, the quarried mineral lying on the land from which the same was extracted shall be allowed to be removed by the permit holder within a period of seven days after which any residual mineral will become the absolute property of the Government.

Chapter - 6

Procedure for inviting competitive bids/ auctions and payments

Mode of Grant
of mining lease
or contract or
permit.

32. (1) Save in the cases specifically mentioned under these rules and where such mineral concessions may be granted on application, all mining leases/ contracts/ permits shall be granted through a transparent process of inviting competitive bids/ open auction.

(2) The competent authority may, in the interest of mineral conservation and scientific mining, pre-qualify the potential bidders, based on an objective assessment criteria determined upfront, by inviting Expressions of Interest through general public notice and restrict the bids among the pre-qualified bidders.

Determination
of reserve price
for inviting bids/
auction.

33. (1) The competent authority shall upfront determine the reserve price in each case where the mineral concessions are granted through competitive bidding/ open auction, as the case may be.

(2) State's priorities with regard to the observance of principles of sustainable development, inter-generational equities and conservation of minerals, scientific mining, availability of construction material at economic rates for developmental works and the State Revenues shall remain the over-arching principles in fixing the reserve prices.

(3) The reserve price may be fixed keeping in view the past trends, availability of mineral reserves in the area, the potential, access and proximity to the markets. However, any aberrations in the auctions held earlier and the bids received of exceptionally lower or higher amount, due to whatsoever reasons, may be ignored.

(4) In case of no bid/ offer is received against a reserve price fixed for an area on two successive occasions, the competent authority may revise the reserve price downwards at appropriate level.

Public notice for
inviting
expressions of
interest/ bids/
open auctions.

34. (1) A public notice of 21 days shall be published for inviting bids or conduct of open auctions for the grant of mineral leases/ contracts/ permits, as the case may be.

(2) In addition to the publication of notice in writing, competitive bids/open auction under sub-rule (1) above, the gist of such notice, along with the schedule for inviting bids/holding open auctions, shall also be published in one daily newspaper having good circulation in the area.

(3) A copy each of the said public notice shall also be sent to the Deputy Commissioner and others as decided by the competent authority for giving wide publicity in the area.

Earnest
money

35. (1) The intending bidder shall deposit the earnest money, equal to ten percent of the reserve price and rounded by an amount of Rs.10,000/-, in each case before commencement of open auction or deposited with the bid, as the case may be.

(2) In case of competitive bids invited through sealed tenders, the earnest money shall accompany the bid offers in the form of a Demand Draft drawn in favour of the competent authority.

(3) In the case of open auctions, the earnest money deposited by all bidders, save in the cases where the earnest money has been ordered to be forfeited by the Presiding Officer on grounds of any misconduct during the auction proceedings, shall be refunded immediately upon completion of the auction proceedings.

(4) In case the highest bidder fails to deposit 10% of the annual bid amount towards the 'Initial bid security', his earnest money shall be forfeited and such bidder shall not be eligible to participate in any such auctions/ competitive bids in respect of the same area or any other area in the State for a period of five years.

(5) No person, who is a defaulter of any mining dues in respect of any mineral concession granted in the past or any other current mineral concession shall be eligible to participate in the auction or bid process. In case he is found to be in such arrears at any stage, his bid shall be revoked with forfeiture of the amount deposited by him. In case any of the partners of a Partnership Firm or a Director of a company participating in the bid/ auction process are found to be defaulters, the bidder firm/ company would be held ineligible and attract similar action:

Provided that where any injunction has been granted by a court of law or any other competent authority staying the recovery of any such amount, the non-payment thereof shall not be treated as a disqualification for the purpose of participation in the auction.

Powers of the
Presiding
Officer.

36. (1) The presiding officer shall conduct the auction in a peaceful manner and may direct any bidder to leave the auction premises in the event of a disorderly conduct by or on behalf of any bidder. In cases of extreme misconduct or misbehaviour, the presiding officer may order the forfeiture of earnest money deposited by such bidder and recommend his debarring from participation in any future auctions.

(2) The presiding officer shall send his recommendations through proper channel to the officer competent to accept tender.

Payments of
the bid
amount.

37. (1) No bid shall be regarded as 'successful' unless accepted by the officer competent to accept bid/ tender in accordance with the provisions of The Delegation of Financial Powers Rules, 1999 of the State.

(2) The highest bidder shall be required to deposit an amount equal to 25% of the annual dead rent/ contract money as the 'Security' along with an additional amount equal to one month's dead rent/ contract money in advance.

(3) The process for completion of the various stages of payment as specified under sub-rule (2) above shall be as follows:-

- (i) On completion of the bid process i.e. the fall of the hammer or the opening of the sealed bids, as the case may be, the highest bidder shall deposit an amount equal to 10% of the annual bid amount as 'Initial Bid Security' before expiry of the period allowed.
- (ii) The amount deposited towards the 'initial bid security' would be adjusted as part of the Bid Security on acceptance of the bid by the competent authority and a Letter of Intent (LoI) will be issued in favour of the successful bidder.

- (iii) The letter of intent holder shall deposit the balance amount of Bid Security i.e. equal to 15% of the annual bid amount before expiry of the period allowed.
- (iv) The amount of security already deposited towards the initial bid security shall be duly adjusted to make up the twenty five percent of the bid amount towards the bid Security.
- (v) Wherever a LoI holder fails to deposit the balance fifteen percent amount towards security as prescribed under sub-rule (3) (iii) above, and/or fails to execute the agreement after the issue of letter of intent, the same shall be deemed to have been revoked and the ten percent amount deposited by him towards 'initial bid security' shall stand forfeited. In addition, the letter of intent holder/ defaulter shall be liable to deposit the unpaid balance of fifteen percent to make up twenty five percent of the bid amount as bid security.
- (vi) Where the LoI holder fails to deposit the unpaid fifteen percent amount on demand, such amount with interest shall be recoverable as arrears of land revenue and such bidder shall be debarred from participation in any subsequent bids for a period of five years.
- (vii) No interest, whatsoever, shall be payable on the security amount deposited.
- (viii) On enhancement of the dead rent/ contract money with expiry of every three years period, the lessee/ contractor shall deposit the balance amount of security so as to upscale the security amount equal to 25% of the revised annual dead rent/ contract money as applicable for one year with respect to the next block of three years.

Chapter - 7

General conditions for grant of any mineral concession

Conditions of
the mining
lease/
contract.

38. (1) The lessee/ contractor shall deposit the annual dead rent (in case of lease) or contract money, as the case may be, in respect of the minor minerals in four quarterly instalments in advance on the 1st of April, 1st of June, 1st of September and 1st of December of the year.

(2) The advance amount paid on account of one instalment along with the fifteen percent amount of the bid security shall be required to be deposited/ adjusted in a manner that the subsequent instalments are payable for a full quarter/ year, as the case may be.

(3) In case of a mining lease, where the amount of royalty payable in respect of a month exceeds the amount of dead rent deposited in advance, the lessee shall deposit such amount of royalty on the mineral extracted and dispatched or consumed by the 7th day of the following month after adjusting the amount of advance dead rent already deposited.

(4) In cases where the lessee has paid the amount of royalty or dead rent during a part of the year, which is equal to or more than the annual dead rent payable for the year, he shall not be required to deposit the advance dead rent for the remaining period of the said year and the royalty for the balance part of the year shall be deposited by the 7th day of the following month.

(5) Where the lessee/ contractor is operating the area, he shall also deposit/ pay an additional amount equal to ten percent of the due dead rent /royalty/ contract money along with instalments towards the "Mines and Minerals Development, Restoration and Rehabilitation Fund".

(6) In case of any default in payment of the instalments of dead rent/ contract money/ royalty/ contribution to the 'Mines and Minerals Development, Restoration and Rehabilitation Fund' on the due date(s), the amount would be payable along with interest at the following rates:-

Serial Number	Period of delay	Rate of Interest applicable
(i)	If paid within a period of 7 days from the due date:	A grace period of up to 7 days is allowed without any interest;
(ii)	If paid after 7 days but up to 30 days of the due date:	15% on the amount of default for the period of default including the grace period;
(iii)	If paid after 30 days but within 60 days of the due date:	18% on the amount of default for the period of default including the grace period;
(iv)	Delay beyond 60 days of the due date	Termination of the lease/ contract and the entire outstanding amount would be recoverable along with interest calculated at the rate of twenty one percent for the entire period of default.

(7) Any default in payment of the due instalments of dead rent, royalty, contract money, contribution to the Fund beyond a period of seven days from the due date would entail:-

- (i) issue of a notice requiring the mineral concession holder to clear the default immediately and stating that in case the due

amount is not paid within a period of thirty days of the due date, his mining operations would be suspended;

- (i) If the concession holder fails to deposit the due amount within a period of thirty days of the due date along with interest applicable thereon, the competent authority shall direct the concession holder to suspend his mining operations and stop any despatch of mineral from the concession area till such time the default is cleared;
- (ii) The order of suspension issued under (i) above shall, inter alia, include a show cause notice for termination of the lease or contract or permit along with forfeiture of security in the event of continuation of default for a period of thirty days from the date of order of suspension. The concession holder shall also be liable to pay the dues for such suspension period;
- (iii) The competent authority may revoke the suspension of mining operations in case the concession holder deposits at least fifty percent of the due amount with an undertaking to pay the balance amount within a period of three months along with interest, concurrent with the instalments payable during this period;
- (iv) The order of suspension of mining operations and the ban on despatch of mineral from the area would remain in force throughout such default period;
- (v) The competent authority may terminate the mineral concession, with or without forfeiture of the whole of the security deposit or part thereof, as deemed appropriate, in such cases without any further opportunity.

(8) The mineral concession holder shall erect boundary pillars around the mining area at his own expense as per his plan of mining and shall at all times maintain and keep the same in good condition. Each of the boundary pillars shall also be numbered along with the GPS readings duly marked thereon. The plan annexed to the concession agreement shall clearly indicate the location of pillars along with their GPS readings.

(9) The mineral concession holder shall, at all times, carry out the mining operations subject to the following restrictions:-

- (i) maintain a distance of fifty meters from the outer periphery of the defined limits of any village habitation, National Highway, State Highway and other roads where such excavation does not require use of explosives, unless specifically relaxed and permitted by the competent authority;

- (ii) maintain a distance of two hundred fifty meters from the outer periphery of the defined limits of any village habitation, National Highway, State Highway and other roads where use of explosives is required, unless specifically relaxed and permitted by the authority or any specific dispensation is obtained from the Director, Mines Safety;
- (iii) mining operations in the river-beds shall be undertaken in accordance with the conditions prescribed under rule 39.

(10) The lessee/contractor shall at all times keep and maintain correct and true accounts of -

- (i) the quantity and other particulars of all minerals obtained from the mines;
- (ii) the number of persons employed in his mining operations;
- (iii) an up-to-date complete plan and sections of the mine;

and shall allow any officer authorised by the Central or the State Government or competent authority in that behalf to examine at any time any accounts and records maintained by him, and shall furnish to the Central or the State Government or the competent authority with such information and returns, as it may require.

(11) Where the continuance of mining operations in any area, in the opinion of the State Government, is likely to endanger the safety of any national or State highway, road, bridge, drainage, reservoir, tank, canal or other public works, or public or private building, or any other public interest or in the interest of environment/ecology of the area, the Government may suspend the operations in the entire concession area or part thereof with immediate effect by communicating the reasons thereof in writing. The Government may, wherever so warranted, terminate such mining lease/contract over entire area or part thereof after giving sixty days notice to the concession holder in this behalf and the grant of such mineral concession shall stand terminated from the date specified in the said notice.

(12) A mineral concession holder shall not stock any mineral outside the concession area granted on mining lease/ contract/ permit. The total mineral excavated and stacked by the concession holder within the area granted on mining lease/ contract/ permit shall not exceed two times of the average monthly production as per approved mining plan at any point of time.

(13) In cases where access to and from any other mineral concession area granted under these rules is required to be provided through the land/ area of the lessee/ contractor, he shall allow the existing and future lessee/

contractor/ or any other mineral concession holder a reasonable access to pass through such land/ area which is comprised in or adjoins or is reached through the land held by such mineral concession holder.

(14) The mineral concession holder shall ensure unhindered access to any officer, authorised by the State or Central Government or competent authority, to enter upon any building, excavation or land comprised in the concession area for the purpose of inspecting the mines. If the mineral concession holder creates any hindrance in peaceful inspection of the mines, the competent authority may take recourse to extreme measure of cancellation of the mineral concession and forfeit the security deposit in whole or part thereof.

(15) A mineral concession holder shall,-

- (i) submit by the 7th day of every month, a return in Form "MMP-1" containing the total quantity of minor mineral raised and dispatched from the area and other details prescribed in the said form during the preceding calendar month and its value, to the competent authority; and
- (ii) also furnish by the 30th April of every year, a statement containing information in Form 'MMP-2' regarding the quantity and value of minor mineral extracted, dispatched, stacked during the previous financial year, average number of regular labourers employed (men and women separately), number of accidents (if any), compensation paid and number of days worked and such other details as prescribed in the form to the competent authority.

(16) The mineral concession holder shall at all times maintain and, if required, strengthen any railway line, bridge, national highway, reservoir, tank, canals, road any other public works or buildings in proper condition to the satisfaction of the Railway Administration or the competent authority or any officer authorised by him and shall ensure that no risk is caused to any such structure as a result of his mining operations.

(17) The mineral concession holder shall report the discovery of any such minor mineral which is not specified in the concession to the competent authority or an officer authorised by him without any delay and shall not dispose off the same.

(18) In case the mineral concession holder incidentally extracts any major mineral, in the process of extracting minor minerals granted through the mineral concession, which is not forming part of the concession, the same shall be the property of the Government and the mineral concession holder shall stack and store the same separately and maintain its proper record in accordance with the directions given by the competent authority.

The competent authority shall lay down a procedure for the disposal of the major mineral so detected, excavated and stacked.

(19) In case, it is detected that the mineral concession holder has disposed of the incidentally extracted major mineral in whole or part thereof or failed to maintain the record of the stored mineral in terms of sub-rule (18) above, he shall be liable to penalties as specified in sub section (1), (4) and (5) of section 21 of the Act, and also termination of mining lease/contract.

(20) In case the mineral concession holder does not commence mining operations within a period of one hundred and eighty days counted from the date of commencement of the mineral concession, notwithstanding the payment of dead rent/ contract money by him, the mineral concession shall be liable to be terminated unless specifically permitted by the competent authority on application for reasons to be recorded in writing.

(21) The mineral concession holder shall immediately inform in writing in Form 'MSE-1': (a) the working in the mines extend below the superjacent ground, or (b) the depth of any open cast excavation reaches six meters (measured from its highest to the lowest point); or (c) the number of persons employed on any day is more than 50, or (d) any explosives are used, to the following:—

- (i) The Director General of Mines Safety, Government of India, Dhanbad;
- (ii) The Director, Mines Safety, Government of India, Guwahati;
- (iii) The Competent Authority;
- (iv) The District Magistrate of the District concerned.

(22) The competent authority will make arrangements for the survey and demarcation of the area granted under the concession at the expense of the mineral concession holder. The mineral concession holder shall have to bear actual expenses of the staff deputed for the work, which shall include prorated salary of the staff, travelling allowance and daily allowance of the staff deployed and instrument usage charges which shall be equal to ten percent of the staff charges.

(23) A safety margin of two meters shall be maintained above the ground water table while undertaking mining and no mining operations shall be permissible below this level unless a specific permission is obtained from the competent authority in this behalf.

(24) A mineral concession may contain and provide for such additional conditions as the competent authority may deem necessary with regard to but not limited to the following:-

- (i) payment of dead rent, royalty, contract money, Mines and Mineral Development, Rehabilitation and Restoration Fund, and the interest payable on delayed payments or any other dues;
- (ii) particulars of the receipt heads of the Government to which the payments are to be credited;
- (iii) payment of rent for use of the surface area and compensation for damage to the landowner in respect of land covered under the lease/contact;
- (iv) restriction of surface operations in any area prohibited by any authority;
- (v) notice by the mineral concession holder for surface occupation;
- (vi) facilities to be given by the mineral concession holder to another mineral concession holder for working of minor mineral(s) in the area or the adjacent area or for work of State or Central Government Departments or their Agencies.
- (vii) entering and working in any forest area;
- (viii) reclamation/ restoration and securing of the pits, shaft and other areas affected by mining;
- (ix) reporting of accidents and use of explosives;
- (x) indemnity to the Government against any third party claims;
- (xi) mineral to be stacked, measured and dispatched;
- (xii) applicability of the provisions of all other statutes/ rules framed by the Central and the State Governments;
- (xiii) maintenance of sanitary conditions in the mining area;
- (xiv) development and conservation of the minerals, and environment and ecology of the area;

- (xv) forfeiture of property left after termination/ expiry of the mineral concession;
- (xvi) delivery of possession of lands and mines on surrender, expiration or premature termination of the mineral concession;
- (xvii) powers to take possession of plant, machinery, premises and mines in the event of war or emergency; and
- (xviii) termination of a mineral concession for non-compliance of terms and conditions of the grant and agreement;
- (xix) any other special conditions may be imposed in the interest of scientific mining, mineral conservation and mineral development, as may be found expedient by the competent authority.

(25) Boundaries of the area covered by a mining lease/ contract/permit shall run vertically downwards below the surface towards the centre of the earth.

**Special
conditions for
river-bed**

39. Following conditions shall be applicable for excavation of minor mineral(s) from river beds in order to ensure safety of river-beds, structures and the adjoining areas:

- (i) No mining would be permissible in a river-bed up to a distance of five times of the span of a bridge on up-stream side and ten times the span of such bridge on down-stream side, subject to a minimum of 250 metres on the up-stream side and 500 metres on the down-stream side;
- (ii) There shall be maintained an un-mined block of 50 meters width after every block of 1000 meters over which mining is undertaken or at such distance as may be directed by the competent authority;
- (iii) The maximum depth of mining in the river-bed shall not exceed three metres measured from the un-mined bed level at any point of time with proper bench formation;
- (iv) Mining shall be restricted within the central 3/4th width of the river/ rivulet;
- (v) No mining shall be permissible in an area up to a width specified by the competent authority from the active edges of embankments;

- (vi) Any other conditions as may be required by the competent authority in public interest.

Powers to
issue
directions.

40. (1) The competent authority may, in the interest of systematic development of mineral deposits, conservation of minerals, scientific mining, sustainable development and protection of the environment, issue directions to the owner, agent, mining engineer, geologist or manager of a mine.

(2) Every direction issued under sub-rule (1) shall be complied within such period as may be specified, not being a period of less than one week:

Provided that where there is difficulty in giving effect to any such direction, the owner, agent, mining engineer, geologist or manager of the mine, as the case may be, may apply for modification or rescinding of such direction and the competent authority may either modify or rescind the direction or confirm the same.

Consequences of
any non-
compliance or
violation of the
terms and
conditions of the
grant of a mineral
concession.

41. (1) In case the mineral concession holder fails to (a) undertake mining in a scientific and systematic manner, or (b) undertakes mining in violation of environmental safeguards, or (c) fails to deposit the due amount of dead rent, royalty, contract money or any other amount due to the Government under these rules, or (d) fails to comply with any of the terms and conditions of grant of the mineral concession agreement or other conditions imposed by any other State/ Central agency at the time of granting permission/ approval for undertaking mining activity, or (e) fails to comply with any other directions issued during the subsistence of the mineral concession, the competent authority shall have the right to suspend the mining operations or prematurely terminate the lease/ contract along with forfeiture of part or full amount of security after following the prescribed procedure;

(2) As a measure of recovery of any outstanding amount towards mining dues from a defaulting mineral concession holder, the competent authority shall be competent to enter upon the said premises and detain all or any of the mineral or moveable property therein till the concession holder makes the payment of outstanding amount. If the concession holder fails to make the payment within a period of ten days, such officer may order disposal and sale of the detained material and such property to the extent it covers the recovery of the outstanding dues and all costs and expenses incurred on this account.

(3) Where a mineral concession is prematurely terminated for breach of any of the conditions subject to which the mineral concession is granted, the competent authority may also order forfeiture of the quarried material lying in the concession area and on passing of such an order, such mineral shall become the absolute property of the State.

Rights of
the lessee/
contractor.

42. Subject to the conditions mentioned under rules 39 and 40, the mineral concession holder shall have the right to use the land in respect of which the mineral concession has been granted for following activities,

- (i) working of the mines;
- (ii) sink pits and shafts and construct roads;
- (iii) erect plant and machinery;
- (iv) use water;
- (v) use land for stacking purpose;
- (vi) install fuel-pumps or stations or diesel or petrol for self-use with the permission of the authority;
- (vii) construct magazine for explosives and storage sheds for explosive related substances with permission from the licensing authority;
- (viii) store over-burden/ waste material in areas identified for the purpose; and
- (ix) request for diversion of public roads, overhead electric lines passing through the concession area from the concerned authorities at his expense to ensure scientific mining.

Special
rights of the
Government

43. (1) The Government shall have the right of pre-emption of the minor mineral and all products thereof lying over the area granted on a mineral concession or elsewhere under the control of the mineral concession holder at all times during the term of any mineral concession. Upon issue of an order by the Government in writing to this effect, the mineral concession holder shall deliver all minor mineral or products thereof to the Government at rates worked out on the basis of average billing of mineral for the last one month at the pit head in such quantities and in such manner as may be specified in the order exercising the said right.

(2) The Government may terminate/ cancel the mineral concession in the State of a National Emergency or War without giving any notice for such termination.

(3) The Government may terminate or cancel the mineral concession, by giving three calendar months prior notice in writing, in the event the minor mineral under the concession is required for establishing an industry beneficial to the general public.

Chapter-8

Payment of rent and compensation to the landowner
determination thereof

Mining over
land in the
ownership of
third parties.

44. (1) Where a mineral concession is granted under these rules over any land in respect of which minor mineral rights vest in the State Government, the rights of the landowner shall be subordinate to that of the State Government for extraction of the mineral, access to the quarry mine, stacking of minerals and other subsidiary purposes. The landowner is entitled to a fair rent and compensation for such use of the land and for damage or injury caused to such land.

(2) A mineral concession holder, who is granted the mineral concession under these rules, is entitled to use the land/area for extraction of mineral in respect of which the said concession is granted. The mineral concession holder shall be liable to pay (a) the annual rent in respect of the land blocked under the concession but not being operated, and (b) compensation in respect of the area used for actual mining operations.

(3) In case the landowner is allowed to use part of the area granted under the mineral concession for his normal operations for which it was being used prior to the grant of mineral concession, concurrent with the concession grant, no rent shall be payable in respect of such portion of land which is not being used for actual mining operations for such period as it remains available to the landowner for his normal use. In cases where the mineral concession holder blocks the entire concession area as a result of which the landowner is not able to use such land or part thereof for his normal operations, the rent shall be payable in respect of the entire blocked area.

Mutual settlement
of rent and
compensation for
the land used for
mining

45. The amount of annual rent and the compensation shall be settled mutually between the landowner and the mineral concession holder.

Determination of
fair market rent, if
not mutually settled
between the parties.

46. (1) Where no agreement is reached by way of mutual settlement between the landowner and the mineral concession holder regarding the rate of rent, the mineral concession holder shall offer to pay rent equal to the amount of Annuity, as applicable from time to time, as payable in cases of land acquisition.

(2) Where the land owner is not agreeable for a mutual settlement under rule 46 and is also not satisfied with the rent offered to be paid under sub-rule (1) above, the landowner or the concession holder may apply to the competent authority to make a reference to the District Collector for determination of the fair rent payable in respect of such land.

(3) Where either of the parties prefer a reference to the District Collector under sub-rule (2) above, the competent authority shall forward the reference to the District Collector for determination of the fair market rent in respect of such land. The competent authority shall also require the mineral concession holder to deposit the rent for one year as prescribed under sub-rule (1) above as a tentative compensation with the Collector. Upon so doing, the mineral concession holder shall be entitled to commence mining operations over the said land area.

(4) Upon a reference from the competent authority, the District Collector may call upon the parties to furnish the details of their claims and counter claims, inter alia, containing information on the parameters prescribed under sub-rule (5) of this rule and afford an opportunity of hearing to the parties.

(5) (a) Pursuant to the hearing granted to the parties to the reference, the District Collector shall determine the fair market rent of the land keeping in view the following:-

- (i) nature/ character of the land;
- (ii) use to which such land was being put immediately before the grant of mineral concession;
- (iii) annual net income that the landowner was able to derive/ earn from such land use;
- (iv) normal increase in the income level that would have taken place in such net income during the intervening period;
- (v) amount so worked out shall be added an amount equal to thirty percent in lieu of compulsory use of the land;

(b) While determining the fair market rent, the collector shall also decide the rate at which such rent would be increased on year-to-year basis during the currency of the mineral concession.

(6) Notwithstanding the parameters prescribed for determining the fair market rent under sub-rule (5) above, Collector shall not determine the rent at a rate lesser than the amount of annuity payable in case of land acquisition.

(7) The District Collector shall order parties and the mineral concession holder to pay such rent to the landowner from time to time, as determined by him.

(8) Any appeal against the order of the District Collector shall lie with the Government.

Determination
of
Compensation.

47. (1) In addition to the rent settled between the parties under rule 45 or determined and payable under rule 46, the landowner would also be entitled to payment of a fair and reasonable compensation for any damage caused to such land in respect of the area under actual mining operations.

(2) In cases where the amount of compensation is not mutually settled between the parties under rule 45, the tentative amount of compensation shall be equal to 10% of the annual contract money, dead rent/ royalty actually paid by the mineral concession holder to the Government, less the amount of rent settled or determined.

(3) Where the landowner or the mineral concession holder is not agreeable to accept the amount of compensation prescribed under sub-rule (2) above, either of them may seek a reference through competent authority to the District Collector for determination of fair and reasonable compensation with reference to the damage or injury caused to such land. Pending a decision by the District Collector on such reference by either of the parties, the mineral concession holder shall deposit the tentative compensation amount for one year with the District Collector in accordance with sub-rule (2) above, whereafter the concession holder shall be entitled to operate the area.

(4) Upon a reference from the competent authority, the District Collector shall proceed to determine the fair compensation amount on account of any damage likely to be caused to such land on account of the mining operations. The Collector shall invite claims and counter claims and afford an opportunity of hearing to the parties before determining the compensation amount.

(5) (a) The Collector shall determine the fair compensation for the damage or injury caused to such land keeping in view the following:-

- (i) nature or character of the land;
- (ii) economic activity for which such land was being used immediately before the grant of mineral concession;
- (iii) nature and extent of damage caused and as to whether such land is fully or partially reclaimable after closure of the mining operations or the damage is irreversible;
- (iv) economic activity for which such land can be used after mine closure, with or without any investment, and the kind of returns it is capable of yielding after such restoration.
- (v) extent of efforts and expenditure proposed to be made by the mineral concession holder for restoration or

reclamation or rehabilitation of the land as per the mine closure plan for its eventual use by the landowner;

(b) While determining the compensation amount, the Collector shall keep in view the total rent and the estimated compensation amount payable to the landowner throughout the concession period. In case the sum total of the rent and the compensation amount assessed is more than the prevailing market value of land, the mineral concession holder may be given an option to buy the land at such rates subject to the landowner agreeing to the same. Alternatively, the Collector may determine the compensation amount keeping in view that the landowner would continue to retain the ownership of land after the closure of mining operations.

(c) In case the mineral concession holder and the landowner(s) are able to settle the compensation mutually in respect of a portion of the land required for actual mining operations, compensation for such portion of the land shall not be a subject for settlement. However, the amount of compensation already settled in respect of part of the operating area shall be kept in view while settling the compensation for the disputed area.

(6) Notwithstanding the determination of compensation on the considerations stated under sub-rule (5) above, the annual rent and the compensation amount put together shall not be less than 10% of the amount of contract money/ dead rent/ royalty actually paid by the mineral concession holder to the government with reference to such portion of land in accordance with sub-rule (2) above.

(7) The compensation amount determined by the District Collector shall be final and binding on the parties and the mineral concession holder shall be liable to pay such compensation amount to the landowner annually during the currency of the mineral concession.

(8) An appeal against the order of the Collector shall lie with the Government.

Part-III

Scientific and Systematic Mining and Environmental Safeguards

Chapter - 9

Mining operations to be undertaken as per the Mining Plan

Mining
Plan.

48. Any mining operations under a mineral concession granted under these rules shall be undertaken by the mineral concession holder in accordance with a duly approved 'Mining Plan':

Provided that the State Government may exempt certain specified nature of mining activities from the requirements of preparation of a mining plan.

Registration of
a 'Recognised
Qualified
Person' (RQP).

49. (1) No person shall be registered as a 'Recognised Qualified Person' for the purposes of rule 50 (1) by the Director, unless he possesses,-

- (i) a degree in Mining Engineering or a post-graduate degree in Geology granted by a university established or incorporated by or under an Act of Parliament or any institution recognised by the University Grants Commission established under section 4 of the University Grants Commission Act, 1956 (3 of 1956) or any qualification equivalent thereto; and
- (ii) professional experience of five years of working in a supervisory capacity in the field of mining or mineral administration after obtaining a degree or qualification required under clause (1) (i) above.

(2) Any person possessing the qualifications and experience as prescribed under sub-rule (1) above, may apply to the Director, or an officer authorised by him, for registration as a RQP along with a fee of Rs. 1,000/- (Rs. one thousand only). The Director may, after making such enquiry as deemed appropriate, grant or refuse to grant recognition and where recognition is refused, the Director shall record the reasons therefore in writing and communicate the same to the applicant.

(3) The applicant recognised under sub-rule (2) above shall be so registered for a period of ten years and his registration may be further renewed on application and deposit of the fee as applicable at such time for a further period not exceeding ten years at any one time.

(4) The registration of a person as 'Recognised Qualified Person' may be revoked at any time in the case of any misconduct on the part of such person after giving him a notice and opportunity of hearing. Similarly, the

Director may refuse to renew recognition for reasons to be recorded in writing after giving him an opportunity of hearing.

Preparation of a Mining Plan by a Recognised Qualified Person.

50. (1) A mining plan shall be prepared by a Recognised Qualified Person (RQP), recognised in this behalf by the Director or an officer authorised by him, or by a person recognized by the Central Government or an officer authorized by the Central Government in this behalf under the provisions of rule 22 B of the Mineral Concession Rules, 1960.

(2) The Director shall specify all such persons who are so recognised by him under sub-rule (1) above and keep such a list of persons published and updated on the website of the department.

Officer authorised for approval/ modification of the Mining Plan/ Scheme of mining.

51. The Director may authorise any of his officers to approve or modify the Mining plan/ Scheme of mining for mining of Minor Mineral in the State subject to such officer fulfilling the following qualifications:-

- (i) a degree in mining engineering or post-graduate degree in geology from a university established or incorporated by or under a Central Act, a Provincial Act or a State Act, including any institution recognized by the University Grant Commission established under section 4 of the University Grants Commission Act, 1956 (3 of 1956), or any equivalent qualification granted by any university or institution outside in India; and
- (ii) possesses professional experience of 8 years in case of a Mining Engineer in the field of mining and 12 years in case of a Geologist in the field of mining/ geological survey, after obtaining the basic academic qualification.

Requirements of a Mining Plan

52. (1) Every mineral concession holder shall prepare a Mining Plan along with the Mine Closure Plan (Progressive and Final) and shall not commence mining operations in any area except in accordance with such Mining Plan duly approved by an officer authorized by the Director in this behalf. The plan shall also contain the conceptual plan of the mining area and take into consideration the following aspects:-

- (i) Level of Production;
- (ii) Level of Mechanisation;
- (iii) Type of Machinery used;
- (iv) Quantity of diesel/ energy fuel consumption;
- (v) Number of trees uprooted due to proposed mining operations.

(2) Where the mining operations have already been undertaken under an existing mineral concession before the commencement of these rules, the holder of such mineral concession shall also submit a Mining Plan along with Mine Closure Plan within a period of ninety days from the commencement of these rules for approval by the authorized officer.

(3) Every mining plan or scheme of mining submitted for approval under these rules shall be accompanied with a non-refundable fee of Rs. 5,000 for every square kilometre or part thereof in respect of the mining area covered under the mining plan.

(4) Every mining plan shall contain all plans, sections serially numbered or suitably indexed. The tracings or copies of such plans and sections duly certified for its correctness by the owner, agent, mining engineer or manager or geologist, by the mining engineer/ geologist appointed by the concession holder, shall be kept at the site office of the minor mineral mine/ concession area.

(5) A mining plan shall incorporate the following as a minimum:-

- (i) the plan of the area under concession delineated on a map with boundaries duly marked along with the positions of boundary pillars with GPS readings;
- (ii) the plan of the area under concession showing the nature and extent of the mineral body/ spot or spots where the mining operations are proposed to be undertaken;
- (iii) the plan of the area showing natural water courses, limits of reserves and other forest areas and density of trees, if any, assessment of impact of mining activity on forest, land surface and environment including air and water pollution i.e. the environment management plan;
- (iv) details of the geology and lithology of the area including the estimated mineral reserves of the area;
- (v) extent of manual mining or mining with the use of machinery and mechanical devices;
- (vi) tentative scheme of mining and annual programme and plan for excavation/ production from year-to-year for a period of five years as part of the Mining Plan;
- (vii) proposed method of mining/ development of mines, use of explosives and blasting operations, if any, stacking and disposal of minerals, mine-drainage pattern, handling of the overburden, location of electronic weigh bridges, and mineral processing, if any;

- (viii) progressive and final mine closure plan;
- (ix) details of scheme of restoration/ rehabilitation of the area through afforestation, land reclamation, use of pollution control devices and such other measures as may be directed by the State Government from time to time.

(6) In addition to the requirements stipulated under sub-rule (4) above, every mining plan shall delineate the approach in respect of environmental safeguards and restoration and rehabilitation measures of the area with regard to the following, among others:-

- (i) precautions for the protection of environment and control of pollution while undertaking mining operations in the area granted on contract lease/ contract;
- (ii) control of air pollution due to dust, exhaust emissions or fumes during mining or processing operations for minor mineral and related activities and containing the same within permissible limits specified under any environmental laws for the time being in force;
- (iii) precautions to prevent or reduce the discharge of toxic and objectionable liquid effluents from minor mineral quarry, workshop or processing plant within the permissible limits. No such toxic affluent shall be discharged in any water body or in the sub-soil through a bore-hole;
- (iv) abatement of and control over the noise arising out of mining and processing operations for minor minerals so as to keep the same within the permissible limits;
- (v) prevention and containment of any damage to the flora of the area held under concession and the nearby area, scheme of undertaking plantation to compensate for any unavoidable damage and maintenance of the same during the subsistence of the concession period;
- (vi) removal and stacking of any top soil or over-burden or waste rock and nonsaleable minor mineral excavated/ generated during the mining operations and utilisation of the same for restoration and rehabilitation of the area;
- (vii) plan for phased restoration, reclamation and rehabilitation of land affected by mining operations.

(7) The mining plan, once approved, shall be valid for the mineral concession period, unless revised and modified and got approved during the concession period.

(8) The owner, agent, mining engineer or manager of every mine shall review the mining plan after every five years and shall submit scheme of mining for the next five years of the concession period for approval.

Modification in
the mining Plan
or Scheme and
other
conditions.

53. (1) Where any modification of the approved mining plan is required during the subsistence of the mineral concession, the concession holder shall get any such modification approved.

(2) The competent authority may, wherever needed, require the mineral concession holder to make such modifications in the mining plan referred to above or impose such conditions, as he may consider necessary by an order in writing if such modification or imposition of condition are considered necessary,-

(a) in the light of the experience of operation of mines;

(b) in view of the change in the technological development; and

(c) in the light of any change in legal provisions or orders of any Court.

(3) A mineral concession holder, desirous of seeking modifications in the approved mining plan as are considered expedient in the interest of safe and scientific mining, conservation of minerals, or for the protection of environment, shall apply to the Director, setting forth the intended modifications and also explaining the reasons for the same.

(4) The Director shall approve the mining plan or such modified mining plan or scheme of mining with or without any modification, as deemed appropriate, within a period of forty-five days from the date of receipt or submission of such application for approval of mining plan or modified mining plan or scheme of mining, as the case may be.

(5) Where no decision is conveyed within the aforesaid period of forty-five days, the mining plan or modified mining plan or scheme of mining, as the case may be, shall be deemed to have been provisionally approved, till such time a final decision in the matter is communicated.

(6) The mineral concession holder shall furnish financial assurance amounting to Rs.15,000/- per hectare of the area granted under the mineral concession and put to use for mining and allied activities subject to a minimum of one lakh rupees in the form and manner as defined.

Chapter – 10

Regulation and control of mining operations

Mining to be undertaken in a scientific and systematic manner.

54. (1) The mining operations shall be undertaken in a scientific and systematic manner *i.e.* mining operations consistent with the approved Mining Plan/ scheme of mining, clearances/ permissions granted by the concerned authorities.

(2) Any un-scientific operation or contravention of the terms of grant or permission (excepting the conditions relating to payment of Government dues) to operate by the mineral concession holder shall amount to violation or breach of the grant.

Non-compliance with or violation of the terms and conditions of the mineral concessions

55. (1) A mineral concession holder shall be held to be in 'default' of compliance of the conditions of grant of mineral concession in cases where the non-compliance is rectifiable *suo moto* or upon a notice within the period indicated in such notice. Some of the instances of major violations on the part of the mineral concession holder may be in the following areas:-

- (i) Undertaking mining operations in an unsafe and unscientific manner *i.e.* without bench formation, non-erection or maintenance of boundary pillars, lack of labour safety measures, and the regulations pertaining to the use of explosives;
- (ii) Non-installation of the electronic weigh bridges or, the weigh bridges, if installed, are found to be not calibrated properly to ensure correct weighment;
- (iii) Non-adherence to the rules with regard to the limits prescribed for stocking of minerals and failure to furnish the prescribed returns in this behalf;
- (iv) Dispatch of mineral from the concession area without a valid mineral transit pass;
- (v) Non-submission of the prescribed reports and returns as per the time frame prescribed.

(2) Wherever non-compliance of terms and conditions of the mineral concession or violation thereof is observed, it shall cause a notice to be served upon the mineral concession holder to rectify the default and take corrective measures within such period as may be specified in such notice.

Breach of terms
and conditions
and the
consequences

56. (1) Any failure on the part of the mineral concession holder to rectify any default or take corrective measures under rule 55 above within the period specified, or such violation being irreversible and non-rectifiable, or recurrence of defaults takes place, the same shall amount to a 'breach' of the terms and conditions of grant of the mineral concession.

(2) Wherever a mineral concession holder is observed to be in 'breach' of the conditions of grant, the competent authority shall be competent to take any or all of the following actions:-

- (i) suspension of the mining operations and dispatch of mineral from the concession area, withholding the inventory of stocks, duly assessed at the time of suspension of operation, till such time the suspension order is revoked. The period of suspension may continue up to a period of three months or till such time the breach condition is rectified, whichever is earlier;
- (ii) temporary seizure of the stocks of the mineral excavated in raw or processed form till such time the stocks are reconciled with the records and established to have been accepted from legal sources;
- (iii) termination of the concession with forfeiture of the security in whole or in part and also forfeiture of the mineral lying in the area and its disposal by the competent authority; and
- (iv) debarring the individuals/ firms/ companies for grant of a fresh mineral concession in the State for a period of up to 5 years.

Procedure for
dealing with
'Breach'
conditions and
the penalties.

57. (1) A breach of any of the conditions of grant of a mineral concession or violation of any of the conditions relating to permission or clearance to undertake mining by any authority shall be dealt as under:-

- (i) the competent authority shall, upon inspection by himself or any officer or on reporting of any violation amounting to breach by any other authority, issue a notice to the mineral concession holder to show cause within the period specified therein as to why the mineral concession be not prematurely terminated along with forfeiture of the amount of security, in full or part thereof, and forfeiture of the mineral already excavated while undertaking said operations;
- (ii) on receipt and examination of the reply of the mineral concession holder, the competent authority may, on his satisfaction that the breach was either not entirely due to fault on the part of the concession holder or was beyond his

control or the same had actually not been committed, settle the notice with such caution as deemed appropriate with or without any further directions;

- (iii) where the mineral concession holder admits to the breach having been committed on his part and promises to remedy the breach conditions in his reply and requests for grant of time, and the competent authority is satisfied with such promise, he may grant time as deemed proper for implementation of the remedial measures with or without a surety;
- (iv) in case the competent authority *prima facie* forms an opinion on examination of the reply of the mineral concession holder that the breach is of a recurring or continuing nature, he may order suspension of the mining operations with immediate effect along with a ban on dispatch of the mineral from the site or any other related activity in the mine;
- (v) In case the competent authority is not satisfied with the reply submitted by the mineral concession holder, the competent authority may terminate the mineral concession with or without forfeiture of the security amount in whole or part thereof along with forfeiture of the mineral already excavated while undertaking said operations. However, no such order shall be passed without affording an opportunity of show cause and representation to the mineral concession holder.

(2) Wherever an order is passed under clause (v) of sub-rule (1) above against a mineral concession holder, he or the partnership firm in which he may be a partner, or the company in which he may be a Director, may be debarred for the grant of a fresh mineral concession for a period of five years from the date of passing such order.

Chapter - 11

Mines and Mineral Development, Restoration and Rehabilitation Fund

Establishment
of the Mines
and Mineral
Development,
Restoration and
Rehabilitation
Fund.

58. A fund known as the 'Mines and Mineral Development, Restoration and Rehabilitation Fund' shall be established under 'Public Account' in the State of Assam under the administrative control of the Department to which rehabilitation charges payable under clause (i) of sub section (1A) of section 15 of the Act shall be credited in order to meet the following objectives:-

- (i) funding of the restoration or reclamation or rehabilitation works in the sites affected by mining operations;
- (ii) provision of common facilities for the benefit of community in and around areas where mining activities are undertaken;

- (iii) development of infrastructure facilities for orderly growth of the mining operations and allied activities e.g. roads, water supply etc.;
- (iv) funding of the studies commissioned or activities related to the mining sector e.g. survey, exploration and prospecting of minerals, procurement of equipment and machinery required to support such activities;
- (v) education, awareness and training of the mineral concession holders and the officers through field visits and exposure to the best mining practices;
- (vi) funding of expenditure incurred on implementation of any scheme of incentives that the State Government may frame for recognition and awards for scientific mining undertaken with highest regard to mineral conservation, rehabilitation measures along with environmental safeguards and other measures;
- (vii) Any other objects which the Government may consider expedient to support in the overall interest of the mining sector.

Contributions
to the Fund

59. (1) An amount equal to ten percent of the dead rent or royalty or contract money paid to the State shall be charged from the mineral concession holder in the nature of 'other charges' for restoration and rehabilitation works and credited to the Fund in addition to the amount payable to the Government on account of such dead rent or royalty or contract money.

(2) The said contribution shall be remitted by the mineral concession holder in instalments along with the instalments of dead rent or royalty or contract money, as the case may be. Such amount shall be reconciled at the close of the financial year and any differential of the amount due shall be adjusted or paid on reconciliation.

(3) The Department shall maintain complete account of receipts to the Fund and the expenditure there from and shall invest the progressive accumulated corpus in a manner so as to earn secure returns therefrom.

Expenditure out
of the Fund.

60. The amount available in the Fund shall be utilised strictly for fulfilment of the objectives for which the Fund is being set up and on the terms and conditions as may be stipulated by the Committee constituted under rule 62.

Restoration and
Rehabilitation
works to remain
the first charge
on the Fund.

61. (1) The expenditure on restoration and rehabilitation of the mining sites shall remain the first charge on the fund.

(2) Every mineral concession holder, before undertaking the restoration and rehabilitation works as part of his progressive mine closure plan, shall get his estimates of expenditure on such works duly approved from the Director or an officer authorised by him and submit the utilisation certificate duly certified by a registered Chartered Accountant. The mineral concession holder shall be entitled to get the expended amount re-imbursed out of the Fund to the extent of actual expenditure subject to such re-imbursment being limited to the amount contributed by him. Any expenditure incurred over and above this limit shall have to be borne by the mineral concession holder from his own account.

Explanatory Note : Notwithstanding the expenditure incurred by a mineral concession holder on the measures taken for the progressive mine closure plan, the occasion for undertaking the complete restoration and rehabilitation works in respect of any mining area arises only when a mine reaches the closure stage. It is likely that the mining operations would have been undertaken by multiple concession holders before reaching the stage of closure of a mine. As such, it becomes imperative that the comprehensive measures for restoration and rehabilitation of a mining site are taken up only upon closure of such mine. The responsibility for execution of such plan shall rest with the mineral concession holder operating such area at the time of its closure. Since the contribution to the fund is also made by each of the lessees/ contractors who have operated the area during the intervening period, the financial burden of restoration and rehabilitation measures shall not be borne by the last contractor/ lessee alone.

(3) A mineral concession holder operating the mine at the time of its final closure shall be responsible for execution of the restoration and rehabilitation works as per the final mine closure plan. He shall prepare and submit the estimates for implementation of the final restoration and rehabilitation plan to the Director, for approval of the estimates.

(4) The Director, shall approve such estimates, with or without any modifications, and reimburse the expenditure actually incurred on the site by the implementation agency in a phased manner out of the Fund. The amount so re-imbursed shall not exceed the total amount received from the mineral concession holders in respect-of that site less the expenditure already incurred earlier.

(5) The Director may require the mineral concession holder to engage an independent agency for implementation of the restoration and

rehabilitation works and evolve a system of monitoring the deliverables through an independent agency.

Sanction of
expenditure from
the Fund

62. (1) Any or all proposals for expenditure from out of the Fund shall be approved by a committee of officers headed by the Secretary of the Department and consisting of representatives from the Departments of Mines and Minerals, Finance, Environment and Forests, Health, Education, Panchayat and Rural Development and Social Welfare.

(2) The mode and method of collection, remittance, and utilisation of these 'other charges' shall be notified separately by the Government.

Part IV

Miscellaneous

Chapter - 12

Illegal or unauthorised Mining and consequences

Illegal or
unauthorised
Mining

63. Any person undertaking any mining operations without a valid mineral concession granted under the Act and the rules framed thereunder in any area shall be deemed to be indulging in illegal or unauthorised mining and shall be dealt in accordance with the provisions contained in this chapter.

Consequences
of illegal or
unauthorised
mining.

64. Any act of illegal or unauthorised mining shall be liable to the following:-

- (i) for a first time violation, the said mineral shall be liable to be seized along with the impounding of all such tools, equipment, vehicles or any other things used for such unauthorised operation, which may be released only upon realisation of the payment of price of the mineral and the applicable royalty for the mineral extracted and, in addition, a fine which shall not be less than Ten Thousand rupees;
- (ii) for a second time violation, the said mineral shall be liable to be seized along with the impounding of all such tools, equipment, vehicles or any other things used for such unauthorised operation for a minimum period of seven days, which may be released only upon realisation of the payment of price of the mineral and the applicable royalty for the mineral extracted and, in addition, a fine which shall not be less than fifteen thousand rupees;
- (iii) wherever a person is found to be indulging in such offence for the third time or more, the officer concerned shall register an FIR and handover all such tools, equipment, vehicles or any other things used for such unauthorised operation to the Police. Any such offence shall entail (a) confiscation of all such tools, equipment, vehicles or any other thing used for such unauthorised operation for a period of minimum thirty days or more, and (b) pecuniary penalty and punishment for the offence as provided under Section 21 of the Mines and Minerals (Development and Regulation) Act, 1957.

Offences by
companies.

65. (1) If the person committing an offence under these rules is a company registered under the Companies Act, every person, who at the time when the offence was committed, was in-charge and was responsible to the company for the conduct of the business of the company, shall be deemed to be guilty

of the offence and shall be liable to be proceeded against and punished accordingly :

Provided that nothing contained in this sub-rule shall render any such person liable to any punishment if he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.

(2) Where an offence under these rules has been committed with the consent or connivance of any director, manager, secretary or other authorised representative of the company, such director, manager, secretary or other authorised representative shall be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

Chapter – 13

Delegation, Review and Appeals

- Delegation.** 66. The Government may delegate any powers under these rules, save in the cases of appeals and subject to such restrictions as it may deem appropriate to the competent authority, by an executive order. Similarly, the competent authority, may delegate any of his powers under these rules, save in the case of appeals, and subject to such restrictions as he may deem appropriate, to any of his subordinate officer(s) by an executive order.
- Review.** 67. The Director/ Principal Chief Conservator of Forests and Head of Forest Force, Assam may, either on an application from an aggrieved party or on his own motion, review the orders passed by him under these rules in any matter.
- Appeals.** 68. (1) Unless otherwise provided, an appeal against an order passed by any Sub-ordinate Officer shall lie with the Director/ Principal Chief Conservator of Forests and Head of Forest Force, Assam as the case may be.
- (2) An appeal against the order passed by the Director/ Principal Chief Conservator of Forests and Head of Forest Force, Assam shall lie before the Government in the Power (E), Mines and Minerals Department in respect of minerals under Schedule – 'X' and the Environment and Forest Department in respect of minerals under Schedule – 'Y'.
- (3) No order under these rules shall be passed by the competent authority against any person unless he has been issued a show cause and given a reasonable opportunity to make a representation.
- Time allowed for appeals or review** 69. (1) Any application for review under rule 67 and an appeal under rule 68 (1) can be preferred within a period of sixty days of the passing of the impugned order. A delay up to thirty days beyond the permissible appeal

period may be condoned by the Director/Principal Chief Conservator of Forests and Head of Forest Force, if found justified.

(2) A second appeal against the orders of the Director/Principal Chief Conservator of Forests and Head of Forest Force, under rule 68 (2) can be filed within a period of 45 days of the passing of the impugned order. A delay for up to thirty days beyond the permissible period may be condoned by the Government, if found justified.

Fee for review
or appeal

70. (1) Every application for review or appeal shall be accompanied with the fee as prescribed in the Second Schedule appended to these rules.

(2) No application for review or appeal shall be entertained in matters where the applicant is in default of any Government dues, on whatsoever account, unless he deposits at least twenty five percent of such dues before filing such application and the proof for such payment is enclosed with the application or memorandum of appeal.

Chapter - 14 Miscellaneous

Power to rectify
inadvertent
mistakes

71. (1) The competent authority may at any time, within six months, from the date of the order passed under these rules, on its own motion rectify any mistake or error apparent on the face of the record, and may within the like period rectify any such mistake or error which has been brought to its notice by an applicant for the grant of the minor mineral(s) concession.

(2) No such rectification under sub-rule (1) above, as has or purports to have a prejudicial effect on another applicant for the grant of the mining lease, shall be made unless the competent authority has given such applicant(s) notice of its intention so to do, and has allowed him/ them a reasonable opportunity to make a representation thereon.

Recovery of
Government
dues as arrears
of land revenue.

72. Any rent, royalty, fee, contract money or other sum due to the Government or penalty imposed under these rules or under the terms and conditions of the mining lease or contract or permit and remaining unpaid, shall constitute a first charge on the assets of a mineral concession holder or the surety furnished under these rules and shall be recoverable as arrears of Land Revenue.

Unauthorized
Working.

73. (1) No person shall undertake any mining operations in any area, except under and in accordance with the terms and conditions of a mineral concession granted under these rules.

(2) Notwithstanding any other punitive measures for any violations provided under the rules, any contravention of sub rule (1) shall be subject to the provisions contained in Section 21 of the Act.

Offences cognizable only on written complaint	74. No court shall take cognizance of any offence punishable under these rules except upon a complaint in writing made by the competent authority within three months of the date on which said offence is alleged to have been committed.
Relaxation in special cases.	75. The Government may, for reasons to be recorded in writing, relax any provision of these rules in cases where any mineral concession is granted to any Government Department or to a statutory authority set up by the State or Central Government, or a company or a corporation wholly owned or controlled by the State or Central Government.
Commencement of the grant of a mineral concession.	76. A mineral concession granted under these rules, in whatever form, shall commence from the date of execution of the agreement or from such date as specified therein.
Concession registration of Lease Deeds/ Contract Agreements.	77. All lease deeds or contract agreements effective for a period of 11 months or more shall be duly registered with the Registrar. All expenditure on registration of the lease deed or contract agreement shall be borne by the concession holder.
Applicability of other Statutes.	78. Grant of any mineral concession or other permissions under these rules shall not absolve the holder from the applicability of other statutes.
Repeal and savings	79. (1) The Assam Minor Mineral Concessions Rule, 1994 as amended from time to time, in their application to the State of Assam are hereby repealed.

(2) Notwithstanding such repeal, anything done or any action taken or proceedings commenced under the 'Assam Minor Mineral Concessions Rule, 1994' as amended from time to time shall be deemed to have been done, taken or commenced under these rules :

Provided that wherever the terms and conditions of any mineral concession, granted before the commencement of these rules, are inconsistent with or repugnant to these rules, the same shall be deemed to have been modified in accordance with these rules from the date of notification thereof.

FORM ML – 1
[see rule 8(5) and 17(1)]

Model form for execution of Mining Lease Deed

This indenture made on this _____ day of _____, 201_ between the Governor of Assam acting through _____ (hereinafter referred to as the "State Government") which expression shall where the context so admits, include the successors and assigns) of the one part; and

Where the lessee is an individual :-

_____ (Name and address of the person) (hereinafter referred to as the "Lessee" which expression shall where the context so admits, includes his heirs, executors, administrator, representatives and permitted assigns)

Where the lessee is more than one individual :-

_____ (Name and address of persons) (hereinafter referred to as the "Lessee" which expression shall where the context so admits include their respective heirs, executors, administrators, representatives and permitted assigns)

Where the lessee is registered firm :-

_____ (Name and address of all the partners or members, where the lessee is a firm or society) all carrying on business in partnership under the firm name and style of _____ (name of the firm and address) registered under Indian Partnership Act, 1932 and having their registered office at _____ (hereinafter referred to as the "Lessee" which expression shall where the context so admits include all partner of the said firm, their representatives, heirs, executors, administrators and permitted assigns).

Where the lessee is a registered company :-

_____ (Name of the company) a company registered under _____ (Act under which company incorporated) and having its registered office at _____ (address) (hereinafter referred to as the "Lessee" which expression shall where the context so admits, include its successors and permitted assigns) of the other part.

**(Where lease is granted through competitive bid process under
rule 8 or renewed under rule 13)**

Whereas the lessee has offered the highest bid of Rs. _____ (in words Rupees _____) in the bid/auction held on _____ for obtaining a mining lease for _____ (name of minor minerals) in respect of the lands hereinafter described in clause 2 and such bid had been accepted by the officer authorized in this behalf and the lessee has deposited with the Government, a sum of Rs. _____ (Rupees _____) as initial bid security (10% of the annual bid amount) and Shri _____, S/o Shri _____, resident of _____ District _____ (referred to as the 'surety' which expression shall where the context so admits, include his heirs, executors, administrators, representatives) has been offered as solvent surety for the aforesaid amount, and whereas the lessee is in possession of a Income Tax Clearance Certificate.

Now, therefore, this deed witnesses and the parties hereby agree as follows :
Liberties and privileges to be exercised and enjoyed by the Lessee(s) :

The following liberties, powers and privileges may be exercised and enjoyed by the lessee subject to the other provisions.

1. In consideration of the rents and royalties, covenants and agreements hereinafter contained and on the part of the Lessee to be paid, observed and performs, the Government hereby grants and demises unto the lessee all those mines/beds/veins/seams of _____ (hereinafter referred to as the said minor minerals), situated, lying and being in or under the lands which are referred to in clause (2) together with the liberties, powers and privileges to be executed or enjoyed in connection herewith which are hereinafter mentioned in Part-I subject to the restrictions and conditions as to exercise and enjoyment of such liberties, powers and privileges which are hereinafter mentioned in Part-II and subject to other provisions of this lease.

2. The area of the said lands is as follows :

All the tract of land situated at village _____ in _____ Sub-Division _____ District bearing _____ Dag No. and _____ Patta No. containing an area of _____ or thereabouts delineated on the plan hereto annexed and boundary as follows :

On the North by _____ ;

On the South by _____ ;

On the East by _____ ;

On the West by _____ ;

And (hereinafter referred to as the 'said lands' or the 'leased area').

3. The lessee shall hold the premises hereby granted from the _____ day _____ for the term of _____ years thence next ensuing.

Part - I

Liberties and privileges to be exercised and enjoyed by the Lessee(s)

The following liberties and privileges may be exercised and enjoyed by the lessee subject to the other provisions :

- 1. To enter upon land and search for win, work, etc. :**

Liberty at all times during the term hereby demised to enter upon the said lands and to search for mineral, bore, dig, drill for win, work, dress, process, convert, carry away and dispose of the said minor mineral(s).

- 2. To sink, drive and make pit, shafts and inclines, etc. :**

Liberty for or in connection with any of the purposes mentioned in this clause to sink, drive, make, maintain and use in the said land and pits, shafts, inclines, drifts, levels, waterways, airways and other works and to use, maintain, deepen or extend any existing works of the like nature in the said lands.

- 3. To bring and use machinery, equipment :**

Liberty for or in connection with any of the purposes mentioned in this clause to erect, construct, maintain and use on or under the said lands any engine, machinery, plan, dressing floors, furnaces, coke, ovens, brick kilns, workshop, store houses, bungalows, godowns, shed and other buildings and other works and convenience of the like nature on or under the said lands.

- 4. To use water from streams, etc.:**

Liberty for or in connection with any of the purposes mentioned in this clause but subject to the rights of any existing or future lessees and with the written permission of the Collector concerned to appropriate and use water from any streams, water course, springs, or other source in or upon the said lands and to divert, step up or dam any such stream or water course, cultivated land, village buildings or watering places for livestock of a reasonable supply of water as before accustomed nor in any way to foul or pollute any streams or springs :

Provided that the lessee shall not interfere with navigation in any navigable stream nor shall divert such stream without the previous written permission of the Government.

5. To fell undergrowth and utilize timber and trees, etc.:

Liberty for or in connection with any of the purposes mentioned in this lease deed, to clear undergrowth and brush wood. Lessee shall not fell any trees or timber standing or found on the said lands without obtaining prior permission in writing from the Forest Department. In case such permission is granted, he shall pay in advance, the price of the trees/timber to be felled to the said officer at the rates, fixed by him.

6. To get building and roads material, etc. :

Liberty for or in connection with any of the purposes, mentioned in this lease deed, to quarry and get stones, gravel and other building and road materials and ordinary clay and to use and employ the same and to manufacture such clay into bricks or tiles and to use such bricks, tiles but not to sell any such materials, bricks, tiles.

7. To use land for stacking purpose :

Liberty to enter upon and use a sufficient part of the surface of the said lands for the purpose of stocking, storing or depositing therein any produce of the mines including over burden or waste material and works carried on ad tools, equipment and other materials needed for mining operations.

8. To install fuel pumps or stations for diesel or petrol for self use :

Liberty to use a sufficient part of the land for installing fuel pumps or stations for diesel or petrol for self use or consumption required for mining operations in the lease area, subject to permission of the authority.

9. To construct magazine for explosive and storage sheds :

Liberty to construct magazine for storage of explosive and storage sheds for explosive related substances with permission from licensing authority.

10. Liberty to seek permission for diversion of public roads, overhead electric lines :

Liberty and power to request to the competent authority for diversion of public road, overhead electric lines passing through the concession area at the expenses of the lessee to ensure scientific and systematic mining.

Part – II**Restrictions as to the exercise of the liberties by the lessee**

The liberties and privileges granted under Part – I are subject to the following restrictions and subject to other provisions of this lease :

I. No mining operations within the limit of public works, etc. :

The lessee shall not carry on, or allow to be carried on any mining operations :-

- (i) within a distance of 50 meters from the outer periphery of the defined limits of any village, habitation, National Highway, State Highway and other roads, where such excavation does not require use of explosives, unless specifically relaxed and permitted by the competent authority; or
- (ii) within a distance of 250 meters from the outer periphery of the defined limits of any village, habitation, National Highway, State Highway and other roads, where use of explosives is required, unless specifically relaxed and permitted by the competent authority or any specific dispensation is obtained from the Director, Mines Safety; or
- (iii) within a distance of 500 metres from major structures like R.C.C Bridges, Guide bund etc.; or
- (iv) within a distance of 75 meters from any railway line or bridge except under and in accordance with the written permission of the railway administration concerned. The Railway Administration or the Government may in granting such permission, impose such conditions as it may deem fit.

Explanation : For the purpose of this clause the expression Railway Administration shall have the same meaning as it is defined by sub-section (4) of section 3 of the Indian Railway Act, 1890.

Provided that where the continuance of any mining operations in any area, in the opinion of the Government is likely to endanger the safety of any National or State Highway, road, bridge, drainage, reservoir, tank, canal or other public works, or public or private buildings or in the public interest or in the interest of environment/ecology of the area, the Government may determine the lease after giving 60 days notice to the lessee in this behalf and the lease shall stand terminated on the date mentioned in this notice.

2. Working in sand Zones:

That the lessee in respect of sand zones, shall restrict the quarrying operations to maximum four villages of the zone at any point of time during the subsistence of the lease. The lessee shall have a right to change the site any time during the subsistence of the lease on settlement of compensation with the land owners of new site of the zone from where he intends to extract sand but ceiling of maximum four villages shall be adhered to strictly and such change of site shall be intimated to the competent authority.

3. Special conditions for river bed mining :

In case of river bed mining/excavation of minor mineral(s), in order to ensure safety of river-beds, structures and the adjoining areas, the following special conditions shall be abide by the lessee :

- (a) No mining would be permissible in a river-bed up to a distance of five times of the span of a bridge on up-stream side and ten times the span of such bridge on down-stream side, subject to a minimum of 250 metres on the up-stream side and 500 metres on the down-stream side;
- (b) There shall be maintain an un-mined block of 50 metres width after every block of 1,000 metres over which mining is undertaken or at such distance as may be directed by the competent authority;
- (c) The maximum depth of mining in the river bed shall not exceed three metres measured from the un-mined bed level at any point of time with proper bench formation.
- (d) Mining shall be restricted within the central $3/4^{\text{th}}$ width of the river/rivulet;
- (e) No mining shall be permissible in an area up to a width specified by the competent authority from the active edges of embankments;
- (f) Any other condition(s) as may be required by the competent authority in public interest.

4. Notice for surface operation in land not already in use :

Before using for surface operations any land which has not already been used for such operation, the lessee shall give notice in advance to the Collector of the District, the competent authority and the officer-in-Charge _____ in writing along

with copy of permission to undertake mining specifying the situation and the extend of the land proposed to be so used and the purpose for which the same is required and the said land shall not be so used, if objection is issued by the Collector.

5. Not to use the land for other purposes :

The lessee shall not cultivate or use the land for any other purpose other than those specified in the lease deed.

6. Disposal of mineral(s) only on issuance of Mineral Transit Pass:

The holder of mining lease shall not sell/dispose off any mineral or mineral products from the concession area without a Mineral Transit Pass.

7. Stacking of mineral(s) inside lease hold area :

The lessee shall not stock the mineral(s) excavated inside the lease hold area at the designated site more than twice the quantity of the average monthly production as per approved mining plan/scheme.

8. Stacking of mineral(s) outside lease hold area :

The lessee shall not stock any minor mineral(s) granted under the lease, outside the lease hold area.

9. Stacking and storage of incidentally extracted major minerals :

In case lessee, while extracting minor mineral(s) given on lease, incidentally extracts any major mineral not given on lease, the same shall be the property of the Government and lessee shall be under an obligation to stack and store it and maintain its proper record in accordance with the direction of the competent authority, who shall also be competent to prescribe the procedure for its disposal.

10. Penalties in case of non-compliance of clause (9) :

In case it is detected that lessee has disposed off incidentally extracted major mineral referred to in sub-rule (18) of rule 38 in whole or part thereof or failed to maintain the record of stored mineral, he shall be liable to penalties as specified in sub-section (1), (4) and (5) of section 21 of the Mines and Minerals (Development and Regulation) Act, 1957 and also premature determination of mining lease in terms of sub-rule (19) of rule 39 of the said rules.

11. Restrictions of mining operations above Ground Water Table :

A safety margin of two metres shall be maintained above the ground water table while undertaking mining and no mining operations shall be permissible below this level unless a specific permission is obtained from the competent authority in this behalf.

12. Restrictions of surface operations :

No mining operations shall be undertaken in any area prohibited by any authority or by the orders of any Court.

13. No mining operations without requisite clearance :

The lessee shall not undertake any mining operations in the area granted on mining lease without obtaining requisite clearance from the competent authority as required for undertaking mining operations.

Part – III
Covenants of the Lessee

The lessee/ lessees hereby covenant(s) with the Government as follows:-

1. Rate of Royalty :

The lessee shall pay royalty on the quantity of the said minor mineral dispatched from the leased area at the rates as per First Schedule of the Assam Minor Mineral Concession Rules, 2012 and as may be revised by the State Government from time to time.

2. Surface rent:

The lessee shall pay Surface rent for the surface area occupied by him as per rule 44.

3. Dead rent:

The lessee shall pay for every year dead rent at the rate as fixed by the Government from time to time.

Where the mining lease is granted by competitive bid/auction under rule 8:- The highest bid received in the open bid/auction at the rate of per annum shall become the 'annual dead rent' amount payable by the lessee. The rate of annual dead rent initially determined on the basis of competitive bids/ auctions shall be increased @ 25% on completion of each block of three years.

Explanation: If the initially determined amount of annual dead rent is Rs.100/-, it shall be increased to Rs.125/- with the commencement of the fourth year and to Rs.156.25 with the commencement of the 7th year and so on and so forth for the next each block of three years :

Provided further that if the lease permits the working of more than one minor mineral in the same area, the Government may charge separate dead rent in respect of each minor mineral :

Provided that the mining of one minor mineral does not involve the working of another minor mineral :

Provided further that the lessee/lessees shall be liable to pay the dead rent or royalty in respect of each mineral, whichever be higher but not both:

Provided further that lessee/ lessees shall deposit the dead rent at the rates as revised and notified from time to time by the State Government.

4. Security deposit :

25% of the annual bid amount/ rate of dead rent. The security amount to be deposited as per following :-

- (i) 10% as initial bid security at the time of auction
- (ii) 15% of the annual bid amount before commencement of mining operations or before the expiry of period allowed, which shall not be more than 12 months, whichever is earlier :

Provided on enhancement of the dead rent after expiry of every three year period of lease the lessee shall deposit the balance amount of security so as to upscale the security amount equal to 25% of the revised annual dead rent as applicable for one year with respect to next block of three years

5. Mode of payment of dead rent/ royalty and surface rent :

- (a) In case of mining lease granted under rule 8, the lessee shall deposit one advance instalment of dead rent before commencement of mining operations or before the expiry of period allowed, which shall not be more than 12 months, whichever is earlier, along with 15% of the balance security amount as per clause 4(a) above.
- (b) The lessee during the subsistence of the lease, pay in advance to the Government the instalments of the dead rent in respect of the said land given to him/ them on mining lease in four quarterly instalments on the 1st of April, 1st of June, 1st of September and 1st of December of the year.

Note: The amount of one advance instalment deposited at the time of commencement of the mining operations or within time allowed for the same shall be adjusted in a manner that the subsequent instalments are payable for a full calendar month/quarter/year, as the case may be.

- (c) The lessee shall be liable to pay the amount of royalty on the mineral excavated and dispatched at the rate specified in the first schedule or dead rent, whichever is more and not both.

- (d) Where the amount of royalty payable in respect of a month exceeds the amount of dead rent deposited in advance, the lessee shall deposit such amount of royalty on the mineral extracted and dispatched or consumed by the 7th day of the following month after adjusting the amount of advance dead rent already deposited.
- (e) In cases where the lessee has paid the amount of royalty or dead rent during a part of the year, which is equal to or more than the annual dead rent payable for the year, he shall not be required to deposit the advance dead rent for the remaining period of the said year and the royalty for the balance part of the year shall be deposited by the 7th day of the following month.

6. Amount to be deposited on account of Mines and Minerals Development Restoration and Rehabilitation Fund :

Where the lessee is operating the area, he shall also deposit/ pay an additional amount, equal to 10% of the due dead rent or royalty, whichever is more along with amount of instalments on account of dead rent or royalty, towards the 'Mines and Minerals Development Restoration and Rehabilitation Fund' separately established under these rules.

7. Interest on delayed payments :

In case of any default in payment of the instalments of dead rent/contract money/ contribution to the Mines and Minerals Development (Restoration and Rehabilitation) Fund on the due date(s), the amount would be payable along with interest at the following rates :

Sr. No.	Period of delay	Rate of Interest applicable
(i)	If paid within a period of 7 days from the due date	A grace period of up to 7 days is allowed without any interest;
(ii)	If paid after 7 days but up to 30 days of the due date	15% on the amount of default for the period of default including the grace period;
(iii)	If paid after 30 days but within 60 days of the due date	18% on the amount of default for the period of default including the grace period;
(iv)	Delay beyond 60 days of the due date	It would amount to a 'breach', invite action for termination of the lease/ contract and the entire outstanding amount would be recoverable along with interest calculated @ 21% for the entire period of default.

8. Working of newly discovered minerals :

If any minor mineral, not specified in the lease, is discovered in the leased area, the lessee shall report the discovery without delay to the competent authority and shall not win or dispose of such minor mineral without obtaining a lease therefor. If he fails to apply for such a lease within six months from the discovery of the minor mineral, the competent authority may give the lease in respect of such mineral, to any other person :

Provided that the grant of such permit may be refused for reasons to be recorded in writing:

9. To commence mining operations within 180 days and carry them on properly :

Unless the competent authority for sufficient cause allows otherwise, the lessee shall commence mining operations 180 days from the date of execution of the lease and shall thereafter conduct such operations in a proper, skilful and workman like manner.

Explanation :— For the purpose of this clause, mining operations shall include the erection of machinery laying of a tramway or construction of a road in connection with the working of the mine.

10. To erect and maintain boundary pillars etc. :

The lessee shall at his own expenses, erect and at all times maintain and keep in good repairs boundary marks and pillars according to the plan annexed to the lease. Each of the pillars should be numbered and every pillar shall have GPS reading.

11. Accounts :

The lessee shall keep correct accounts showing the quantity and other particulars of all minerals obtained from the mines and the number of persons employed therein and a complete plan of the mine and shall allow any officer authorised by the Assam Government or the Central Government in that behalf to examine at any time any accounts and records maintained by him, and shall furnish to the Assam Government or competent authority or the Central Government or the competent authority with such information and returns as it may require.

12. To allow facilities to other lessees etc. :

In addition to the concession holders under Rule – 5 of the Assam Minor Mineral Concession Rules, 2012, the lessee shall allow existing and future licensees or lease holders/contractors of any land which is comprised in or adjoins or is reached by the land, held by the lessee, reasonable facilities for access thereto.

13. To allow entry to officers :

The lessee shall allow any officer authorised by the Assam Government and the Central Government or competent authority to enter upon any building, excavation or land comprised in the lease for the purpose of inspecting the mines.

14. Returns :

The lessee shall :—

- (a) submit a return in form 'MMP1' by the 7th of every month to the competent authority and also to other officer(s) specified giving the total quantity of minor

mineral(s) raised and dispatched from the leased area in the preceding calendar month and its value ;

- (b) also furnish a statement giving information in Form 'MMP2' by the 15th April every year to the competent authority and to other Officer(s), specified regarding quantity and value of minor mineral(s) obtained during last financial year, average number of regular labourers employed (men and women separately) number of accidents, compensation paid and number of days worked separately.

15. To strengthen and support the mines :

The lessee shall strengthen and support to the satisfaction of the Railway Administration or the State Government, as the case may be any part of the mine which in its opinion requires such, strengthening or support for the safety of any railway, bridge, national highway, reservoirs, canal, road or any other public work or building.

16. Notice for use of explosives, etc. :

The lessee shall immediately give notice in writing in Form 'IMSBF' to the following:

1. The Controller General, Indian Bureau of Mines, Government of India, Nagpur;
2. The Director General of Mines Safety, Government of India, Dhanbad;
3. The Director, Mines Safety, Government of India, Guwahati;
4. The Regional Controller of Mines, Indian Bureau of Mines, Kolkata;
5. The competent authority;
6. The District Magistrate of the District concerned; and
7. The Officer-in-charge as soon as :
 - (a) The working in the mines extend below superjacent ground; or
 - (b) The depth of any open cast excavation measured from its highest to the lowest point reaches six metres; or
 - (c) The number of persons employed on any day is more than 50;

or

- (d) Any explosives are used.

17. Maintenance of Sanitary conditions :

The Lessee shall maintain sanitary conditions in the area held by him under the lease.

18. To pay compensation for damage and indemnify the Government :

The lessee shall make and pay such reasonable satisfaction and compensation for all damage, injury or disturbance which may be done by him in exercise of the powers granted by the lease and shall indemnify the Government against all claims which may be made by third parties in respect of such damage, injury or disturbance.

19. Application of all Acts, Rules and Regulations to this lease :

The lessee shall abide by the provisions of Mines Act, 1952, and the rules framed there under and also the provisions of other labour laws both Central and State as are applicable to the workmen engaged in the mines and quarries relating to the provisions of drinking water, rest shelters, dwelling houses, latrines and first-aid and medical facilities in particular and other safety and welfare provisions in general, to the satisfaction of the competent authorities under the aforesaid Acts, Rules and Regulations and also to the satisfaction of the District Magistrate concerned. In case of non compliance of any of the provisions of the enactments as aforesaid, competent authority may terminate the mining lease by giving one month's notice with forfeiture of security deposited :

Provided that the lessee shall carry out mining operations in accordance with all other provisions as applicable for undertaking mining including the provisions of Forest (Conservation) Act, 1980 and Environment (Protection) Act, 1986 and the rules made thereunder.

20. To report accident :

The lessee shall without delay report to the Deputy Commissioner of the district concerned and the competent authority or any other officer authorised by him, any accident which may occur at or in the leased area.

21. Delivery of possession of land and mines on the surrender or sooner determination of the lease :

At the end or sooner determination or surrender of the lease the Lessee shall deliver up the said lands and all mines (if any dug there) in a proper and workable state, save in respect of any working as to which the Government might have sanctioned abandonment.

22. To provide electronic weighing machine :

The lessee shall provide and at all times keep at or near the pit-head at which the said mineral shall be brought to bank a properly constructed and efficient electronic weighing machine and shall weigh or caused to be weighed thereon all the said minor minerals from time to time brought to bank, sold, exported and converted products, and shall at the close of each day cause the total weights, ascertained by such means of the said minor minerals, ores, products, raised, sold, exported and converted during the previous twenty four hours to be entered in the aforesaid books of accounts. The lessee shall permit the Government at all times during the said term to employ any persons to be present at the weighing of the said minor minerals, as aforesaid and to keep accounts thereof and to check the accounts kept by the lessee. The lessee shall give 15 days previous notice in writing to the Officer-in-Charge _____ of every such measuring or weighing in order that he or some officer on his behalf may be present thereat.

23. To secure pits shafts not fill them up :

The lessee shall well and properly secure pits and shafts and will not without permission in writing, wilfully close, fill up or close any mine or shaft.

24. Not to enter upon or to commence operations in the Forest land :

The lessee shall not enter upon or commence any mining operations in any forest land comprised in the leased area except after obtaining permission in writing of the Forest Department, Assam.

25. To respect water rights and not injure adjoining property :

The lessee shall not injure or cause to deteriorate any source of water, power or water-supply and shall not in any other way render any spring or stream or water unfit to be used or to do anything to injure adjoining land, villages or houses.

26. Stocks lying at the end of the lease :

(a) The lessee on expiry of the lease period (successful completion of the lease) shall remove already extracted all of the mineral from the premises of the quarry within a period of seven days. In case any quantity of the already extracted mineral, in the said land is left undisposed off and is not removed within seven days from the date of expiry of the period of lease the same shall be deemed to be the property of the Government who may dispose it off in any manner it may like without paying anything thereof to the lessee.

(b) The lessee on the termination or sooner determination of the lease shall not remove extracted mineral from the premises of the leased areas. All extracted minerals in the said lands left over un-disposed after the termination or determination of lease shall be deemed to be property of the Government and competent authority, may dispose it off in any manner it may like without paying anything thereof to the lessee.

27. Payment of taxes :

The lessee shall duly and regularly pay to the appropriate authority all taxes, cesses and local dues in respect of the leased area, said minor minerals or the working of the mines.

28. Payment of additional amount for reclamation/ restoration :

The lessee shall also deposit/pay additional amount equal to 10% of the amount of royalty/dead rent along with the payment of royalty or dead rent, whichever is more, by the 7th of every month, to ensure the compliance of the Reclamation and Restoration works. This additional amount shall be refunded after satisfactory Reclamation/ Restoration of the area after mining in accordance with the Mine Closure Plan :

Provided that in case the lessee fails to reclaim/ restore the area as per mining plan to the satisfactions of the State Government, the amount deposited shall be forfeited and used for the restoration of the area :

Provided further that in case no rehabilitation position of the mine comes during the tenure of the mining lease, the amount so deposited shall be kept by the State Government in the mining area development fund for future use as and when the mine reaches to a stage requiring restoration and rehabilitation.

29. Assign sublet or transfer of the lease :

The lessee shall not assign, sublet or transfer the lease to any person without obtaining prior permission in writing from the competent authority.

30. Fencing of working place :

If a working place is found to be unsafe all persons shall be withdrawn by the lessee immediately from the dangerous area and all access to such working place except for the purpose of removing the danger or saving life shall be prevented by securely fencing the full width of all entrances to the place, at his own cost.

31. Fencing of excavation after termination or sooner determination of the lease :

The lessee on termination or sooner determination of the lease, shall at his own cost, suitably fence the excavations for safety as competent authority.

32. Felling of trees:

The lessee shall not fell or cut any tree, standing on the land wherein the quarry is located without obtaining prior permission in writing from the Forest Department, Assam and paying its price as fixed.

33. Security deposit shall carry no interest:

The security deposited by the lessee shall not carry any interest.

34. State Government not responsible for loss to lessee:

The Government shall not be responsible for any kind of loss to the lessee.

Part-IV

Rights of the State Government

1. Suspension or termination of the lease :

The competent authority shall have the right to suspend or prematurely terminate the lease.

- (a) If the dead rent or royalty or surface rent or any other amount due to the Government are not paid;

- (b) if any of the terms and conditions of the lease deed or conditions of grant or permission to undertake mining by any other statutory authority or competent authority is violated;
- (c) if any of the provisions of these rules and other laws both Central and State as are applicable to mines and minerals, are not complied with :

Provided that no orders of suspension or termination of the lease shall be passed by the competent authority without giving reasonable opportunity to show cause and following the procedure prescribed in the Assam Minor Mineral Concession Rules, 2012.

Provided further that the competent authority may also at any time after issuance of the notice for default on account of non payment of dues, enter upon the said premises and detain all or any of the mineral(s) or movable property therein and may carry away, detain, or order the sale of the property so detained, or so much of it as will suffice for the satisfaction of the rent or royalty or both dues and all costs and expenses occasioned by the non-payment thereof and shall give proper receipt of the articles carried away.

2. Determination of lease in public interest :

The Government may by giving 'six months' prior notice in writing determine the lease if the Government consider that the minor mineral under the lease is required for establishing an Industry beneficial to the public :

Provided that in the State of National Emergency or War, the lease may be determined without giving such notice.

3. Right of pre-emption :

The government shall from time to time and at all times during the terms of lease have the right (to be exercised by notice in writing to the lessee) of pre-emption of the said mineral(s) and all products thereof lying in or upon the said lands hereby demised or elsewhere under the control of the lessee and the lessee shall deliver all minerals or products thereof to the Government at current market rates in such quantities and in the manner at the place specified in the notice exercising the said right.

4. Penalty for not allowing entry to officers:

If the lessee or his transferee or assignee does not allow any entry or inspection under clause (13) of part-III, the competent authority may cancel the lease and forfeit in whole or in part the security deposit paid by the lessee.

5. Settlement of Rent and Compensation Payable to third parties thereof :

In case the occupier(s) or owner(s) of the said land refuses his/ their consent to the exercise of the rights and powers reserved to the Government and demised to the lessee under these presents, the lessee shall report the matter to the competent authority who

shall request the Collector of the District concerned to direct the occupier(s) or owner(s) to allow the lessee to enter the said lands and to carry out such operations as may be necessary for working the mine, on payment in advance of such rent or compensation to the occupier or owner by the lessee, as may be fixed by the Collector as per the provisions of rules 46 and 47 of the rules.

6. Suspension of mining operations :

The competent authority may order to suspend the mining operations after serving a notice to the lessee, in case, the following violations are noticed:—

- (a) unsafe and unscientific mining;
- (b) non operations of weighbridge;
- (c) non providing of safety appliances to the workers;
- (d) non payment of compensation to the surface owners;
- (e) non submissions of monthly returns;

In case of violations of the aforesaid conditions and also any other terms and conditions of the agreement deed and the provisions of the rules, the competent authority may give a notice to the lessee to remedy the violations within a period of 15 days from the date of issue of the notice. In case, the violations pointed out through notice, are not remedied within the stipulated period of 15 days, the competent authority may after affording an opportunity of being heard to the lessee, order the suspension of the mining operations till such time, the defaults/ defects are removed by the lessee within the time frame (within a maximum period of six months) granted by the competent authority. During the period of suspension of mining operations, the lessee will be allowed only to undertake rectification work for removal of the defects and shall not dispose of the mineral. During the suspension period, the lessee shall be under the obligation to deposit the amount of the dead rent on the due dates.

On satisfactory removal of the defects, the competent authority may revoke the suspension orders with or without any modification. Non removal of the defects/ defaults during the suspension period and within the time allowed by the competent authority, shall lead to premature termination of lease.

Part-V

General

1. Cancellation:

The lease shall be liable to be cancelled by the competent authority if the lessee cease to work the mine for a continued period of six months without obtaining written sanction.

2. Notices :

Every notice by these presents required to be given to the lessee shall be given in writing to such person resident on the said lands as the lessee may appoint for the

purpose of receiving such notices and if there shall have been no such appointment then every such notice shall be sent to the lessee by registered post addressed to the lessee at the address recorded in this lease or at such other address in India as the lessee may from time to time in writing to the competent authority designate for the receipt of notices and every such service shall be deemed to be proper and valid service upon the lessee and shall not be questioned or challenged by him.

3. Recovery of government dues as arrears of land revenue:

Without prejudice to any other mode of recovery authorised by any provision of this lease or by any law, all amounts, falling due hereunder against the lessee may be recovered as arrears of land revenue under the law in force for such recovery.

4. Forfeiture of property left more than three months after expiry or determination of lease :

The lessee should remove his property lying on the said lands within three months after the expiry or sooner determination of the lease or after the date from which any surrender by the lessee of the said lands under relevant rules of the Assam Minor Mineral Concession Rules, 2012 becomes effective, as the case may be, the property left after the aforesaid period shall become the property of the Government and may be sold or disposed of in such manner as the competent authority shall deem fit without liability to pay any compensation therefore, to the lessee.

5. Security and forfeiture thereof :

- a. the competent authority may forfeit the whole or any part of the amount deposited as 'Security' under this lease, in case the lessee commits a breach(s) of any covenants to be performed by the lessee under this lease.
- b. Whenever the said security deposit or any part thereof or any further sum hereafter deposited with the competent authority in replenishment thereof is forfeited under sub clause (a) or applied by the competent authority under this lease (which the Government is hereby authorised to do) the lessee shall immediately deposit with the inappropriate part thereof to bring the amount in deposit with the Government up to the requisite amount of security at that point of time of lease.
- c. The rights conferred to the Government by clause (a) shall be without prejudice to the rights conferred on the State Government by any other provision of this lease or by any law.
- d. On such date as the competent authority may elect within twelve calendar months after the determination of this lease or any renewal thereof, the amount of security deposit paid in respect of this lease and then remaining in deposit with the Government and not required to be applied to any of the purposes mentioned in this lease shall be refunded to the lessee. No interest shall run on the security deposit.

6. Survey and demarcation of the area :

When a mining lease is granted arrangement shall be made, if necessary, at the expense of the lessee, for the survey and demarcation of the area granted under the lease. The lessee shall have to bear actual expenses of the staff deputed for the work. Actual expenses will include travelling allowances, daily allowances and salary of staff plus 10 percent as instrument charges.

7. Surrender of a mining lease by the lessee :

The Government may accept the request of a lease holder for surrender of a lease or part thereof in cases where it is established that it has not been found feasible to operate the lease grant for whatsoever reasons subject to the condition that the lessee :

- (i) has been regular in furnishing the production returns as required in terms of the lease agreement;
- (i) has been taking the requisite steps for the progressive mine closure plan as per the conditions of the lease grant;
- (iv) is not in default of payment of any dues of the Government as on the date of making such application and undertakes to pay all such dues till the date of expiry of the notice period either in cash in advance or by way of adjustment of the security or both:

Provided that in case the lessee makes an application for surrender of part area of the lease, it shall not result in any prorated reduction of the dead rent and the rate of dead rent payable and applicable for the entire area at the time of such application shall remain intact.

8. Penalty for repeated breaches :

In case of repeated breaches of covenants and agreements by the lessee for which notice has been given by the competent authority in accordance with Sub-rule (1) of Rule 55 and/ or sub rule(1) of rule 56 of the Assam Minor Mineral Concession Rules, 2012 on earlier occasions, the competent authority without giving any further notice, may impose such penalty not exceeding twice the amount of annual dead rent specified in clause 3 of part-III of this form.

9. Obtaining sales tax number :

The lessee shall get himself registered with the commercial Taxes Department of Assam State and shall obtain the Sales Tax Number.

10. Overriding effect :

Unless otherwise specifically provided, it is agreed that this deed shall be governed by the provisions of the Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957) and the rules made thereunder. The provisions of the Act and the rules shall prevail over the terms and conditions of the agreement.

IN WITNESS WHEREOF: - These presents have been executed in the manner hereunder appearing the day and year first above written.

Signature of the Lessee

For and on behalf of the Government of Assam.

Witness :-

1. _____

1. _____

2. _____

2. _____

Signature of surety

Witness

1. _____

2. _____

FORM ML-2*{See rule 9(1)}***(Register of application for grant/ renewal of Mining Lease)**

1	Serial Number
2	Date of application for grant or renewal of mining lease
3	Date on which application was received by the Receiving Officer
4	Name of applicant with full address
5	Situation of the land applied for viz village and district with details
6	Estimated area of the land
7	Particulars of minerals which the applicant intends to mine
8	Amount of application fee paid
9	Final disposal of application together with number and date of the order
10	Remarks
11	Signatures of the Officer

FORM ML-3

{See rule 9 (2)}

(Mining Lease Register)

1	Serial number	
2	(a) Date of application (b) Date of receipt of the application	
3	Name and address of the applicant	
4	Situation and boundaries of the land	
5	The mineral granted under mining lease	
6	The total area	
7	Number and date of grant of the lease	
8	Period for which granted	
9	Date of execution of the lease deed	
10	Number, date and period of renewal	
11	Amount of security deposited	
12	Particulars of disposal or refund of security deposit	
13	Date of assignment or transfer of the lease, if any and fee paid thereof and the names of the parties thereto	
14	Date of expiry or relinquishment or cancellation	
15	Date from which the area is available for re-grant	
16	Signature of the Officer-In-charge	

FORM ML-4

{See rule 12 (10)}

(Model Form for transfer of Mining Lease/Mining Contract)

The indenture made this day of 20
 between (Name of the person with
 address and occupation) (hereinafter referred to as the 'transferor' which expression
 shall where the context so admits be deemed to include his heirs, executors,
 administrators, representatives and permitted assigns). or

Where the transferors are more than one individuals
 (Name of the persons with address and occupations) and (Name
 of the persons with address and occupations) (hereinafter referred to as the 'transferor'
 which expression shall where the context so admits be deemed to include their heirs,
 executors, administrators, representatives and their permitted assigns). or

Where the transferor is a registered firm (Name of the
 persons with address of all the partners) all carrying on business in partnership under
 the firm name and style of (Name of the firm)
 registered under the Indian Partnership Act, 1932 (9 of 1932) and having their
 registered office at (Address) (hereinafter referred
 to as the 'transferor' which expression shall where the context so admits shall be
 deemed to include all the said partners, their respective heirs, executors, legal
 representatives and their permitted assigns). or

Where the transferor is a registered company (Name
 of company) a company registered under the Companies Act 1956 and having its
 registered office at (Address) (hereinafter referred to as the
 'transferor' which expression shall where the context so admits be deemed to include
 its successors and permitted assigns) of the first part.

Where the transferee is an individual
 (Name of the person with address and occupation) (hereinafter referred to as the
 'transferee' which expression shall where the context so admits be deemed to include
 his heirs, executors, administrators, representatives and permitted assigns). or

Where the transferees are more than one individuals
 (Name of the persons with address and occupations) and (Name
 of the persons with address and occupations) (hereinafter referred to as the 'transferee'
 which expression shall where the context so admits be deemed to include their heirs,
 executors, administrators, representatives and their permitted assigns). or

Where the transferee is a registered firm (Name of the
 persons with address of all the partners) all carrying on business in partnership under
 the firm name and style of (Name of the firm)
 registered under the Indian Partnership Act, 1932 (9 of 1932) and having their
 registered office at (Address) (hereinafter referred

to as the 'transferee' which expression shall where the context so admits shall be deemed to include all the said partners, their respective heirs, executors, legal representatives and their permitted assigns).

Where the transferee is a registered company (Name of company) a company registered under the Companies Act 1956 and having its registered office at (Address) (hereinafter referred to as the 'transferee' which expression shall where the context so admits be deemed to include its successors and permitted assigns) of the second part.

Where the Governor of Assam (hereinafter referred to as the 'Government' which expression shall where the context so admits be deemed to include successors and assigns) of the third part.

Whereas by virtue of an indenture of lease dated the (dated) (hereinafter referred to as lease) the original whereof is attached hereto and marked 'A' entered into between the Government (therein called the lessor) and the transferor (therein called the lessee/contractor) is entitled to search for, win and work the mines and minerals in respect of (Name of minerals) in the land described in Schedule thereto and also in Schedule annexed thereto for the term and subject to the payment of rents and royalties and observance and performance of the lessee's/contractor's covenant and conditions in the said deed of lease/contract reserved and contained including a covenant not to assign the lease/contract or any interest there under without the previous sanction of the Government.

Whereas the transferor is now desirous of transferring and assigning the lease/contract to the transferee and the Government has, at the request of the transferor, granted permission to the transferor vide order No..... dated to such a transfer and assignment of the lease/contract upon the conditions of the transferees entering into an agreement is and containing the terms and conditions hereinafter set forth.

Now this Deed Witnesseth as follows:

2. The transferee hereby covenants with the Government that from and after the transfer and assignment of the lease/contract, the transferee shall be bound by, and be liable to perform, observe and conform and be subject to all the provisions of all the covenants, stipulations and conditions contained in said hereinbefore recited lease in the same manner in all respects as if the lease/contract had been granted to the transferee as the lessee/contractor there under and he had originally executed it such.
3. It is further hereby agreed and declared by the transferor of the one part and transferee of the other part that:-
 - (i) the transferor and transferee declare that they have ensured that the mineral rights over the area for which the mining lease/contract is being transferred, vest in the Government;

- (ii) the transferor hereby declares that he has not assigned subject, mortgaged or any other manner, transferred the mining lease/contract now being transferred and that no other person has any right, title or interest where under in the present mining lease/contract being transferred;
- (iii) the transferor further declares that he has not entered into or made any agreement, contract or understanding whereby he has been or is being directly or indirectly financed to a substantial extent by or under which the transferor's operation or understandings were or are being substantially controlled by any person or body of persons other than the transferor;
- (v) the transferee hereby declares that he has accepted all the conditions and liabilities which the transferor was having in respect of such mining lease/contract;
- (vi) the transferee further declares that he is financially capable of and will directly undertake mining operations;
- (vii) the transferee further declares that he has filed an affidavit stating that he has filed up to date income tax returns, paid the income tax assessed as provided in the Income Tax Act, 1961 (43 of 1961);
- (viii) the transferor has supplied to the transferee the original or certified copies of all the plans of abandoned workings in the area and in a belt 65 metres width surrounding it;
- (ix) the transferee hereby further declares that as a consequence of this transfer, the total area held by him under mineral concession are not in contravention of the provisions of the Rules;
- (x) the transferor has paid all the rents, royalties, and other dues towards Government till the date, in respect of this lease.

In witness whereof the parties hereto have signed on the date and year first above written.

Signature of the transferor

For and on behalf of the Governor of Assam

Witness:-

1. _____
2. _____

1. _____
2. _____

Signature of Transferee

Witness:-

1. _____
2. _____

FORM ML-5

{See rule 13(2)}

(Application for renewal of Mining lease)

Received at _____ (Place) at _____ (Hours)
on the _____ day of _____

From

To

The _____

Dated the _____ 20

- I. I/ we hereby apply for renewal of a mining lease for _____ (name of minor mineral(s)) for a term of _____ years over _____ hectares of land in the area specified in the Schedule.
- II. A sum of Rs. on account of application fee payable under rule 13 of the Assam Minor Mineral Concession Rules, 2012, deposited in the Government Treasury and the receipted Challan thereof Demand Bank Draft No. _____ dated _____ is enclosed.
- III. The required particulars are given below :—

PARTICULARS

1	Name of applicant individual/firm/company or society.	
2	Nationality of the individual or place of registration or incorporation of firm, company or society.	
3	Profession or nature of business of individual or firm or company and place of business.	
4	Address of the individual/ firm/company or society.	
5	Name of Minor Mineral which the applicant intends to mine.	
6	Period for which the original lease was granted.	

7	Manner in which the Minor Mineral(s) is to be utilized : (a) for manufacture (b) for sale (c) any other purpose In case of manufacture, the industries in connection with which it is required should be specified.	
8	A description illustrated by a map or plan (in triplicate) showing as accurate as possible the situation, boundaries and area of land in respect of which the lease is required and where the area is un-surveyed the location of the area should be shown by some permanent physical features i.e. road, tanks etc.	
9	A statement showing all the areas within jurisdiction of the Government :— (i) already held by me/us in my/our name/names (and jointly with others) under quarrying leases specifying the names of minor minerals. (ii) already applied for but not yet granted, and (iii) applied for simultaneously or being applied for in the State. Note: No application will be held to be complete for the purpose of priority unless it furnishes the particular required by paragraphs i), ii) and iii) and is properly signed and stamped.	
10	Period for which renewal of mining lease is required	
11	Whether renewal is applied for the whole or part of the lease held	
12	In case the renewal applied for is only for part of the lease held :- a. The area applied for renewal. b. Description of the area applied for renewal. c. Map (in triplicate) of the lease held with area applied for renewal clearly marked on it (copy of map attached).	
13	Means by which the minor mineral is to be raised i.e. by hand, labour or mechanical or electric power	
14	Year-wise quantity of the mineral(s) excavated along with royalty paid in each year since grant of lease. (attached no due certificate of concerned Officer-In-charge.	
15	Mineral reserves available	
16	Details of explorations undertaken, if any	

17	Details of the mined out areas restored/ reclaimed/ rehabilitated as per progressive mine closure plan	
18	Details of the sites of overburden restored	
19	Details of the compliance of:- (i) Environmental Clearance; (ii) Mining plan/ scheme of mining; (iii) Safety provisions as per the Mines Act, 1952 and the rules and regulations framed thereunder; and (iv) other relevant laws and terms and conditions applicable on Mines and Minerals	
20	Details of defaults, if any, in submission of production returns, payment of royalty/dead rent and found wanting in taking adequate measures for labour safety.	
21	Details of investment made in development of mine, plant and machinery with a long term perspective and optimal benefit of the same could not have derived during the original period of lease	
22	Any other particulars which the applicant wishes to furnish.	
Schedule giving description of the area applied for		
1	Name of village, Sub-Division and District	
2	In the case of forest land, the name of the range and Division	
3	Dag and Patta Numbers and area of each field or part thereof	
3.1	Patta No. a) b)	Area a) b)
3.2	Full description of the area applied for with regard to its natural features :-	
3.3	Felling series and working circle, if any	
3.4	District	

(Signature of applicant)

Place _____

Date _____

N.B. — If the application is signed by an authorised agent of the applicant, power of attorney should be attached.

This is not necessary if whole village or a well defined portion thereof is applied for or if the area lies in Government Forest. If all the numbers cannot be entered in this form they should be continued on a separate sheet attached to it and signed. Where a portion of a Patta number only is required the approximate area of such portion will suffice.

FORM ML-6*(See rule 14)***(Acknowledgement of Application for renewal of Mining Lease)****Government of Assam**

No.

Dated

Received the application with the following enclosures for a mining lease in respect of minor mineral of Shri/M/s----- at -----
 --- AM/PM on ----- for about ----- hectares of land village -----
 - sub-division ----- district ----- for mining of ----- (Name of the minor mineral):

**Signature and Designation of
The Receiving Officer.**

Place:

Dated

Enclosures:

FORM MC-1

(See rule 18 (3) and 22(1))

(Model Form for execution of mining contract)

This indenture made on this _____ day of _____ 20____ between the Governor of Assam acting through _____ (hereinafter referred to as the "State Government" which expression shall where the context so admits, include the successors and assigns) of the one part; and

Where the Contractor is an individual:- _____ (Name and address of the person) (hereinafter referred to as the "Contractor" which expression shall where the context so admits, includes his heirs, executors, administrator, representatives and permitted assigns)

Where the Contractor is more than one individual:- _____ (Name and address of persons) (hereinafter referred to as the "Contractor" which expression shall where the context so admits include their respective heirs, executors, administrators, representatives and permitted assigns)

Where the Contractor is registered firm:- _____ (Name and address of all the partners or members, where the "Contractor" are a firm or society) all carrying on business in partnership under the firm name and style of _____ (name of the firm and address) registered under Indian Partnership Act 1932 and having their registered office at _____ (hereinafter referred to as the "Contractor" which expression shall where the context so admits include all partner of the said firm, their representatives, heirs, executors/Administrators and permitted assigns).

Where the Contractor is a registered company:- _____ (Name of the company) a company registered under _____ (Act under which company incorporated) and having its registered office at _____ (address) (hereinafter referred to as the "Contractor" which expression shall where the context so admits, include its successors and permitted assigns) of the other part.

Whereas the "Contractor" has offered the highest bid of Rs. _____ (in words Rupees _____) in the bid/auction held on _____ for obtaining a mining contract for _____ cu.m. (in words _____ cubic metres (name of minor minerals) in respect of the lands hereinafter described in clause 2 and such bid had been accepted by the officer authorized in this behalf and the contractor has deposited with the Government, a sum of Rs. _____ (Rupees _____) as initial bid security (10% of the annual bid amount) and Shri _____ S/o Shri _____ resident of _____ District _____ (referred to as the 'surety' which expression shall where the context so admits, include his heirs, executors, administrators, representatives) has been offered as solvent surety for the aforesaid

amount, and whereas the contractor is in possession of a Income Tax Clearance Certificate.

Now, therefore, this deed witnesses and the parties hereby agree as follows: —

Liberties and privileges to be exercised and enjoyed by the Contractor.

The following liberties, powers and privileges may be exercised and enjoyed by the contractor subject to the other provisions of contract :—

(1) In consideration of the contract money, covenants and agreements hereinafter contained and on the part of the Contractor to be paid, observed and performed the Government hereby grants and demises unto the contractor all those mines/beds/veins/seams of _____ (hereinafter referred to as the said minor minerals,) situated, lying and being in or under the lands which are referred to in clause (b) together with the liberties, powers and privileges to be executed or enjoyed in connection herewith which are hereinafter mentioned in Part-I subject to the restrictions and conditions as to exercise and enjoyment of such liberties, and privileges which are hereinafter mentioned in Part- II and subject to other provisions of this contract.

(2) All the tract of land situated at village _____ in Sub-Division _____ District _____ bearing Dag and Patta Nos. _____ containing an area of _____ or thereabouts delineated on the plan hereto annexed and bounded as follows:

On the North by _____;
On the South by _____;
On the East by _____;
On the West by _____;

and (hereinafter referred to as the 'said lands' or the 'Contracted area')

(3) The contractor shall hold the premises hereby granted and demised from the _____ day _____ for the term of _____ years thence next ensuing.

Part-I

Liberties and privileges to be exercised and enjoyed by the Contractor

The following liberties and privileges may be exercised and enjoyed by the contractor subject to the other provision of contract: —

1. To enter upon land and search for win, work :

Liberty at all times during the term hereby demised to enter upon the said lands and to search for mineral, bore, dig, drill for win, work, dress, process, convert, carry away and dispose of the said minor mineral(s).

ii. To sink, drive and make pit, shafts and inclines :

Liberty to sink, drive, make, maintain and use in the said land and pits, shafts, inclines, drifts, levels, waterways, airways and other works and to use, maintain, deepen or extend any existing works of the like nature in the said lands.

iii. To bring and use machinery, equipment:

Liberty to erect, construct, maintain and use on or under the said lands any engine, machinery, plan, dressing floors, furnaces, coke ovens, brick kilns, workshop, store houses, bungalows, godowns, shed and other buildings and other works and conveniences of the like nature on or under the said lands.

iv. To use water from streams :

Liberty but subject to the rights of any existing or future contractor and with the written permission of the Collector concerned to appropriate and use water from any streams, water course, springs or other source in or upon the said lands and to divert, step up or dam any such stream or water-course and collect or impound any such water and to make, construct and maintain any water course, cultivated land, village buildings or watering places for livestock of a reasonable supply of water as before accustomed nor in any way to foul or pollute any streams or springs : provided that the contractor/contractors shall not interfere with navigation in any navigable stream nor shall divert such stream without the previous written permission of the Government.

v. To fell undergrowth and utilise timber and trees :

Liberty to clear undergrowth and brush wood. Contractor shall not fell any trees or timber standing or found on the said lands without obtaining prior permission in writing from the Forest Department. In case such permission is granted, he shall pay in advance, the price of the trees/timber to be felled to the said Officer at the rates, fixed by him.

vi. To get building and roads material :

Liberty to quarry and get stones, gravel and other building and road materials and ordinary clay and to use and employ the same and to manufacture such clay into bricks or tiles and to use such bricks, tiles but not to sell any such material, bricks, tiles.

vii. To use land for stacking purpose :

Liberty to use a sufficient part of the surface of the said lands for the purpose of stocking, storing or depositing therein any produce of the mines including over burden/waste material and works carried on and tools, equipment and other materials needed for mining operations.

viii. To install fuel pumps or stations for Diesel or Petrol for self use:

Liberty to use a sufficient part of the land for installing fuel pumps or stations for diesel or petrol for self use /consumption required for mining operations in the contract area, subject to permission of the authority.

ix. To construct magazine for explosive and storage sheds:

Liberty to construct magazine for storage of explosive and storage sheds for explosive related substances with permission from licensing authority.

x. Liberty to seek permission for diversion of public roads, overhead electric lines:

Liberty to request to the competent authority for diversion of public road over head electric lines passing through the concession area at the expenses of lessee to ensure scientific and systematic mining.

Part-II**Restrictions as to the Exercise of the Liberties by the contractor**

The liberties and privileges granted under Part- I are subject to the following restrictions and subject to other provisions of this contract : -

1. No mining operations within the limit of public works:

The contractor shall not carry on, or allow to be carried on any mining operations:-

- (i) within a distance of 50 metres from the outer periphery of the defined limits of any village *habitation*, National Highway, State Highway and other roads where such excavation does not require use of explosives, unless specifically relaxed and permitted by the competent authority; or
- (ii) within a distance of 250 metres from the outer periphery of the defined limits of any village *habitation*, National Highway, State Highway and other roads where use of explosives is required, unless specifically relaxed and permitted by the competent authority or any specific dispensation is obtained from the Director, Mines Safety; or
- (iii) within a distance of 500 metres from major structures like R.C.C Bridges, Guide bund etc.; or
- (iv) within a distance of 75 metres from any railway line or bridge except under and in accordance with the written permission of the railway administration concerned. The Railway Administration or the Government may in granting such permission, impose such conditions as it may deem fit.

Explanation : - For the purpose of this clause the expression Railway Administration shall have the same meanings as it is defined by sub section (4) of section 3 of the Indian Railway Act, 1890:

Provided that where the continuance of any mining operations in any area, in the opinion of the Government is likely to endanger the safety of any National or State Highway, road, bridge, drainage, reservoir, tank, canal or other public works, or public or private buildings or in the public interest or in the interest of environment/ ecology of the area, the Government may determine the contract after giving 60 days notice to the contractor in this behalf and the contract shall stand terminated on the date mentioned in the notice.

2. Working in Sand Zones:

That the contractor in respect of sand zones, shall restrict the quarrying operations to maximum four villages of the zone at any point of time during the subsistence of the contract. The contractor shall have a right to change the site at any time during the subsistence of the contract on settlement of compensation with the land owners of new site of the zone from where he intend to extract sand but ceiling of maximum four villages shall be adhered to strictly and such change of site shall be intimated to the competent authority.

3. Special conditions for river bed mining:

In case of river bed mining / excavation of minor mineral(s), in order to ensure safety of riverbeds, structures and the adjoining areas, the following special conditions shall be abide by the contractor:-

- (a) no mining would be permissible in a river-bed up to a distance of five times of the span of a bridge on up-stream side and ten times the span of such bridge on down-stream side, subject to a minimum of 250 metres on the up-stream side and 500 metres on the downstream side;
- (b) there shall be maintained an un-mined block of 50 metres width after every block of 1000 metres over which mining is undertaken or at such distance as may be directed by the competent authority;
- (c) the maximum depth of mining in the river-bed shall not exceed three metres measured from the un-mined bed level at any point in time with proper bench formation;
- (d) mining shall be restricted within the central 3/4th width of the river/rivulet.
- (e) no mining shall be permissible in an area up to a width specified by the competent authority from the active edges of embankments;
- (f) any other condition(s), as may be required by the competent authority in public interest.

4. Notice for surface operation in land not already in use :

Before using for surface operations any land which has not already been used for such operation, the contractor shall give notice in advance to the Collector of the district, the competent authority and the Officer-in-Charge, _____ in writing along with copy of permission to undertake mining specifying the situation and the extend of the land proposed to be so used and the purpose for which the same is required and the said land shall not be so used, if objection is issued by the Collector.

5. Not to use the land for other purposes:

The contractor shall not cultivate or use the land for any other purpose other than those specified in the contract-deed

6. Disposal of mineral(s) only on issuance of Mineral Transit Pass:

The holder of mining contract shall not sell/dispose off any mineral or mineral products from the concession area without a Mineral Transit Pass.

7. Stacking of mineral(s) inside contract hold area:

The contractor shall not stock the mineral(s) excavated inside the contract hold area at the designated site more than twice the quantity of the average monthly production as per approved mining plan/ scheme.

8. Stacking of mineral(s) outside contract hold area:

The contractor shall not stock any minor mineral(s) granted under the contract, outside the contract hold area.

9. Stacking and storage of incidentally extracted major minerals:

In case contractor, while extracting minor mineral given on contract, incidentally extracts any major mineral not given on contract, the same shall be the property of the Government and contractor shall be under an obligation to stack and store it and maintain its proper record in accordance with the direction of the competent authority who shall also be competent to prescribe the procedure for its disposal.

10. Penalties in case of non-compliance of clause (9) :

In case it is detected that contractor has disposed off incidentally extracted major mineral referred to in clause 9 above or in sub rule (18) of rule 38, in whole or part there of or failed to maintain the record of stored mineral, he shall be liable to penalties under the Act and also premature determination of mining contract in terms of sub rule (19) of Rule 39 of the said rules.

11. Restrictions of mining operations above Ground Water Table :

A safety margin of two metres shall be maintained above the ground water table while undertaking mining and no mining operations shall be permissible below this

level unless a specific permission is obtained from the competent authority in this behalf.

12. Restrictions of surface operations:

No mining operations shall be undertaken in any area prohibited by any authority or by the orders of any Court.

13. No mining operations without requisite clearance:

The contractor shall not undertake any mining operations in the area granted on mining contract without obtaining requisite clearance from the competent authority as required for undertaking mining operations.

Part – III

Covenants of the contract

The contractor hereby covenant with the Government as follows:-

1. Surface rent:

The contractor shall pay for the surface area occupied by him, surface rent at the rate of Rs. (Rupees) per annum.

2. Security deposit :

In case of mining contract granted through competitive bid/auction under rule 18:

25% of the annual bid amount / rate of contract money. The security amount to be deposited as per following :-

- (i) 10% as initial bid security at the time of auction; and
- (ii) 15% of the annual bid amount before commencement of mining operations :

Provided on enhancement of the contract money after expiry of every three year period of contract the contractor shall deposit the balance amount of security so as to up-scale the security amount equal to 25% of the revised annual contract money as applicable for one year with respect to next block of three years

3. Mode of payment of contract money and surface rent :

- (a) The contractor shall deposit one advance instalment of contract money before commencement of mining operations or before the expiry of period allowed along with 15% of the balance security amount as per clause 2 above.
- (b) The contractor, during the subsistence of the contract, shall pay in advance to the Government the instalments of the contract money in respect of the said land given

to him on mining contract in four quarterly instalments on the 1st of April, 1st of June, 1st of September and 1st of December of the year.

Note: The amount of one advance instalment deposited at the time of commencement of the mining operations or within time allowed for the same shall be adjusted in a manner that the subsequent instalments are payable for a full calendar month/quarter/year, as the case may be.

4. Amount to be deposited on account of Fund

Where the contractor is operating the area, he shall also pay an additional amount, equal to 10% of the due contract money along with amount of instalments on account of dead rent or royalty, towards the Fund.

5. Interest on delayed payments.

In case of any default in payment of the instalments of contract money/ contribution to the Fund on the due date(s), the amount would be payable along with interest at the following rates:

Serial Number	Period of delay	Rate of Interest applicable
(i)	If paid within a period of 7 days from the due date	A grace period of up to 7 days is allowed without any interest
(ii)	If paid after 7 days but up to 30 days of the due date	15% on the amount of default for the period of default including the grace period;
(iii)	If paid after 30 days but within 60 days of the due date	18% on the amount of default for the period of default including the grace period;
(iv)	Delay beyond 60 days of the due date	It would amount to a 'breach', invite action for termination of the contract and the entire outstanding amount would be recoverable along with interest calculated @ 21% for the entire period of default

6. Working of newly discovered minerals :

If any minor mineral, not specified in the contract, is discovered in the contracted area, the contractor shall report the discovery without delay to the competent authority and shall not win or dispose of such minor mineral without obtaining a separate mineral concession therefor. If he fails to apply for such a mineral concession within 6 months from the discovery of the minor mineral, the competent authority may give the mineral concession in respect of such mineral, to any other person :

Provided that the grant of such permit may be refused for reasons to be recorded in writing.

7. To commence mining operations within 180 days and carry them on properly :

Unless the competent authority for sufficient cause allows otherwise, the contractor shall commence mining operations 180 days from the date of execution of the contract

and shall thereafter conduct such operations in a proper, skilful and workman like manner.

Explanation:— For the purpose of this clause, mining operations shall include the erection of machinery laying of a tramway or construction of a road in connection with the working of the mine.

8. To erect and maintain boundary pillars :

The contractor shall at his own expenses, erect and at all times maintain and keep in good repairs boundary marks and pillars according to the plan annexed to the contract. Each of the pillars should be numbered and every pillar shall have GPS reading.

9. Accounts:

The contractor shall keep correct accounts showing the quantity and other particulars of all minerals obtained from the mines and the number of persons employed therein and a complete plan of the mine and shall allow any officer authorised by the Government or the Central Government or the competent authority in that behalf to examine at any time any accounts and records maintained by him, and shall furnish to the Government or the Central Government or the competent authority with such information and returns as it may require.

10. To allow facilities to other lessees etc. :

In addition to the concession holders under Rule – 5 of the Assam Minor Mineral Concession Rules, 2012, the lessee shall allow existing and future contractor of any land which is comprised in or adjoins or is reached by the land, held by the lessee, reasonable facilities for access thereto.

11. To allow entry to officers :

The contractor shall allow any officer authorised by the Government or the Central Government or the competent authority to enter upon any building, excavation or land comprised in the contract for the purpose of inspecting the mines.

12. Returns :—The contractor shall :—

- (a) submit a return in form 'MMP1' by the 7th of every month to the competent authority and also to other officer (s) giving the total quantity of minor mineral(s) raised and dispatched from the contracted area in the preceding calendar month and its value ;
- (b) also furnish a statement giving information in Form 'MMP2' by the 15th April every year to the competent authority and to other Officer(s), regarding quantity and value of minor mineral obtained during last financial year, average number of regular labourers employed (men and women separately) number of accidents, compensation paid and number of days worked separately.

13. To strengthen and support the mines:

The contractor shall strengthen and support to the satisfaction of the Railway Administration or the State Government, as the case may be any part of the mine which in its opinion requires such, strengthening or support for the safety of any railway, bridge, national highway, reservoirs, canal, road or any other public work or building.

14. Notice for use of explosives, etc :

The contractor shall immediately give notice in writing in Form 'MSE-1' to the following:

1. The Controller General, Indian Bureau of Mines, Government of India, Nagpur;
2. The Director General of Mines Safety, Govt. of India, Dhanbad;
3. The Director, Mines Safety, Govt. of India, Guwahati;
4. The Regional Controller of Mines, Indian Bureau of Mines, Kolkata;
5. The competent authority;
6. The District Magistrate of the District concerned; and
7. The office-in-charge as soon as:
 - (a) The working in the mines extends below superjacent ground;
or
 - (b) The depth of any open cast excavation measured from its highest to the lowest point reaches six metres; or
 - (c) The number of persons employed on any day is more than 50;
or
 - (d) Any explosives are used.

15. Maintenance of Sanitary conditions:

The Contractor shall maintain sanitary conditions in the area held by him under the contract.

16. To pay compensation for damage and indemnify the Government:

The contractor shall make and pay such reasonable satisfaction and compensation for all damage, injury or disturbance which may be done by him in exercise of the powers granted by the contract and shall indemnify the Government against all claims which may be made by third parties in respect of such damage, injury or disturbance.

17. Application of all Acts, Rules and Regulations to this contract :

The contractor shall abide by the provisions of Mines Act, 1952 and the rules and regulations framed there under and also the provisions of other labour laws both Central and State as are applicable to the workmen engaged in the mines and quarries relating to the provisions of drinking water, rest shelters, dwelling houses, latrines and first-aid and medical facilities in particular and other safety and welfare provisions in general, to the satisfaction of the competent authorities under the aforesaid Acts, Rules and Regulations and also to the satisfaction of the District Magistrate concerned. In case of non compliance of any of the provisions of the enactments as aforesaid, the competent

authority may terminate the mining contract by giving one month's notice with forfeiture of security deposited or :

Provided that the contractor shall carry out mining operations in accordance with all other provisions as applicable for undertaking mining including the provisions of Forest (Conservation) Act, 1980 and Environment (Protection) Act, 1986 and the rules made there under.

18. To report accident :

The contractor shall without delay report to the Deputy Commissioner of the district concerned and the competent authority or any other office authorised by him, any accident which may occur at or in the contract area.

19. Delivery of possession of land and mines on the surrender or sooner determination of the contract :

At the end or sooner determination or surrender of the contract, the contractor shall deliver up the said lands and all mines (if any dug there) in a proper and workable State, save in respect of any working as to which the Government might have sanctioned abandonment.

20. To provide electronic weighing machine :

The contractor shall provide and at all times keep at or near the pit-head at which the said mineral shall be brought to bank a properly constructed and efficient weighing machine and shall weigh or caused to be weighed thereon all the said minor minerals from time to time brought to bank, sold, exported and converted products, and shall at the close of each day cause the total weights, ascertained by such means of the said minor minerals, ores, products, raised, sold, exported and converted during the previous twenty four hours to be entered in the aforesaid books of accounts. The contractor shall permit the Government at all times during the said term to employ any persons to be present at the weighing of the said minor minerals, as aforesaid and to keep accounts thereof and to check the accounts kept by him. The contractor shall give 15 days previous notice in writing to the Officer-in-Charge_____ of every such measuring or weighing in order that he or some officer on his behalf may be present thereat.

21. To secure pits shafts not fill them up :

The contractor shall well and properly secure pits and shafts and will not without permission in writing, will fully close, fill up or close any mine or shaft.

22. Not to enter upon or to commence operations in the reserved or protected Forest:

The contractor shall not enter upon or commence any mining operations in any forest land comprised in the contracted area except after previously obtaining permission in writing of the Forest Department, Assam.

23. To respect water rights and not injure adjoining property :

The contractor shall not injure or cause to deteriorate any source of water, power or water supply and shall not in any other way render any spring or stream or water unfit to be used or to do anything to injure adjoining land, villages or houses.

24. Stocks lying at the end of the contract: –

- (a) The contractor on expiry of the contract period (successful completion of the contract) shall remove already extracted all of the mineral from the premises of the quarry within a period of seven days. In case any quantity of the already extracted mineral, in the said land is left undisposed off and is not removed within seven days from the date of expiry of the period of contract the same shall be deemed to be the property of the Government and competent authority may dispose it off in any manner it may like without paying anything thereof to the contractor.
- (b) The contractor on the termination or sooner determination of the contract shall not remove extracted mineral from the premises of the contracted areas. All extracted minerals in the said lands left over un-disposed after the termination or determination of contract shall be deemed to be property of the Government and competent authority may dispose it off in any manner it may like without paying anything thereof to the contractor.

25. Payment of taxes:

The contractor shall duly and regularly pay to the appropriate authority all taxes, cesses and local dues in respect of the contracted area, said minor minerals or the working of the mines.

26. Payment of additional amount for reclamation/ restoration:

The contractor shall also deposit / pay additional amount equal to 10% of the amount of contract money by the 7th of every month, to ensure the compliance of the Reclamation and Restoration works. This additional amount shall be refunded after satisfactory Reclamation/ Restoration of the area after mining in accordance with the Mine Closure Plan :

Provided that in case the contractor fails to reclaim/ restore the area as per mining plan to the satisfactions of the Government, the amount deposited shall be forfeited and used for the restoration of the area.

Provided further that in case no rehabilitation position of the mine comes during the tenure of the mining contract, the amount so deposited shall be kept by the Government in the mining area development fund for future use as and when the mine reaches to a stage requiring restoration and rehabilitation.

27. Assign sublet or transfers of the contract:

The contractor shall not assign, sublet or transfer the contract to any person without obtaining prior permission in writing from the competent authority.

28. Fencing of working place:

If a working place is found to be unsafe all persons shall be withdrawn by the contractor immediately from the dangerous area and all access to such working place except for the purpose of removing the danger or saving life shall be prevented by securely fencing the full width of all entrances to the place, at his own cost.

29. Fencing of excavation after termination or sooner determination of the contract:

The contractor on termination or sooner determination of the contract shall at his own cost, suitably fence the excavations for safety as instructed by the competent authority.

30. Felling of trees:

The contractor shall not fell or cut any tree, standing on the land wherein the quarry is located without obtaining prior permission in writing from the Forest Department, Assam and paying its price as fixed.

31. Security deposit shall carry no interest:

The security deposited by the contractor shall not carry any interest.

32. Government not responsible for loss to contractor:

The Government shall not be responsible for any kind of loss to the contractor.

Part-IV**Rights of the State Government****1. Suspension or termination of the contract:**

The competent authority shall have the right to prematurely terminate the contract

- (a) If the contract money or surface rent or any other amount due to the Government are not paid;
- (b) if any of the terms and conditions of the contract agreement or conditions of grant or permission to undertake mining by any other statutory authority/Competent authority is violated;
- (c) if any of the provisions of these rules and other laws both Central and State as are applicable to mines and minerals, are not complied with:

Provided that no orders of suspension/termination of the contract shall be passed by the competent authority without giving reasonable opportunity to show cause and following the procedure prescribed in the Rules :

Provided that in case of default in payment of Government dues such as contract money/ surface rent or any other dues payable under these presents, the contract may be terminated by the competent authority without affording hearing to the contractor after serving upon a notice to make good the payment within thirty days :

Provided further that the competent authority may also at any time after issuance of the notice for default on account of non payment of dues, enter upon the said premises and detain all or any of the mineral or movable property therein and may carry away, detain or order the sale of the property so detained, or so much of it as will suffice for the satisfaction of the contract money or rent or royalty or both dues and all costs and expenses occasioned by the non-payment thereof.

2. Determination of contract in public interest:

The Government may by giving six months' prior notice in writing determine the contract if the Government consider that the minor mineral under the contract is required for establishing an Industry beneficial to the public:

Provided that in the State of National Emergency or war, the contract may be determined without giving such notice.

3. Right of pre-emption :

The Government shall from time to time and at all times during the terms of contract have the right (to be exercised by notice in writing to the contractor) of pre-emption of the said mineral(s) and all products thereof lying in or upon the said lands hereby demised or elsewhere under the control of the contractor and the contractor shall deliver all minerals or products thereof to the Government at current market rates in such quantities and in the manner at the place specified in the notice exercising the said right.

4. Penalty for not allowing entry to officers :

If the contractor or his transferee or assignee does not allow any entry or inspection under clause 11 of part-III, the competent authority may cancel the contract and forfeit in whole or in part the security deposit paid by the contractor.

5. Compensation and acquisition of land of third parties thereof :

In case the occupier(s)-or owner(s) of the said land refuses his/ their consent to the exercise of the rights and powers reserved to the Government and demised to the contractor under these presents, the contractor shall report the matter to the competent authority who shall request the Collector of the district concerned to direct the occupier(s) or owner(s) to allow the contractor to enter the said lands and to carry out such operations as may be necessary for working the mine, on payment in advance of such compensation to the occupier or owner by the contractor, as may be fixed by the Collector under the rules.

6. Suspension of mining operations:

The Director may order to suspend the mining operations after serving a notice to the contractor, in case, the following violations are noticed:-

- (a) unsafe and unscientific mining;
- (b) non operations of weighbridge;
- (c) non providing of safety appliances to the workers;
- (d) non payment of compensation to the surface owners;
- (e) non submissions of monthly returns;

In case of violations of the aforesaid conditions and also any other terms and conditions of the agreement deed and the provisions of the rules, the competent authority may give a notice to the contractor to remedy the violations within a period of 15 days from the date of issue of the notice. In case, the violations pointed out through notice, are not remedied within the stipulated period of 15 days, the competent authority may after affording an opportunity of being heard to the contractor, order the suspension of the mining operations till such time, the defaults/ defects are removed by the lessee within the time frame granted by the competent authority. During the period of suspension of mining operations, the contractor will be allowed only to undertake rectification work for removal of the defects and shall not dispose off the mineral. During the suspension period, the contractor shall be under the obligation to deposit the amount of the contract money etc. on the due dates.

On satisfactory removal of the defects, the competent authority may revoke the suspension orders with or without any modification. Non removal of the defects/ defaults during the suspension period and within the time allowed by the competent authority, shall lead to premature termination of contract.

**Part-V
General**

1. Cancellation:

The contract shall be liable to be cancelled by the competent authority if the contractor cease to work the mine for a continued period of 180 days without obtaining written sanction.

2. Notices :

Every notice by these presents required to be given to the contractor shall be given in writing to such person resident on the said lands as the contractor may appoint for the purpose of receiving such notices and if there shall have been no such appointment then every such notice shall be sent to the contractor by registered post addressed to the contractor at the address recorded in this contract or at such other address in India as the contractor may from time to time in writing to the competent authority designate for the receipt of notices and every such service shall be deemed to be proper and valid service upon the contractor and shall not be questioned or challenged by him.

3. Recovery of Government dues as arrears of land revenue:

Without prejudice to any other mode of recovery authorised by any provision of this contract or by any law, all amounts, falling due hereunder against the contractor may be recovered as arrears of land revenue under the law in force for such recovery.

4. Forfeiture of property left more than three months after expiry or determination of contract :

The contractor should remove his property lying on the said lands within three months after the expiry or sooner determination of the contract or after the date from which any surrender by the contractor of the said lands becomes effective, as the case may be, the property left after the aforesaid period shall become the property of the Government and may be sold or disposed of in such manner as the competent authority shall deem fit without liability to pay any compensation therefore, to the contractor.

5. Security and forfeiture thereof :

- (a) the competent authority may forfeit the whole or any part of the amount deposited as security under this contract, in case the contractor commits a breach of any covenants to be performed by the contractor under the contract.
- (b) Whenever the said security deposit or any part thereof or any further sum hereafter deposited with the Government in replenishment thereof is forfeited under sub clause (a) or applied by the competent authority under the contract (which the competent authority is hereby authorised to do) the contractor shall immediately deposit the deficient amount thereof, to bring the amount in deposit with the Government up to the requisite amount of security at that point of time of contract.
- (c) The rights conferred to the Director by clause (a) shall be without prejudice to the rights conferred on the Government by any other provision of this contract or by any law.
- (d) On such date as the competent authority may decide within twelve calendar months after the determination of this contract or refusal of any renewal thereof, the amount of security deposit paid in respect of this contract in case is the same is otherwise not forfeited or is not required to be detained for any other purposes mentioned in this contract shall be refunded to the contractor. No interest shall run on the security deposit.

6. Survey and demarcation of the area :

When a mining contract is granted, arrangement shall be made, if necessary, at the expense of the contractor, for the survey and demarcation of the area granted under the contract. The contractor shall have to bear actual expenses of the staff deputed for the work. Actual expenses will include travelling allowances, daily allowances and salary of staff plus 10 percent as instrument charges.

7. Surrender of a mining contract by the contractor :

The Government may accept the request of the contractor for surrender of a contract or part thereof in cases where it is established that it has not been found feasible to operate the contract grant for whatsoever reasons subject to the condition that the contractor :

- (i) has been regular in furnishing the production returns as required in terms of the contract agreement;
- (ii) has been taking the requisite steps for the progressive mine closure plan as per the conditions of the contract grant;
- (iii) is not in default of payment of any dues of the Government as on the date of making such application and undertakes to pay all such dues till the date of expiry of the notice period either in cash in advance or by way of adjustment of the security or both :

Provided that in case the contractor makes an application for surrender of part area of the contract, it shall not result in any prorated reduction of the contract money and the rate of contract money payable and applicable for the entire area at the time of such application shall remain intact.

8. Penalty for repeated breaches:

In case of repeated breaches of covenants and agreements by the contractor for which notice has been given by the competent authority in accordance with sub-rule (1) of rule 55 and /or sub rule(1) of rule 56 on earlier occasions, the competent authority without giving any further notice, may impose such penalty not exceeding twice the amount of security deposited.

9. Obtaining Sale Tax number:

The contractor shall get himself registered with the Taxation Department of Assam and shall obtain the Sales Tax number.

10. Overriding effect:

Unless otherwise specifically provided, it is agreed that this deed shall be governed by the provisions of the Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957) and the rules made thereunder. The provisions of the Act and the rules shall prevail over the terms and conditions of the agreement.

Signature of the Contractor

For and on behalf of the Governor of Assam

Witness :-

1. _____

1. _____

2. _____

2. _____

Signature of surety

Witness

1. _____

2. _____

FORM MC-2

(See rule 19(1))

(Application for renewal of Mining Contract)

Received at _____ (Place) at _____ (Hours) on the
_____ day of _____.

From

To

The _____

Dated the _____ 20

1. I hereby apply for renewal of a mining contract for _____ (name of minor mineral(s)) for a term of _____ years over _____ hectares of land in the area specified in the Schedule.

2. A sum of Rs on account of application fee payable under rule 20, deposited in the Government Treasury and the receipted Challan thereof /Demand Bank Draft No. _____ dated _____ is enclosed.

3. The required particulars are given below:-

PARTICULARS

(i)	Name of applicant individual/firm/Company or Society	
(ii)	Nationality of the individual or place of registration or incorporation of firm, company or society	
(iii)	Profession or nature of business of individual or firm or company and place of business	
(iv)	Address of the individual/ firm/company or society	
(v)	Name of Minor Mineral which the applicant intends to mine	
(vi)	Period for which the original contract was granted	

(vii)	Manner in which the Minor Mineral(s) raised is to be utilized : (a) For manufacture (b) for sale (c) any other purpose In case of manufacture, the industries in connection with which it is required should be specified.	
(viii)	A description illustrated by a map or plan (in triplicate) showing as accurate as possible the situation, boundaries and area of land in respect of which the renewal of contract is required and where the area is un-surveyed the location of the area should be shown by some permanent physical features i.e. road, tanks etc	
(ix)	A statement showing all the areas within jurisdiction of the Government :- (i) already held by me/us in my/our name/names (and jointly with others) under quarrying leases specifying the names of minor minerals. (ii) already applied for but not yet granted, and (iii) applied for simultaneously or being applied for in the State. Note: No application will be held to be complete for the purpose of priority unless it furnishes the particular required by paragraphs i), ii) and iii) and is properly signed and stamped	
(x)	Period and quantity for which renewal of mining contract is required.	
(xi)	Whether renewal is applied for the whole or part of the contract held.	
(xii)	In case the renewal applied for is only for part of the contract held :- (a) the area and quantity applied for renewal (b) description of the area applied for renewal. (c) Map (in triplicate) of the contract held with area applied for renewal clearly marked on it (copy of map attached)	
(xiii)	Means by which the minor mineral is to be raised i.e. by hand, labour or mechanical or electric power.	
(xiv)	Year-wise quantity of the mineral(s) excavated along with contract money paid in each year since grant of contract (attached no due certificate of concerned officer in charge.	
(xv)	Mineral reserves available.	
(xvi)	Details of explorations undertaken, if any	
(xvii)	Details of the mined out areas restored/ reclaimed/ rehabilitated as per progressive mine closure plan.	

(xviii)	Details of the sites of overburden restored	
(xix)	Details of the compliance of:- (i) Environmental Clearance; (ii) Mining plan/ scheme of mining; (iii) Safety provisions as per the Mines Act, 1952 and the rules and regulations framed thereunder; and (iv) other relevant laws and terms and conditions applicable on Mines and Minerals	
(xx)	Details of defaults, if any, in submission of production returns, payment of contract money and found wanting in taking adequate measures for labour safety.	
(xxi)	Details of investment made in development of mine, plant and machinery with a long term perspective and optimal benefit of the same could not have derived during the original period of contract.	
(xxii)	Any other particulars which the applicant wishes to furnish.	
(xxiii)	Schedule giving description of the area applied for	
a.	Name of village	
b.	In the case of forest land the name of the Range and Division	
c.	Dag and Patta Number and area of each field or part thereof	
	Dag and Patta no. a) b) - -	Area a) b) - -
d.	Full description of the area applied for with regard to its natural features :-	
e.	Felling series and working circle, if any	
f.	District	

(Signature of applicant)

Place _____

Date _____

N.B. If the application is signed by an authorised agent of the applicant, power of attorney should be attached.

FORM MPS-1

*{see rule 24(4)}***Model Form for execution of permit granted for area less than five hectares**

This indenture made on this _____ day of _____ 20__ between the Governor of Assam acting through _____, (hereinafter referred to as the "State Government") which expression shall where the context so admits, include the successors and assigns) of the one part; and

Where the permit holder is an individual:

_____ (Name and address of the person)(hereinafter referred to as the "permit holder" which expression shall where the context so admits, includes his heirs, executors, administrators, representatives and permitted assigns;

Where the permit holder is more than one individual:

_____ (Name and address of persons) (hereinafter referred to as the "permit holder" which expression shall where the context so admits include their respective heirs, executors, administrators, representatives and permitted assigns)

Where the permit holder is registered firm:

_____ (Name and address of all the partners or members, where the "permit holder" are a firm or society) all carrying on business in partnership under the firm name and style of _____ (name of the firm and address) registered under Indian partnership Act, 1932 and having their registered office at _____ (hereinafter referred to as the "permit holder" which expression shall where the context so admits include all partner of the said firm, their representatives, heirs, executors/Administrators and permitted assigns;

When the permit holder is a registered company:

_____ (Name of the company) a company registered under _____ (Act under which company incorporated) and having its registered office at _____ (address) (hereinafter referred to as the "permit holder" which expression shall where the context so admits, include its successors and permitted assigns) of the other part.

Whereas the "permit holder" has offered the highest bid of Rs _____ (in words Rupees _____) in the bid/auction held on _____ for obtaining a mining contract for _____ cu.m. (in words _____ cubic metres) _____ (name of minor minerals) in respect of the lands hereinafter described in clause 2 and such bid had been accepted by the officer authorized in this behalf and the Permit holder has deposited with the Government, a sum of Rs _____ (Rupees _____) as initial bid security (10% of the

annual bid amount) and Shri _____ S/o Shri _____
 _____ resident of _____
 _____ District _____ (referred
 to as the 'surety' which expression shall where the context so admits, include his heirs,
 executors, administrators, representatives) has been offered as solvent surety for the
 aforesaid amount, and whereas the permit holder is in possession of a Income Tax
 Clearance Certificate.

Now, therefore, this deed witnesses and the parties hereby agree as follows:-

- (1) In consideration of the permit money, covenants and agreements hereinafter contained and on the part of the permit holder to be paid, observed and performed the Government hereby grants and demises unto the permit holder all those mines/beds/veins/seams of _____ (hereinafter referred to as the said minor minerals) situated, lying and being in or under the lands which are referred to in clause 2 together with the liberties and privileges to be executed or enjoyed in connection herewith which are hereinafter mentioned in Part-I subject to the restrictions and conditions as to exercise and enjoyment of such liberties and privileges which are hereinafter mentioned in Part-II and subject to other provisions of this permit.

- (2) All the tract of land situated at village _____ in Sub-Division _____ District _____ bearing Dag and Patta Numbers _____ containing an area of _____ or thereabouts delineated on the plan hereto annexed and bounded as follows:

on the North by _____;
 on the South by _____;
 on the East by _____;
 on the West by _____;

and (hereinafter referred to as the 'said lands' or the 'permit area')

- (3) The permit holder shall hold the premises hereby granted and demised from the _____ day _____ for the term of _____ years thence next ensuing.

Part-I Liberties and privileges

The following liberties and privileges may be exercised and enjoyed by the permit holder subject to the other provision of permit: -

1. To enter upon land and search for win, work :-

Liberty at all times during the term hereby demised to enter upon the said lands and to search for mineral, bore, dig, drill for win, work, dress, process, convert, carry away and dispose of the said minor mineral(s).

2. To sink, drive and make pit, shafts and inclines :

Liberty to sink, drive, make, maintain and use in the said land and pits, shafts, inclines, drifts, levels, waterways, airways and other works and to use, maintain, deepen or extend any existing works of the like nature in the said lands.

3. To bring and use machinery, equipment:

Liberty to erect, construct, maintain and use on or under the said lands any engine, machinery, plan, dressing floors, furnaces, coke ovens, brick kilns, workshop, store houses, bungalows, godowns, shed and other buildings and other works and conveniences of the like nature on or under the said lands.

4. To use water from streams :

Liberty but subject to the rights of any existing or future Permit holder and with the written permission of the Collector concerned to appropriate and use water from any streams, water course, springs or other source in or upon the said lands and to divert, step up or dam any such stream or water-course and collect or impound any such water and to make, construct and maintain any water course, cultivated land, village buildings or watering places for livestock of a reasonable supply of water as before accustomed nor in any way to foul or pollute any streams or springs :

Provided that the Permit holder shall not interfere with navigation in any navigable stream nor shall divert such stream with out the previous written permission of the Government.

5. To fell undergrowth and utilise timber and trees :

Liberty to clear undergrowth and brush wood. Permit holder shall not fell any trees or timber standing or found on the said lands without obtaining prior permission in writing from the Forest Department. In case such permission is granted, he shall pay in advance, the price of the trees or timber to be felled to the said Officer at the rates, fixed by him.

6. To get building and roads material :

Liberty to quarry and get stones, gravel and other building and road materials and ordinary clay and to use and employ the same and to manufacture such clay into bricks or tiles and to use such bricks, tiles but not to sell any such material, bricks, tiles.

7. To use land for stacking purpose :

Liberty to use a sufficient part of the surface of the said lands for the purpose of stocking, storing or depositing therein any produce of the mines including over burden or waste material and works carried on and tools, equipment and other materials needed for mining operations.

8. To install fuel pumps or stations for Diesel or Petrol for self use :

Liberty to use a sufficient part of the land for installing fuel pumps or stations for diesel or petrol for self use or consumption required for mining operations in the permit area, subject to permission of the authority.

9. To construct magazine for explosive and storage sheds :

Liberty to construct magazine for storage of explosive and storage sheds for explosive related substances with permission from the competent authority, in this behalf.

10. Liberty to seek permission for diversion of public roads, overhead electric lines :

Liberty to request to the competent authority for diversion of public road over head electric lines passing through the concession area at the expenses of permit holder to ensure scientific and systematic mining.

Part-II**Restrictions**

The liberties, powers and privileges granted under Part- I are subject to the following restrictions and subject to other provisions of this permit : -

1. No mining operations within the limit of public works:

The permit holder shall not carry on, or allow to be carried on any mining operations:-

- (i) within a distance of fifty metres from the outer periphery of the defined limits of any village habitation, National Highway, State Highway and other roads where such excavation does not require use of explosives, unless specifically relaxed and permitted by the competent authority; or
- (ii) within a distance of two hundred fifty metres from the outer periphery of the defined limits of any village habitation, National Highway, State Highway and other roads where use of explosives is required, unless specifically relaxed and permitted by the competent authority or any specific dispensation is obtained from the Director, Mines Safety; or
- (iii) within a distance of 500 metres from major structures like R.C.C Bridges, Guide bund etc.; or
- (iv) within a distance of seventy metres from any railway line or bridge except under and in accordance with the written permission of the railway administration concerned. The Railway Administration or the Government may in granting such permission, impose such conditions, as it may deem fit.

Explanation : - For the purpose of this clause, the expression 'Railway Administration' shall have the same meanings as it is defined by sub section (4) of section 3 of the Indian Railway Act, 1890 () :

Provided that where the continuance of any mining operations in any area, in the opinion of the Government is likely to endanger the safety of any National or State Highway, road, bridge, drainage, reservoir, tank, canal or other public works, or public or private buildings or in the public interest or in the interest of environment or ecology of the area, the Government may determine the permit after giving sixty days notice to the permit holder in this behalf and the permit shall stand terminated on the date mentioned in the notice :

Provided further that in the State of National Emergency or war, the permit may be determined without giving such notice.

2. Working In sand zones:

That the Permit holder in respect of sand zones, shall restrict the quarrying operations to maximum four villages of the zone at any point of time during the subsistence of the permit. The Permit holder shall have a right to change the site at any time during the subsistence of the permit on settlement of compensation with the land owners of new site of the zone from where he intend to extract sand but ceiling of maximum four villages shall be adhered to strictly and such change of site shall be intimated to the competent authority.

3. Special conditions for river bed mining:

In case of river bed mining or excavation of minor mineral(s) , in order to ensure safety of river-beds, structures and the adjoining areas, the following special conditions shall be abide by the permit holder :-

- (a) no mining would be permissible in a river-bed up to a distance of five times of the span of a bridge on up-stream side and ten times the span of such bridge on down-stream side, subject to a minimum of 250 metres on the up-stream side and 500 metres on the downstream side;
- (b) there shall be maintained an un-mined block of 50 metres width after every block of 1000 metres over which mining is undertaken or at such distance as may be directed by the competent authority;
- (c) the maximum depth of mining in the river-bed shall not exceed three metres measured from the un-mined bed level at any point in time with proper bench formation;
- (d) mining shall be restricted within the central 3/4th width of the river/rivulet.
- (e) no mining shall be permissible in an area up to a width specified by the competent authority from the active edges of embankments;
- (f) any other condition(s), as may be required by the competent authority in public interest.

4. Notice for surface operation in land not already in use :

Before using for surface operations any land which has not already been used for such operation, the permit holder shall give notice in advance to the Collector of the district, the Director and the Officer-in-Charge, _____ in writing along with copy of permission to undertake mining specifying the situation and the extend of the land

proposed to be so used and the purpose for which the same is required and the said land shall not be so used, if objection is issued by the Collector.

5. Not to use the land for other purposes :

The permit holder shall not cultivate or use the land for any other purpose other than those specified in the permit agreement.

6. Disposal of mineral(s) only on issuance of mineral transit pass:

The holder of mining permit shall not sell or dispose off any mineral or mineral products from the concession area without a mineral transit pass.

7. Stacking of mineral(s) inside permit hold area:

The permit holder shall not stock the mineral(s) excavated inside the permit hold area at the designated site more than twice the quantity of the average monthly production as per approved mining plan or scheme.

8. Stacking of mineral(s) outside permit hold area:

The Permit holder shall not stock any minor mineral(s) granted under the permit, outside the permit hold area.

9. Stacking and storage of incidentally extracted major minerals:

In case Permit holder, while extracting minor mineral given on permit, incidentally extracts any major mineral not given on permit, the same shall be the property of the Government and Permit holder shall be under an obligation to stack and store it and maintain its proper record in accordance with the direction of the competent authority who shall also be competent to prescribe the procedure for its disposal and in case it is detected that permit holder has disposed off incidentally extracted major mineral in this clause or in the rule, in whole or part there of or failed to maintain the record of stored mineral, he shall be liable to penalties under the Act and also premature determination of mining permit in terms of the rules.

10. Restrictions of mining operations above ground water table :

A safety margin of two metres shall be maintained above the ground water table while undertaking mining and no mining operations shall be permissible below this level unless a specific permission is obtained from the competent authority in this behalf.

11. Restrictions of surface operations:

No mining operations shall be undertaken in any area prohibited by any authority or by the orders of any Court.

12. No mining operations without requisite clearance:

The Permit holder shall not undertake any mining operations in the area granted on mining permit without obtaining requisite clearance from the competent authority as required for undertaking mining operations.

Part – III

Covenants of the permit

The permit holder hereby covenant with the Government as follows :-

1. Surface rent:

The permit holder shall pay for the surface area occupied by him, surface rent at the rate of Rs. _____ (Rupees) only.

2. Security deposit:

The permit holder shall deposit twenty five percent of the annual bid amount or rate of permit money as Security. The security amount shall be deposited as per following:-

- (i) ten percent as initial bid security at the time of auction; and
- (ii) fifteen percent of the annual bid amount before commencement of mining operations or before the expiry of period allowed;

3. Mode of payment of permit money and surface rent

- (a) The permit holder shall deposit one advance instalment of permit money before commencement of mining operations or before the expiry of period allowed along with fifteen percent of the balance security amount as per clause 2 above.
- (b) The permit holder, during the subsistence of the permit, shall pay in advance to the Government the instalments of the permit money in respect of the said land given to him on mining permit in four quarterly instalment on the 1st of April, 1st of June, 1st of September and 1st of December.

Note: The amount of one advance instalment deposited at the time of commencement of the mining operations or within time allowed for the same shall be adjusted in a manner that the subsequent instalments are payable for a full calendar month or quarter or year, as the case may be.

4. Amount to be deposited on account of Fund

Where the Permit holder is operating the area, he shall also pay an additional amount, equal to 10% of the due permit money along with amount of instalments on account of dead rent or royalty, towards the Fund.

5. Interest on delayed payments :

In case of any default in payment of the instalments of permit money/ contribution to the Fund on the due date(s), the amount would be payable along with interest at the following rates:

Serial Number	Period of delay	Rate of Interest applicable
(i)	If paid within a period of 7 days from the due date	A grace period of up to 7 days is allowed without any interest
(ii)	If paid after 7 days but up to 30 days of the due date	15% on the amount of default for the period of default including the grace period;
(iii)	If paid after 30 days but within 60 days of the due date	18% on the amount of default for the period of default including the grace period;
(iv)	Delay beyond 60 days of the due date	It would amount to a 'breach', invite action for termination of the contract and the entire outstanding amount would be recoverable along with interest calculated @ 21% for the entire period of default.

6. Working of newly discovered minerals:

If any minor mineral not specified in the permit, is discovered in the permit area, the Permit holder shall report the discovery without delay to the competent authority and shall not win or dispose of such minor mineral without obtaining a separate mineral concession/lease for such mineral. If he fails to apply for such a mineral concession within six months from the discovery of the minor mineral, the competent authority may give the mineral concession in respect of such mineral, to any other person :

Provided that the grant of such permit may be refused for reasons to be recorded in writing.

7. To commence mining operations within one hundred eighty days and carry them on properly :

Unless the competent authority for sufficient cause otherwise, the permit holder shall commence mining operations one hundred eighty days from the date of execution of the permit and shall thereafter conduct such operations in a proper, skilful and workman like manner.

Explanation :- For the purpose of this clause, mining operations shall include the erection of machinery laying of a tramway or construction of a road in connection with the working of the mine.

8. To erect and maintain boundary pillars :

The permit holder shall at his own expenses, erect and at all times maintain and keep in good repairs boundary marks and pillars according to the plan annexed to the permit. Each of the pillars should be numbered and every pillar shall have GPS reading.

9. Accounts :

The permit holder shall keep correct accounts showing the quantity and other particulars of all minerals obtained from the mines and the number of persons employed therein and a complete plan of the mine and shall allow any officer authorised by the Government or the Central Government or the competent authority in that behalf to examine at any time any accounts and records maintained by him, and shall furnish to the Government or the Central Government or the competent authority with such information and returns as it may require.

10. To allow facilities to other concession holders :

The permit holder shall allow existing and future concession holders of any land which is comprised in or adjoins or is reached by the land, held by the lessee, reasonable facilities for access thereto.

11. To allow entry to officers :

The permit holder shall allow any officer authorised by the Government or the Central Government or the competent authority to enter upon any building, excavation or land comprised in the permit area for the purpose of inspecting the mines.

12. Returns :

The permit holder shall : -

- (a) submit a return in form 'MMP1' by the 7th of every month to the competent authority and also to other officer (s) specified giving the total quantity of minor mineral(s) raised and dispatched from the permit area in the preceding calendar month and its value ;
- (b) also furnish a statement giving information in Form 'MMP2' by the 15th April every year to the competent authority and to other Officer(s) regarding quantity and value of minor mineral obtained during last financial year, average number of regular labourers employed (men and women separately) number of accidents, compensation paid and number of days worked separately.

13. To strengthen and support the mines:

The permit holder shall strengthen and support to the satisfaction of the Railway Administration or the State Government, as the case may be any part of the mine which in its opinion requires such, strengthening or support for the safety of any railway, bridge, national highway, reservoirs, canal, road or any other public work or building.

14. Notice for use of explosives, etc:

The permit holder shall immediately inform in writing in Form MSE1 in case of (a) working in the mines extends below superjacent ground; or (b) depth of any open cast excavation measured from its highest to the lowest point reaches six metres; or (c)

number of persons employed on any day is more than 50; or (d) any explosives are used, to the following;

- (i) The Controller General, Indian Bureau of mines, Government of India, Nagpur;
- (ii) The Director General of Mines Safety, Government of India, Dhanbad;
- (iii) The Director, Mines Safety, Government of India, Guwahati;
- (iv) The Regional Controller of Mines, Indian Bureau of Mines, Kolkata;
- (v) The competent authority;
- (vi) The District Magistrate of the District concerned; and
- (vii) The Officer-in-Charge.

15. Maintenance of sanitary conditions :

The permit holder shall maintain sanitary conditions in the area held by him under the permit.

16. To pay compensation for damage and indemnify the Government :

The permit holder shall make and pay such reasonable satisfaction and compensation for all damage, injury or disturbance which may be done by him in exercise of the powers granted by the lease and shall indemnify the Government against all claims which may be made by third parties in respect of such damage, injury or disturbance.

17. Application of all Acts, Rules and Regulations to this permit :

The Permit holder shall abide by the provisions of Mines Act, 1952 and the rules and regulations framed thereunder and also the provisions of other labour laws both Central and State as are applicable to the workmen engaged in the mines and quarries relating to the provisions of drinking water, rest shelters, dwelling houses, latrines and first-aid and medical facilities in particular and other safety and welfare provisions in general, to the satisfaction of the competent authorities under the aforesaid Acts, Rules and Regulations and also to the satisfaction of the District Magistrate concerned. In case of non compliance of any of the provisions of the enactments as aforesaid, the competent authority may terminate the mining lease by giving one month's notice with forfeiture of security deposited:

Provided that the permit holder shall carry out mining operations in accordance with all other provisions as applicable for undertaking mining including the provisions of Forest (Conservation) Act, 1980 and Environment (Protection) Act, 1986 and the rules made there under.

18. To report accident :

The permit holder shall without delay report to the Deputy Commissioner of the district concerned and the competent authority or any other officer authorised by him, any accident which may occur at or in the permit area.

19. Delivery of possession of land and mines on the surrender or sooner determination of the permit :

At the end or sooner determination or surrender of the permit, the permit holder shall deliver up the said lands and all mines (if any dug there) in a proper and workable state, save in respect of any working as to which the Government might have sanctioned abandonment.

20. To secure pits/shafts and not fill them up :

The permit holder shall well and properly secure pits and shafts and will not without permission in writing, wilfully close, fill up or close any mine or shaft.

21. Not to enter upon or to commence operations in the reserved or protected forest:

The permit holder shall not enter upon or commence any mining operations in any forest land comprised in the leased area except after previously obtaining permission in writing of the Forest Department.

22. To respect water rights and not injure adjoining property :

The permit holder shall not injure or cause to deteriorate any source of water, power or water supply and shall not in any other way render any spring or stream or water unfit to be used or to do anything to injure adjoining land, villages or houses.

23. Stocks lying at the end of the permit :

(a) The permit holder on expiry of the permit period (successful completion of the permit) shall remove already extracted the entire mineral from the premises of the quarry within a period of seven days. In case any quantity of the already extracted mineral, in the said land is left undisposed off and is not removed within seven days from the date of expiry of the period of permit the same shall be deemed to be the property of the Government and competent authority may dispose it off in any manner it may like without paying anything thereof to the Permit holder.

(b) The permit holder on the termination or sooner determination of the permit shall not remove extracted mineral from the premises of the permit areas. All extracted minerals in the said lands left over un-disposed after the termination or determination of lease shall be deemed to be property of the Government and competent authority may dispose it off in any manner it may like without paying anything thereof to the Permit holder.

24. Payment of taxes:

The permit holder shall duly and regularly pay to the appropriate authority all taxes, cesses and local dues in respect of the permit area, said minor minerals or the working of the mines.

25. Payment of additional amount for reclamation/ restoration:

The Permit holder shall also pay additional amount equal to 10% of the amount of permit money by the 7th of every month to ensure the compliance of the Reclamation and Restoration works. This additional amount shall be refunded after satisfactory reclamation or restoration of the area after mining in accordance with the mine closure plan :

Provided that in case the Permit holder fails to reclaim or restore the area as per mining plan to the satisfactions of the Government, the amount deposited in the joint account shall be forfeited and used for the restoration of the area:

Provided further that in case no rehabilitation position of the mine comes during the tenure of the mining permit, the amount so deposited shall be kept by the Government in the mining area development fund for future use as and when the mine reaches to a stage requiring restoration and rehabilitation.

26. Assign sublet or transfer of the permit area :

The permit holder shall not assign, sublet or transfer the permit area to any person without obtaining prior permission in writing from the competent authority.

27. Fencing of working place :

If a working place is found to be unsafe, all persons shall be withdrawn by the permit holder immediately from the dangerous area and all access to such working place except for the purpose of removing the danger or saving life shall be prevented by securely fencing the full width of all entrances to the place, at his own cost.

28. Fencing of excavation after termination or sooner determination of the permit :

The permit holder on termination or sooner determination of the permit, shall at his own cost, suitably fence the excavations for safety as instructed by the competent authority.

29. Felling of trees :

The permit holder shall not fell or cut any tree, standing on the land wherein the quarry is located without obtaining prior permission in writing from the Forest Department and paying its price as fixed.

30. Security deposit shall carry no interest :

The security deposited by the permit holder shall not carry any interest. It shall be refunded to the permit holder within three months from the date of expiry or sooner determination of the permit in case the same is otherwise not forfeited or is not required to be detained for any other purpose.

31. Government not responsible for loss to Permit holder :

The Government shall not be responsible for any kind of loss to the Permit holder.

Part-IV**Rights of the State Government**

1. **The Suspension or Termination of the permit:**— The competent authority shall have the right to suspend or prematurely terminate the permit

- (a) If the permit money or royalty or surface rent or any other amount due to the Government are not paid,
- (b) if any of the terms and conditions of the permit agreement or conditions of grant or permission to undertake mining by any other statutory authority/Competent authority is violated;
- (c) if any of the provisions of these rules and other laws both Central and State as are applicable to mines and minerals, are not complied with :

Provided that no orders of suspension or termination of the permit shall be passed by the competent authority without giving reasonable opportunity to show cause and following the procedure prescribed in the Rules :

Provided further that in case of default in payment of Government dues such as permit money, royalty, dead rent or any other dues payable under these presents, the permit may be terminated by the competent authority without affording hearing to the permit after serving upon a notice to make good the payment within thirty days :

Provided further that the competent authority may also at any time after issuance of the notice for default on account of non payment of dues, enter upon the said premises and detain all or any of the mineral or movable property therein and may carry away, detain or order the sale of the property so detained, or so much of it as will suffice for the satisfaction of the permit money or rent or royalty or both dues and all costs and expenses occasioned by the non-payment thereof.

2. **Determination of permit area in public interest:**

The Government may by giving six months' prior notice in writing determine the permit if the Government consider that the minor mineral under the permit is required for establishing an Industry beneficial to the public:

Provided that in the State of national emergency or war, the permit may be determined without giving such notice.

3. **Right of pre-emption :**

The Government shall from time to time and at all times during the terms of permit have the right (to be exercised by notice in writing to the permit holder) of pre-emption of the said mineral(s) and all products thereof lying in or upon the said lands hereby

demised or elsewhere under the control of the permit holder and the permit holder shall deliver all minerals or products thereof to the Government at current market rates in such quantities and in the manner at the place specified in the notice exercising the said right.

4. Penalty for not allowing entry to officers :

If the permit holder or his transferee or assignee does not allow any entry or inspection under clause 11 of part-III, the competent authority may cancel the permit and forfeit in whole or in part the security deposit paid by the permit holder.

5. Compensation and acquisition of land of third parties thereof :

In case the occupier(s) or owner(s) of the said land refuses his consent to the exercise of the rights and powers reserved to the Government and demised to the permit holder under these presents, the permit holder shall report the matter to the competent authority who shall request the Collector of the district concerned to direct the occupier(s) or owner(s) to allow the permit holder to enter the said lands and to carry out such operations, as may be necessary for working the mine, on payment in advance of such compensation to the occupier or owner by the permit holder, as may be fixed by the Collector concerned under the rules.

6. Suspension of mining operations:

The Director may order to suspend the mining operations after serving a notice to the permit holder, in case, the following violations are noticed:-

- (a) unsafe and unscientific mining; or
- (b) non providing of safety appliances to the workers; or
- (c) non payment of compensation to the surface owners; or
- (d) non submissions of monthly returns;

In case of violations of the aforesaid conditions and also any other terms and conditions of the agreement deed and the provisions of the rules, the competent authority may give a notice to the permit holder to remedy the violations within a period of fifteen days from the date of issue of the notice. In case, the violations pointed out through notice, are not remedied within the stipulated period of fifteen days, the competent authority may after affording an opportunity of being heard to the Permit holder, order the suspension of the mining operations till such time, the defaults/ defects are removed by the Permit holder within the time frame granted by the competent authority. During the period of suspension of mining operations, the permit holder will be allowed only to undertake rectification work for removal of the defects and shall not dispose off the mineral. During the suspension period, the Permit holder shall be under the obligation to deposit the amount of the Govt. dues on the due dates.

On satisfactory removal of the defects, the competent authority may revoke the suspension orders with or without any modification. Non removal of the defects or defaults during the suspension period and within the time allowed by the competent authority, shall lead to premature termination of permit.

Part-V**General****1. Cancellation:**

The Permit holder shall be liable to be cancelled by the competent authority if the permit holder cease to work the mine for a continued period of one hundred eighty days without obtaining written sanction.

2. Notices :

Every notice by these presents required to be given to the permit holder shall be given in writing to such person resident on the said lands as the permit holder may appoint for the purpose of receiving such notices and if there shall have been no such appointment then every such notice shall be sent to the permit holder by registered post addressed to the permit holder at the address recorded in this permit or at such other address in India as the permit holder may from time to time in writing to the competent authority designate for the receipt of notices and every such service shall be deemed to be proper and valid service upon the Permit holder and shall not be questioned or challenged by him.

3. Recovery of Government dues as arrears of land revenue:

Without prejudice to any other mode of recovery authorised by any provision of this permit or by any law, all amounts, falling due hereunder against the Permit holder may be recovered as arrears of land revenue under the law in force for such recovery.

4. Forfeiture of property left more than three months after expiry or determination of permit:

The permit holder shall remove his property lying on the said lands within three months after the expiry or sooner determination of the permit. The property left after the aforesaid period of three months shall become the property of the Government and may be sold or disposed of in such manner, as the competent authority shall deem fit, without liability to pay any compensation therefore, to the permit holder.

5. Security and forfeiture thereof :

(a) the competent authority may forfeit the whole or any part of the amount deposited as security under this permit, in case the permit holder commits a breach of any covenants to be performed by the permit holder under the permit.

(b) Whenever the said security deposit or any part thereof or any further sum hereafter deposited with the Government in replenishment thereof is forfeited under sub-clause (a) or applied by the competent authority under the permit (which the competent authority is hereby authorised to do) the permit holder shall immediately deposit with the in appropriate part thereof to bring the amount in deposit with the Government up to the requisite amount of security at that point of time of permit.

(c) The rights conferred to the competent authority by clause (a) shall be without prejudice to the rights conferred on the Government by any other provision of this permit or by any law.

(d) On such date, as the competent authority may decide, within twelve calendar months after the determination of this permit or refusal of any renewal thereof, the amount of security deposit paid in respect of this permit and then remaining in deposit with the Government and not required to be applied to any of the purposes mentioned in this permit shall be refunded to the permit holder. No interest shall run on the security deposit.

6. Survey and demarcation of the area :

When a mining permit is granted, arrangement shall be made, if necessary, at the expense of the permit holder, for the survey and demarcation of the area granted under the permit. The permit holder shall have to bear actual expenses of the staff deputed for the work. Actual expenses will include travelling allowances, daily allowances and salary of staff plus ten percent as instrument charges.

7. Surrender of a mining permit by the Permit holder :

The Government may accept the request of the permit holder for surrender of a permit or part thereof in cases where it is established that it has not been found feasible to operate the permit grant for whatsoever reasons subject to the condition that the permit holder :

- (i) has been regular in furnishing the production returns as required in terms of the permit agreement;
- (ii) has been taking the requisite steps for the progressive mine closure plan as per the conditions of the permit grant;
- (iii) is not in default of payment of any dues of the Government as on the date of making such application and undertakes to pay all such dues till the date of expiry of the notice period either in cash in advance or by way of adjustment of the security or both :

Provided that in case the permit holder makes an application for surrender of part area of the permit, it shall not result in any prorated reduction of the permit money and the rate of permit money payable and applicable for the entire area at the time of such application shall remain intact.

8. Penalty for repeated breaches :

In case of repeated breaches of covenants and agreements by the permit holder for which notice has been given by the competent authority in accordance with sub-rule (1) of rule 55 and/ or clause (i) of sub rule (1) of rule 56 on earlier occasions, the Director

without giving any further notice, may impose such penalty not exceeding twice the amount of annual permit money.

9. Obtaining Sale Tax number :

The Permit holder shall get himself registered with the Taxation Department of Assam and shall obtain the Sales Tax number.

10. Overriding effect :

Unless otherwise specifically provided, it is agreed that this deed shall be governed by the provisions of the Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957) and the rules made thereunder. The provisions of the Act and the rules shall prevail over the terms and conditions of the agreement.

Signature of the Permit holder

For and on behalf of the Governor of Assam.

Witness :-

1. _____

1. _____

2. _____

2. _____

Signature of surety

Witness

1. _____

2. _____

FORM MPS-2

(See rule 25(3))

(Model form for execution deed for permit of Saltpeter)

This indenture made this _____ day of _____
 _____ 20____ between the Governor of Assam acting
 through _____ (hereinafter called the
 "Government" which expression shall where the context so admits be deemed to
 include his successors in office and assigns of the first part, and Shri _____
 _____ son of Shri _____
 resident of _____ district _____
 _____ (hereinafter referred to as "Permit holder" which expression shall,
 where the context so admits include his heirs, executors, administrators, representatives
 and permitted assigns) of the second part and Shri _____
 _____ son of Shri _____
 resident of _____ district _____ (hereinafter
 referred to as "the surety", which expression shall, where the context so admits, include
 his heirs, executors, administrators, representatives and permitted assigns) of the third
 part:

And whereas the permit holder has offered the highest bid for the permit of _____
 _____ cu.m. (in words _____ cubic metre _____ (name
 of the quarry) (hereinafter referred to as the "said lands") in Sub-Divisions
 _____ district _____ and whereas the permit holder has paid
 Rs. _____ (Rupees _____) only First instalment/
 permit money in full for the first year _____ and Rs.
 _____ (Rupees _____) only as security (equal to 25% of
 the bid amount) for the due fulfilment of the terms and covenants hereinafter mentioned
 and the Government has agreed to grant him the aforesaid permit.

Now these presents witnesses as follows :

1. Amount and mode of payment of permit money :

The permit holder shall during the subsistence of the permit pay in advance to the
 Government, the following permit money in respect of the said lands given to him on
 permit for the period from _____ to _____ on the dates
 mentioned below.

Serial Number	Value of Annual permit money	Periodicity of payment
1	2	3
(i)	Up to Rs. 10.00 lakhs.	Rs. (Full amount of permit money in lump-sum to be deposited at the time of auction along with the security amount.)
(ii)	Above Rs. 10.00 lakhs	Rs. (In two instalments, one at the time of auction and another by 15 th of May of the year to which the permit pertains)

2. Amount to be deposited on account of Mines and Mineral Development, Restoration and Rehabilitation Fund (hereinafter referred to as "Fund")

Where the permit holder is operating the area, he shall also pay an additional amount, equal to ten percent of the due permit money, whichever is more alongwith amount of instalments on account of dead rent or royalty, towards the Fund.

3. Interest on delayed payments :

In case of any default in payment of the instalments of permit money or contribution to the Fund on the due date(s), the amount would be payable alongwith interest at the following rates:

Serial Number	Period of delay	Rate of Interest applicable
(i)	If paid within a period of 7 days from the due date	A grace period of up to 7 days is allowed without any interest;
(ii)	If paid after 7 days but up to 30 days of the due date	15% on the amount of default for the period of default including the grace period;
(iii)	If paid after 30 days but within 60 days of the due date	18% on the amount of default for the period of default including the grace period;
(iv)	Delay beyond 60 days of the due date	Termination of the lease/ contract and the entire outstanding amount would be recoverable along with interest calculated @ 21% for the entire period of default.

4. No quarrying operations in certain areas :

No quarrying operations or working shall be carried on or permitted to be carried on by the permit holder in or under the said lands or to any point within a distance of ten metres from any railway line, bridge, National Highway, reservoir, tank, canal or other public road or buildings etc:

Provided that where the continuance of any mining operations in any area, in the opinion of the competent authority is likely to endanger the safety of any National or State Highway, road, bridge, drainage, reservoir, tank, canal, other public works, or other public or private buildings, the competent authority may terminate the permit after giving one month's notice to the Permit holder in this behalf. The permit shall stand terminated on the date mentioned in the notice. In such an event the Permit holder shall be refunded the permit money proportionate to the unexpired portion of the permit paid by him in advance if any.

5. To allow entry to Central Government and State Government Officers for inspection :

The permit holder shall at all reasonable times allow the competent authority and any other officer authorised by the Central Government or by the State Government in that behalf to inspect the said lands and the buildings and plant erected thereon and the permit holder shall assist such person in conducting the inspection and afford them all

information they may reasonably require and shall conform to and observe all orders which the Central or the State Government or the competent authority, as a result of such inspection or otherwise may from time to time pass.

6. Assign, sublet or transfer of the permit :

The permit holder shall not assign, sublet or transfer the permit to any person without obtaining prior permission in writing from the competent authority.

7. To pay compensation for damage and indemnify the Government:

The Permit holder shall make and pay such reasonable satisfaction and compensation for all damage, injury or disturbance which may be done by him in exercise of the powers granted by the permit and shall indemnify the Government against all claims which may be made by third parties in respect of such damage, injury or disturbance.

8. Not to carry on surface operation in prohibited areas :

The permit holder shall not carry on surface operation in any area prohibited by any authority, without obtaining prior permission in writing from the concerned authority.

9. Not to enter and work in reserved and protected forest areas :

The permit holder shall not enter and work in any forest land without obtaining prior permission in writing from the Forest Department.

10. Application of all Acts, rules and regulations to this permit :

The permit holder shall abide by the provisions of Mines Act, 1952 (35 of 1952), and the rules and regulations framed thereunder and also the provisions of other labour laws both Central and State as are applicable to the workmen engaged in the mines and quarries relating to the provisions of drinking water, rest shelters, dwelling houses, latrines and first-aid and medical facilities in particular and other safety and welfare provisions in general, to the satisfaction of the authorities under the aforesaid Acts, rules and regulations and also to the satisfaction of the District Magistrate concerned. In case of non compliance of any of the provisions of the enactments as aforesaid, the competent authority may terminate the permit by giving one month's notice with forfeiture of security deposited :

Provided that the Permit holder shall carry out mining operations in accordance with all other provisions as applicable for undertaking mining including the provisions of Forest (Conservation) Act, 1980 and Environment (Protection) Act, 1986 and the rules made there under.

11. Disposal of mineral(s) only on issuance of Mineral Transit Pass:

The holder of mining permit shall not sell or dispose off any mineral or mineral products from the concession area without a Mineral Transit Pass.

12. Security deposit shall carry no interest:

The security deposited by the permit holder shall not carry any interest. It shall be refunded to the permit holder within three months from the date of expiry or sooner determination of the permit in case the same is not forfeited or required to be detained for any other purposes under this deed.

13. Penalty for default :

In case of default in the due observance of the terms and conditions of the permit or in payment of the permit money on the due date, the permit may be terminated by the competent authority by giving one month's notice. In such an event, the competent authority shall be at liberty to forfeit the security deposited and also the instalment, paid in advance, if any the permit holder shall deliver the possession of the quarry to the Officer-in-Charge, concerned within seven days of the receipt of the order of termination of permit.

14. Termination of permit by Government in public interest :

The permit may be terminated by the Government if considered by it to be in public interest, by giving one month's notice:

Provided that in the State of National emergency or War, the permit may be terminated without giving such notice.

15. Recovery of permit money as arrears of land revenue :

Any sum due from the permit holder on account of permit money in respect of the permit shall be recoverable from him as arrears of land revenue.

16. To submit reports :

The permit holder shall furnish such reports and returns relating to output, labourers employed and other matters, as the competent authority may prescribe from time to time.

17. Returns :

The permit holder shall submit a monthly return in form 'MMPI' by the 10th day of each month to the competent authority and to the Officer-in-Charge concerned giving the total quantity of minor mineral(s) raised and dispatched from the specific area out of the area under permit in the preceding calendar month, and its value and such other information relating to the permit as may be called for by the competent authority.

18. State Government not responsible for loss to permit holder :

The Government shall not be responsible for any kind of loss to the Permit holder for any reason what-so-ever.

19. Notices :

Every notice by these presents required to be given to the permit holder shall be given in writing to such person, resident on the said lands as the Permit holder may appoint for the purpose of receiving of such notice and if there shall have been no such appointment then every such notice shall be sent to the Permit holder at the address recorded in this deed or at such other address in India, the Permit holder may, from time to time, in writing to the officer authorised by the competent authority for the receipt of notices and every such service shall be deemed to be proper and valid service upon the Permit holder and shall not be questioned by him.

20. Compensation and acquisition of land of third parties thereof :

In case the occupier(s) or owner(s) of the said land refuses his/ their consent to the exercise of the rights and powers reserved to the Government and demised to the Permit holder under these presents, the Permit holder shall report the matter to the competent authority who shall request the Collector of the district concerned to direct the occupier(s) or owner(s) to allow the Permit holder to enter the said lands and to carry out such operations as may be necessary for working the mine, on payment in advance of such compensation to the occupier or owner by the Permit holder, as may be fixed by the Collector concerned under the rules.

21. Suspension of mining operations :

The competent authority may order to suspend the mining operations after serving a notice to the permit holder, in case of the following;

- (a) unsafe and unscientific mining;
- (b) non providing of safety appliances to the workers;
- (c) non payment of compensation to the surface owners;
- (d) non submissions of monthly returns;

In case of violations of the aforesaid conditions and also any other terms and conditions of the agreement deed and the provisions of the rules, the competent authority may give a notice to the permit holder to remedy the violations within a period of fifteen days from the date of issue of the notice. In case, the violations pointed out through notice, are not remedied within the stipulated period of fifteen days, the competent authority may after affording an opportunity of being heard to the permit holder, order the suspension of the mining operations till such time, the defaults/ defects are removed by the Permit holder within the time frame granted by the competent authority. During the period of suspension of mining operations, the Permit holder will be allowed only to undertake rectification work for removal of the defects and shall not dispose off the mineral. During the suspension period, the permit holder shall be under the obligation to deposit the amount of the dead rent etc. on the due dates.

On satisfactory removal of the defects, the competent authority may revoke the suspension orders with or without any modification. Non removal of the defects or

defaults during the suspension period and within the time allowed by the competent authority, shall lead to premature termination of permit holder.

22. Stocks lying at the end of the permit :

- (a) The permit holder on expiry of the permit period (successful completion of the permit) shall remove already extracted all of the mineral from the premises of the quarry within a period of seven days. In case any quantity of the already extracted mineral, in the said land is left undisposed off and is not removed within seven days from the date of expiry of the period of permit the same shall be deemed to be the property of the Government which will be disposed by the competent authority in any manner, without paying anything thereof to the permit holder.
- (b) The permit holder on the termination or sooner determination of the permit shall not remove extracted mineral from the premises of the permit areas. All extracted minerals in the said lands left over un-disposed after the termination or determination of permit lease shall be deemed to be property of the Government which will be disposed off by the competent authority in any manner without paying anything thereof to the permit holder.

23. Recovery of Government dues as arrears of land revenue:

This indenture further witnesseth that in further pursuance of the agreement and covenants referred to above, the permit holder and the surety further covenant that if the permit holder shall make default in the payment of the permit money under these presents including any interest thereon, on the date or dates on which the same shall be or become payable then the whole of the outstanding permit money and interest shall be payable by the Permit holder and the surety jointly and severally. The Government shall be at liberty to recover the same from the permit holder or the surety irrespective of the fact whether Government shall have pursued all or any of its remedies against the Permit holder.

24. Permit holder shall get himself registered with the Taxation Department of Assam and shall obtain the Sales Tax number.

25. Overriding effect:

Unless otherwise specifically provided, it is agreed that this deed shall be governed by the provisions of the Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957) and the rules made thereunder. The provisions of the Act and the rules shall prevail over the terms and conditions of the agreement.

IN WITNESS WHEREOF these presents have been executed in the manner hereunder appearing the day and year above written.

Signature of the Permit holder.**For and on behalf of the Governor of Assam.****In the presence of :****In the presence of :**

1. _____

1. _____

Address _____

Address _____

2. _____

2. _____

Address _____

Address _____

Signature of the surety**In the presence of :-**

1. Name _____

Address _____

2. Name _____

Address _____

FORM PIM - 1*(See rule 26(4))***Application for the grant of permit for excavation of Brick Earth by the Brick Kiln Owners****To**

.....

.....

Dear Sir,

Undersigned intends to install a brick Kiln or is the owner of
 (Name and address of the Brick Kiln), and for manufacturing of the bricks requires the minor mineral namely "Brick Earth". The application fee of Rs. 500/- (non-refundable) in the form of bank draft/treasury challan bearing number..... dated, is enclosed.

2. The details of the area for which permission is being sought, is given as under :-

- (a) location of Brick Kiln(village/ sub-division/district)
- (b) category of the Brick Kiln
- (c) extent of the land from which brick earth is to be excavated (Dag No., Patta No. etc.)
- (d) lay out plan of the area applied for permit
- (e) existing status of the land as compared to general ground level of the area
- (f) quantity of brick kiln required to be removed
- (g) advance amount of Permit fee/royalty
- (h) security (refundable).

3. Applicant further submits that;

- (i) royalty at the rates prescribed under First Schedule to the Assam Minor Mineral Concession Rules, 2012 shall be paid for the brick earth to be removed from the area under permit.
- (ii) area is free from Plantation or is not forest land.
- (iii) digging of the earth at the site is otherwise not prohibited by any court of law or any authority.
- (iv) brick earth will be used only for manufacturing of the bricks.
- (v) he will abide by all relevant provisions for excavation of earth.
- (vi) a compensation has been settled with land owner mutually and a copy of the agreement signed between the applicant and the landowner qua mutual settlement of the compensation is attached(in case land is owned by the applicant himself, the proof thereof).
- (vii) in case of renewal of permit copy of last permit, alongwith proof of payment towards applicable permit money or royalty.

Dated :**Encls: As above.****(Name and address of the applicant).**

FORM PIM - 2

(See Rule 26(8))

Standard form for quarrying permits for brick earth

Whereas Shri/Messers _____ owner(s) of Brick Kiln falling in category _____ has/ have applied for quarrying permit for removal of the "Brick Earth", for a period of two years from the land measuring _____ bigha/ acres/hectares bearing Dag, Patta numbers _____ in the revenue estate of _____ Sub-division _____ District _____ under rule 26 of the Assam Minor Mineral Concession Rules, 2012. The applicant has paid requisite application fee of Rs. _____ and has/have also paid security amounting to Rs. _____ (25% of the annual royalty amount). (Further the applicant has also deposited the permit fee of _____ for _____ category of Brick Kiln.)

The permission is hereby granted for removal of brick earth and manufacture of bricks from the aforesaid area during the period from _____ to _____ (upto 31st March, _____) subject to the conditions given below :-

1. The holder of the permits shall keep the Government indemnified from third party claim relating to the extraction of brick earth from the land for which quarrying permit is given.
2. The holder of the permit shall excavate the brick earth in such a manner that the same shall not disturb or damage any road, public ways, buildings, premises of public grounds.
3. The holder of the permit shall not use the brick earth excavated from the land granted on permit for any other purpose than that of manufacturing of bricks. In case the brick earth is to be transported up to brick kiln from the site of the excavation, the permit holder transports the same only by issuing a Mineral Transit Pass.
4. That the holder of the permit shall not fell any tree standing on the land without obtaining prior permission in writing from the competent authority in the Forest Department. In case such permission has been granted, he shall abide by the terms and conditions stipulated in such permission.
5. The permit holder shall not carry on surface operations in any area prohibited by any authority, without obtaining prior permission in writing from the concerned authority.
6. The permit holder shall not enter and work in any Forest without obtaining prior written permission of the Forest Department.

7. The permit holder shall report immediately all accidents to the Deputy Commissioner and the competent authority concerned.
8. The depth of the pit below surface shall not exceed nine feet.
9. The annual amount of royalty shall be paid in advance by 1st April of every year.

In case the annual royalty is not paid on the date specified above, the permit holder shall be liable to pay interest as per following :-

Serial Number	Period of delay	Rate of Interest applicable
(i)	If paid within a period of 7 days from the due date	A grace period of up to 7 days is allowed without any interest
(ii)	If paid after 7 days but up to 30 days of the due date	15% on the amount of default for the period of default including the grace period;
(iii)	If paid after 30 days but within 60 days of the due date	18% on the amount of default for the period of default including the grace period;
(iv)	Delay beyond 60 days of the due date	Termination of the permit and the entire outstanding amount would be recoverable along with interest calculated @ 21% for the entire period of default.

10. The brick Kiln owner shall be liable to make payment of lump-sum royalty for the whole of the year notwithstanding the operation of the Kiln for any part of the year.
11. In case of any default in due observance of the terms and conditions of this permit or in payment of the instalment on due date, the permit may be cancelled by the competent authority by giving one month's notice. Any sum due from the permit holder on account of royalty and interest thereon shall be recovered from him/ them as an arrear of land Revenue.

Signature _____

Designation _____

FORM PIM – 3

*(See rule 27(5))***Application for the grant of permit for extraction of ordinary clay/earth**

To

.....

.....

Dear Sir,

The applicant is the owner of land or is having the written consent of the land owner of the land measuring bigha/ ha
 (details of Dag, Patta numbers) in village Sub-division
 District and have to remove the ordinary clay/earth for
 levelling the land or selling the same for commercial purpose. As a result of levelling of
 land or excavation, ordinary clay/earth excavated is to be disposed off, for which
 permission is solicited. The applicant further state that :-

2. The details of the area for which permission is being sought, is given as under:-

- (a) location of the area
- (b) purpose
- (c) total area to be excavated/levelled
- (d) extent of the area [length, breadth and depth]
- (e) quantity of the ordinary clay to be removed and disposed off
- (f) existing status of the land as compared to general ground level of the area
- (g) advance royalty
- (h) security (refundable)

Dated :

Encls: As above.

(Name and address of the applicant).

(i) Proof of ownership of land/consent of the land owner.

Form PIM- 4

(See rule 27(6))

Standard form for excavation of ordinary clay or earth

Whereas Sh./ Messers _____ has applied for the grant of a permit under Rule 27 of the Assam Minor Mineral Concession Rules, 2012, for excavation of _____ tonnes/ cubic meter/ quintals of _____ ordinary clay/earth, a minor minerals for excavation/removal from _____ (details of area). The applicant has/have paid royalty in advance amounting to _____ and Rs. _____ on account of Mines and Mineral Development, Rehabilitation and Restoration Fund (10% of the amount of royalty) and Rs. _____ on account of security (50% of the amount of royalty).

The permission is hereby granted for disposal of the mineral _____ (name of minor minerals) tonnes/ cubic meter/ quintals excavated/removed from the aforesaid area for the period from _____ to _____ subject to following conditions:-

1. The holder of the permits shall keep the Government indemnified from third party claim relating to the extraction of ordinary clay/earth from the land for which quarrying permit is given.
2. The holder of the permit shall excavate the ordinary clay/earth in such a manner that the same shall not disturb or damage any Road, Public ways, buildings, premises of public grounds.
3. That the holder of the permit shall not fell any tree standing on the land without obtaining prior permission in writing from the competent authority in the Forest Department. In case such permission has been granted, he shall abide by the terms and conditions stipulated in such permission.
4. The permit holder shall not carry on surface operations in any area prohibited by any authority, without obtaining prior permission in writing from the concerned authority.
5. The permit holder shall not enter and work in any forest land without obtaining prior written permission of the Forest Department.
6. The permit holder shall report immediately all accidents to the Deputy Commissioner and the competent authority concerned.
7. The depth of the pit below surface shall not exceed nine feet and in case where sand deposits are found, the depth of the pit below surface shall not exceed three feet.

8. The permit holder shall not excavate any other mineral than that of ordinary clay/earth found in the area. Any breach in this regard will entail immediate suspension of the workings and followed by termination of permit along with forfeiture of security amount, after affording opportunity of show cause. In case any mineral is illegally disposed off, the Officer-in-Charge shall also recover amount of penalty in accordance with the provisions of Mines and Mineral (Development and Regulation) Act 1957 and Rules framed thereunder.
9. The permit holder shall ensure that any mining operations below a depth of 1.5 metres shall necessarily be undertaken by formation of benches for safe mining. The benches would be formed in a manner that the width of the bench is not lesser than the height of the bench or as permitted by the Director, Mines Safety, Government of India.
10. The permit holder shall transport/dispose of the ordinary clay/earth from the site of the excavation, only by issuing a Mineral Transit Pass.
11. The permit holder shall restore and rehabilitate the area of excavation with in fifteen days from the date of expiry of the permit and shall submit compliance report to the Officer-in-Charge.
12. In case of any default in due observance of the terms and conditions of this permit or in payment of the instalment on due date, the permit may be cancelled by the competent authority by giving one month notice where the remaining period of permit is more than sixty days. In other cases the period of permit is less than sixty days, notice of ten days shall be given before taking decision on cancellation of permit.
13. The amount of security deposit shall entail no interest. The security amount shall be refunded within a period of three months in case the same is not forfeited or required to be detained for any other purpose under this permit.
14. Any sum due from the permit holder shall be recovered from him as an arrear of land Revenue.

The permission shall be valid up to _____.

Signatures _____

Designation _____

FORM MMP - 1

[See rule 24, 25 and 38(15)(i)]

Monthly return for the Month of _____ (to be furnished by the
mining lessee/contractor/permit holder)

1.	Name of the Mine		3.	Name and address of lessee	
2.	Location of the Mine (a) Village (b) District (c) State		4.	Name of Minor Mineral(s) for which lease has been granted	

Name of mineral(s)	Closing stock brought forward from the previous month (Tonne/Cu.M.)	Production during the month (Tonne/Cu.M.)	Dispatched during the month (in Tonne/Cu.M.)				Closing stock (Tonne / Cu.M.)
5.	6.	7.	8.				9.
			By Truck	By Railway	By other means of transport	Total	

Average daily No. of labourer or employees				Wages paid			
10				11			
Male	Female	Adolescent	Total	Male	Female	Adolescent	Total
6A	6B	6C	6D	7A	7B	7C	7D

Dated : _____

Signature of the lessee/contractor/
Permit holder or his authorized agent.

- N.B. : (1) Please furnish on the reverse of this form reasons for rise or fall in production, dispatches and labour employed, etc. as compared with the previous month.
- (2) Please send this report to :
- The competent authority;
 - The Officer-in-Charge concerned by the 10th of the month following the month under report.

FORM MMP - 2
[See rule 38(15)(ii)]

Annual return to be furnished by the mining lessee/contractor

**Annual Statement of Minor Minerals obtained, labourer employed, etc. for the Financial
Year ending _____ 20__.**

Name of the lessee _____

Area of the lease _____

Village _____

Sub-Division _____

District _____

Name of the minor mineral	Output	Value	Average number of persons employed daily		
1	2	3	4		
			Male	Female	Total

Average No. of days worked	No. of accidents	Compensation paid (in Rs.)	No. of days worked	Remarks
5	6	7	8	9

Dated : _____

Signature of the lessee/contractor/
Permit holder or his authorized agent.

N.B. : This return is to be submitted by the 15th of April of each year for the preceding financial year, i.e. from First of April to 31st March to the :

- (a) The competent authority.
- (b) The Officer-in-Charge concerned.

FORM MSE - 1

[See rule 38(21)]

Notice for explosive, etc. by the lessee

1.	Name of mine	
2.	Name of minor mineral(s) excavated	
3.	Situation of mine (village, Police Station, Sub-Division, District)	
4.	The date when works were first started.	
5.	Name and postal address of present owner(s)	
6.	Name and postal address of agency, if any	
7.	Name and postal address of Manager, if any	
	Age	
	Qualification	
	Experience in mining	
8.	Whether workings are likely to be extended below, superjacent ground.	
9.	Maximum depth of open cast excavation measured from its lowest point	
	Date when depth first exceeded six metres.	
10.	Nature, amount and kind of explosives used, if any.	
11.	Date when explosives were first used.	
12.	Date(s) on which the number of persons employed on any day exceeded 50.	

Signature of Owner/Agent/Manager

Dated: _____

To be sent to :

1. The Controller General, Indian Bureau of Mines, Government of India, Nagpur;
2. The Director General of Mines Safety, Government of India, Dhanbad;
3. The Director, Mines Safety, Government of India, Guwahati;
4. The Regional Controller of Mines, Indian Bureau of Mines, Kolkata;
5. The Competent Authority;
6. The District Magistrate of the concerned District and
7. The Officer-in-Charge concerned.

SCHEDULE – 'X'
[Under Rule 3 (1)]

Minor minerals for industrial and specific uses :

(1) Building stone including Granite :	When mined for the purpose of manufacture of polished tiles, slabs and other decorative and architectural purposes
	Or
	When mined in large-scale for export of the stone in the form of cubes, slabs, boulder or gravel and for construction of dams, dykes, bridges, etc.
(2) Marble	
(3) Fuller's earth	
(4) Bentonite	
(5) Lime Shell	When used in kilns for manufacturing of lime used as building materials
(6) Kankar	
(7) Lime stone of any grade	
(8) Brick earth	When used in mechanized brick plants
(9) Quartzite and Sand Stone	When used in cement manufacturing or any other manufacturing industry.
(10) Ordinary clay	When used in cement manufacturing or in any industry other than Cottage Industry
(11) Shale	

SCHEDULE 'Y'
[Under Rule 3 (2)]

Minor minerals for uses other than in industry :-

(1) Gravel	When used in construction of roads and buildings other than mined in large scale for export and for construction of dams, dykes, bridges, etc.
(2) Ordinary clay	Other than used in cement manufacturing or in any industry except cottage industry
(3) Ordinary Sand	Other than sand used for prescribed purposes.

Mineral Concession Rule 1960 :- Rule 70 :- Sand not to be treated as minor mineral when used for certain purposes sand shall not be treated as minor mineral when used for any of the following purposes :

- (i) Purpose of refractory and manufacture of ceramic,
- (ii) Optical purposes,
- (iii) Metallurgical purposes,
- (iv) Purposes of stowing in coal mines,
- (v) For manufacture of silvicrete cement,
- (vi) For manufacture of Sodium silicate,
- (vii) For manufacture of pottery and glass.

(4) Boulder	When used in construction of roads and buildings other than mines in large scale for export and for construction of dams, dykes and bridges, etc.
(5) Shingle	
(6) Chalcedony or impure quartz pebbles	When used for ball mill purposes for filing for bore wells or for decorative purposes in buildings
(7) Murram	Other than brick-earth used in mechanized brick plants
(8) Brick-earth	

(9) Road metal	
(10) Reh matti	
(11) Slate and Shale	When used as building material and other than used in cement or other industry except Cottage Industry.
(12) Stones	When used for making household utensils.
(13) Quartzite and Sandstone	When used for purposes of building or for making road metal and household utensils other than used in cement manufacturing or in any other manufacturing industry.
(14) Salt-petre	
(15) Ordinary Earth	

First Schedule
Rates of royalty
 (see rule 8(6), 26(6) and 27(4))

Sl.No	Name of Minor Mineral	Rate of Royalty (In Rs.)	
	Building Stone (excluding		
1	Granite)	100.00	Cu. M
2	Gravel	100.00	Cu. M
3	Ordinary Clay	15.00	Cu. M
4	Ordinary sand other than sand used for prescribed purposes.	70.00	Cu. M
5	Boulder	100.00	Cu. M
6	Shingle	75.00	Cu. M
7	Chalcedony or Impure quartz pebbles	90.00	Cu. M
8	Lime Shell	when used in kilns for manufacture of lime used as building materials.	80.00 Cu. M
9	Kankar		
10	Lime Stone		
11	Murram	-	
12	Brick Earth	15.00	Cu. M
13	Fuller's Earth	20.00	Cu. M
14	Bentonite	30.00	Cu. M
15	Road metal	-	
16	Rchmatti	-	
17	Slate	-	
18	Shale	-	
19	Marbale	-	
20	Stone used for making household utensils	-	
21	Quartzite and Sandstone	80.00	Cu. M
22	Salt petre	-	
23	Granite	70.00	Cu. M
24	Ordinary Earth	-	

Second Schedule**Fee for review and appeal**

{See rule 71(1)}

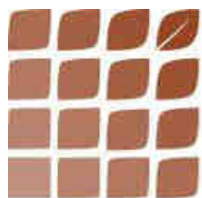
An appeal before Controlling Officer against the orders of Subordinate Officer	Rs. 2,000/-
An application before the Director/Principal Chief Conservator of Forests and Head of Forest Force for review of orders passed by him	Rs. 2,000/-
An appeal before the Government against the orders of Director/Principal Chief Conservator of Forests and Head of Forest Force	Rs. 3,000/-

R. T. JINDAL,

Principal Secretary to the Government of Assam,
Power (E), Mines and Minerals Department,
Dispur, Guwahati – 6.

ANNEXURE-8

Assam Minor Mineral Concession (Amendment) Rules, 2021



International Environmental
Law Research Centre

Assam Minor Mineral Concession (Amendment) Rules, 2021

This document is available at ielrc.org/content/e2111.pdf

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GOVERNMENT OF ASSAM
FINANCE (ESTABLISHMENT-B) DEPARTMENT
2nd FLOOR, BLOCK 'F', JANATA BHAWAN
DISPUR, GUWAHATI-6

No. FEB.28/2016/pt/25

Dated Dispur the 1st November, 2021.

From : Secretary to the Govt. of Assam,
Finance (Establishment-B) Department.

To : 1. All Treasury Officers
2. All Accounts Officer/ Deputy Accounts Officers

Sub : Forwarding of Notification vide No-PEM.130/2021/40 dtd.7th October, 2021.
Sir,

With reference to the subject cited above I am directed to forward herewith copy of Notification vide No-PEM.130/2021/40 dtd.7th October, 2021, relating to Assam Minor Mineral Concession (Amendment) Rules, 2021.

All Treasury Officers and all Accounts Officer/Deputy Accounts Officers are requested to follow the above mentioned Rule with immediate effect.

Yours faithfully,

s.d.
Secretary to the Govt. of Assam,
Finance (Establishment-B) Department.
Dated Dispur the 1st November, 2021.

No. FEB.28/2016/pt/25-A

Copy to for information to:

1. P.S. to Principal Secretary, Finance Department for kind information of Principal Secretary.
2. P.S. to Commissioner & Secretary (MT/JN) Finance Department for kind information of Commissioner & Secretary.
3. All Deputy Commissioners.
4. The Director of Finance (Budget)/Accounts & Treasuries/Audit (L/F)/PenTsion
5. All Sr. FA/Joint Directors.
6. All Sr. F&AO/Deputy Directors
7. Finance(ASCFMS) Unit for necessary Uploading in the website.

By order etc.,

Delmard
Secretary to the Govt. of Assam,
Finance (Establishment-B) Department
B

GOVERNMENT OF ASSAM
ORDERS BY THE GOVERNOR
DEPARTMENT OF MINES AND MINERALS
JANATA BHAWAN, DISPUR
NOTIFICATION

Dated Dispur, the 7th October, 2021

No. PEM.130/ 2021/ 40 : In exercise of the powers conferred by the sub-section (1) of section 15 and section 23C of the Mines and Minerals (Development and Regulation) Act, 1957 (Central Act 67 of 1957), the Governor of Assam is hereby pleased to make the following rules further to amend the Assam Minor Mineral Concession Rules, 2013, hereinafter referred to as the principal Rules, in the manner hereinafter appearing, namely: -

Short title and commencement	1. (1) (2)	These rules may be called the Assam Minor Mineral Concession (Amendment) Rules, 2021. They shall come into force on the date of their publication in the Official Gazette.
Amendment of rule 5	2	In the principal Rules in Rule 5. for the existing the sub-rule (3), the following shall be substituted, namely: - ^ (3) (i) - The minor minerals, when shall be used or consumed by Government Departments the rates of Royalties shall be paid as per the rates prescribed in the Third Schedule appended to these rules and other Ancillary Charges as shall be notified by Government, shall be deducted by the Government Departments through the Treasury in proportionate rate to the percentage of the total cost of project excluding taxes as GST, IT etc. The minor minerals, when shall be used or consumed by Government Agencies the rates of Royalties shall be deducted as per the rates prescribed in the Third Schedule appended to these rules and other Ancillary Charges as shall be notified by Government, at the time of payment of bills of contractors or suppliers in proportionate rate to the percentage of the total cost of project excluding taxes as GST, IT etc. and thereafter shall deposit in the appropriate Head of Account or Bank Account as shall be notified by Government for the said purpose. (ii) The minor minerals, when shall be used or consumed by Central Government Departments or any of their Agencies, the rates of Royalties shall be paid as per the rates prescribed in the Third Schedule appended to these rules and other Ancillary Charges as shall be notified by Government. Such Departments or Agencies shall ensure that prescribed Royalties and ancillary charges have been paid by the Contractors/Suppliers/Agencies before making final payment against their bills. (iii) Urban local bodies shall collect Royalty as prescribed in the Third Schedule in 4 (four) equal instalments. The first instalment shall be collected at the time of granting of building construction permission, the next two instalments during construction and the final instalment on completion of the construction works. The Royalties as collected by the Urban Local Bodies shall be deposited the Head of Account or Bank account as shall be notified by the Government. In rural areas, the existing procedure of making payments of Royalties shall continue. (iv) The rates as appended in the Third Schedule and process as prescribed above shall be applicable to fresh tenders only "
Amendment of rule 8	3.	In the principal Rules, in rule 3. In sub-rule (6), in between the punctuation mark and figure "[6]" and the word "The lessee" the punctuation mark and figure "[1]" shall be inserted and thereafter at the end of clause (i) the following new clauses shall be inserted, namely: -

" (ii) - The minor minerals, when shall be used or consumed by Government Departments, the rates of Royalties shall be paid as per the rates prescribed in the Third Schedule appended to these rules and other Ancillary Charges as shall be notified by Government, shall be deducted by the Government Departments through the Treasury in proportionate rate to the percentage of the total cost of project excluding taxes as GST, IT etc..

The minor minerals, when shall be used or consumed by Government Agencies the rates of Royalties shall be deducted as per the rates prescribed in the Third Schedule appended to these rules and other Ancillary Charges as shall be notified by Government, at the time of payment of bills of contractors or suppliers in proportionate rate to the percentage of the total cost of project excluding taxes as GST, IT etc. and thereafter shall deposit in the appropriate Head of Account or Bank Account as shall be notified by Government for the said purpose.

(iii) The minor minerals, when shall be used or consumed by Central Government Departments or any of their Agencies, the rates of Royalties shall be paid as per the rates prescribed in the Third Schedule appended to these rules and other Ancillary Charges as shall be notified by Government. Such Departments or Agencies shall ensure that prescribed Royalties and ancillary charges have been paid by the Contractors/Suppliers/Agencies before making final payment against their bills.

(iv) Urban local bodies shall collect Royalty as prescribed in the Third Schedule in 4 (four) equal instalments. The first instalment shall be collected at the time of granting of building construction permission, the next two instalments during construction and the final instalment on completion of the construction works. The Royalties as collected by the Urban Local Bodies shall be deposited the Head of Account or Bank account as shall be notified by the Government.

In rural areas, the existing procedure of making payments of Royalties shall continue.

(v) The rates as appended in the Third Schedule and process as prescribed above shall be applicable to fresh tenders only. "

Amendment of
rule 27

4. in the principal Rules, in rule 27, in sub-rule (4), in between the punctuation mark and figure "(4)" and the word "The Royalty", the punctuation mark and figure "(i)" shall be inserted and thereafter at the end of clause (i) the following new clauses shall be inserted, namely: -

" (ii) Ordinary Earth/Clay, when shall be used or consumed by Government Departments, the rates of Royalties shall be paid as per the rates prescribed in the Third Schedule appended to these rules and other Ancillary Charges as shall be notified by Government, shall be deducted by the Government Departments through the Treasury in proportionate rate to the percentage of the total cost of project excluding taxes as GST, IT etc..

The minor minerals, when shall be used or consumed by Government Agencies the rates of Royalties shall be deducted as per the rates prescribed in the Third Schedule appended to these rules and other Ancillary Charges as shall be notified by Government, at the time of payment of bills of contractors or suppliers in proportionate rate to the percentage of the total cost of project excluding taxes as GST, IT etc. and thereafter shall deposit in the appropriate Head of Account or Bank Account as shall be notified by Government for the said purpose.

(iii) The minor minerals, when shall be used or consumed by Central Government Departments or any of their Agencies, the rates of Royalties shall be paid as per the rates prescribed in the Third Schedule appended to these rules and other Ancillary

Charges as shall be notified by Government. Such Departments or Agencies shall ensure that prescribed Royalties and ancillary charges have been paid by the Contractors/Suppliers/Agencies before making final payment against their bills.

(iv) Urban local bodies shall collect Royalty as prescribed in the Third schedule in 4 (four) equal instalments. The first instalment shall be collected at the time of granting of building construction permission, the next two instalments during construction and the final instalment on completion of the construction works. The Royalties as collected by the Urban Local Bodies shall be deposited in the Head of Account or Bank account as shall be notified by the Government.

In rural areas, the existing procedure of making payments of Royalties shall continue.

(v) The rates as appended in the Third Schedule and process as prescribed above shall be applicable to fresh tenders only."

5. In the principal Rules, after the Second Schedule, the following new Schedule shall be inserted, namely: -

"THIRD SCHEDULE

Appropriate amount of Royalty to be deducted by Government user agencies

(See Rule 5(3), 8(6) and 27(4))

Sl. No.	Work	Appropriate amount of Royalty of Minor Mineral as percentage of Project Cost excluding taxes as GST, IT etc.
I	RCC Building/RCC Work	2.00 %
II.	Assam Type Building (Single floor)	1.00 %
III	Assam Type Building (Ground floor + 1 or more)	2.00%
IV	RCC Bridge Work	2.00 %
V	DBM & BC Work	2.00 %
VI	Road Improvement / Re-construction Work	3.00 %
VII	New Road Construction Work with Bituminous Work	6.00 %
VIII	New Road Construction Work with ICBP	3.00 %
IX	Earth Work/ Ordinary Clay	9.00%
X	Earth Work along with Geobag Protection Work	3.50 %
XI	Earth Work along with Boulder Protection Work	5.50 %
XII	River Protection Work with Boulder	4.00%
XIII	River Protection Work with Geobag	1.50 %
XIV	River Protection Work with Boulder and Geobag	2.00 %
XV	Head work/Brick work of Irrigation projects	4.00%
XVI	Pradhan Mantri Awas Yojana (PMAY)	1.00% "

Sd/-

Dr. Krishna Kumar Dwivedi, IAS
Principal Secretary to the Government of Assam,
Mines and Minerals Department.

Memo No. PEM.130/2021/40-A

Dated Dispur, the 7th October, 2021

Copy to:-

1. PPS to Chief Minister, Assam, Dispur, Guwahati-6.
2. PS to the Minister, Mines & Minerals Department, Dispur, Guwahati-6.
3. PS to Chief Secretary, Assam, Dispur, Guwahati-6.
4. PS to the PCCF & HoFF, Assam, Aranya Bhawan, Panjabari, Guwahati-37.
5. PS to Additional Chief Secretary to the Govt. of Assam, Water Resource Department, Dispur, Guwahati-6.
6. PS to Additional Chief Secretary to the Govt. of Assam, Public Health Engineering Department, Dispur, Guwahati-6.
7. PS to Principal Secretary to the Govt. of Assam, Mines & Minerals Department, Dispur, Guwahati-6.
8. PS to Principal Secretary to the Govt. of Assam, Environment & Forest Department, Dispur, Guwahati-6.
9. PS to Principal Secretary to the Govt. of Assam, Panchayat & Rural Development Department, Dispur, Guwahati-6.
10. PS to Principal Secretary to the Govt. of Assam, Irrigation Department, Dispur, Guwahati-6.
11. PS to Commissioner & Secretary to the Govt. of Assam, Finance (EA) Department, Dispur, Guwahati-6.
12. PS to Commissioner & Special Secretary to the Govt. of Assam, Public Works (Roads) Department, Dispur, Guwahati-6.
13. PS to Commissioner & Special Secretary to the Govt. of Assam, Public Works (Building & NH) Department, Dispur, Guwahati-6.
14. PS to Commissioner & Secretary to the Govt. of Assam, Legislative Department, Dispur, Guwahati-6.
15. PS to Legal Remembrancer & Secretary to the Govt. of Assam, Judicial Department, Dispur, Guwahati-6.
16. The Accountant General, Assam, Beltola, Guwahati.
17. The Director, Assam Govt. Press, Bamunimaidam, Guwahati-21 for publication of the notification in the next issue of the Assam Gazette and to submit 50 (Fifty) copies of the said notification to this department.
18. The Executive Director, Regional Office, National Highway & Infrastructure Development Corporation Ltd., Ambari, Guwahati-781001.
19. The Regional Officer, Regional Office, National Highway & Infrastructure Development Corporation Ltd., Ambari, Guwahati-781001.
20. The General Manager, Railway Construction, North East Frontier Railway, Maligaon, Guwahati-781011.
21. Special Director General, Regional Office, CPWD, Garchuk, Guwahati-35.

By order etc.,

Addl. Secretary to the Govt. of Assam,
Mines & Minerals Department.
Dispur, Guwahati-6.

ANNEXURE-9

**Honorable NGT Court Order OA No.
360/2015 dated 05.04.2019 regarding
the steps required to be taken for
environment protection from
unregulated sand mining**

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 360/2015
WITH
Original Application No. 366/2015
(M.A.No. 02/2019)
WITH
Original Application No. 368/2015
(M.A.No. 16/2019)
WITH
Original Application No. 173/2018
(Earlier O.A. No. 89/2017 (EZ)
(I.A. No. 76/2019)
WITH
Original Application No. 874/2018
WITH
Original Application No. 44/2016
WITH
Original Application No. 517/2015
WITH
Original Application No. 550/2015
WITH
Original Application No. 530/2016
WITH
Original Application No. 272/2016
WITH
Original Application No. 481/2016
WITH
Original Application No. 540/2015
WITH
Original Application No. 90/2016
WITH
Execution Application No. 40/2017
IN
O.A. No. 517/2015

National Green Tribunal Bar Association	Applicant(s)
Virender Singh (State of Gujarat)	Respondent(s)
National Green Tribunal Bar Association	Applicant(s)
Dr.SarvabhounBagali (State of Karnataka)	Respondent(s)
National Green Tribunal Bar Association	Applicant(s)

Versus
Dr.Sarvabhoun Bagali (State of Maharashtra) Respondent(s)
WITH
Sudarsan Das Applicant(s)

Versus
State of West Bengal &Ors.
(State of West Bengal and Odisha) Respondent(s)
WITH

News item published in "The Tribune " Authored by Arun Sharma
Titled "Mounds of sand on Sutlej banks, mining mafia digs in"

WITH
Mushtakeem Applicant(s)

Versus
MoEF& CC &Ors. Respondent(s)

WITH
Sandeep Kumar Applicant(s)

Versus
Ministry of Environment, Forests and
Climate Change &Ors. Respondent(s)

WITH
Virender Kumar Applicant(s)

Versus
Ministry of Environment, Forests and
Climate Change &Ors. Respondent(s)

WITH
Sandeep Kumar Applicant(s)

Versus
Ministry of Environment, Forests and
Climate Change &Ors. Respondent(s)

WITH
M/s Ganga Yamuna Mining Co. Applicant(s)
Versus

State of Haryana&Ors. Respondent(s)
WITH

Joginder Singh Applicant(s)
Versus

Ministry of Environment, Forests &Ors. Respondent(s)
WITH

Ved Pal Singh Applicant(s)
Versus

Ministry of Environment, Forests &Ors. Respondent(s)

Chander Mohan Uppal	WITH	Applicant(s)
State of U.P. &Ors.	Versus	Respondent(s)
Sandeep Kumar	WITH	Applicant(s)
Ministry of Environment, Forests and Climate Change &Ors.	Versus	Respondent(s)

Date of hearing: 05.04.2019

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

For Applicant(s):	Mr. Raj Panjwani, Sr. Advocate, Mr. Aagney Sai, Advocate Mr. Sravan Kumar, Advocate Mr. Rahul Choudhary, Ms. Meera Gopal, Mr. Sharan Balakrishna, Advocates.
For Respondent (s):	Ms. Puja Singh, Advocate for the State of Gujarat Mr. Devraj Ashok, Advocate for State of Karnataka Mr. Soumyajit Pani, Advocate for State of Odisha Mr. Raja Chatterjee, Advocate for State of West Bengal Mr. Ankit Verma, Advocate for State of U.P Mr. Divya Prakash Pande, Advocate Mr. Shlok Chandra, Mr. Ritesh Kumar Sharma, Advocates Mr. Sany Antony, Advocate Mr. Ankur Mittal, Mr. Abhay Gupta, Advocate Mr. Rahul Khurana, Advocate, Mrs. Madhri Gupta, Mr. Sanjay Sabbarwa, Mining Officer

ORDER

1. The common question for consideration in this group of matters is the steps required to be taken for environment protection from unregulated sand mining in the States of Gujarat, Karnataka, Maharashtra, West Bengal, Odisha, Punjab, Haryana and Uttar Pradesh. The issue is common even with regard to States who are not party to these proceedings.

Background

2. The Hon'ble Supreme Court, vide judgment in *Deepak Kumar Vs State of Haryana & Ors. (2012) 4 SCC 629*, directed that leases of minor minerals, including their renewal, even for an area of less than 5 hectares (ha) be granted only after environmental clearance from the Ministry of Environment and Forest and Climate Change (MoEF & CC). This direction was held to be necessary in view of degradation of environment on account of illegal and unrestricted upstream, in-stream and flood plain sand mining activities. Under the existing guidelines, no environmental clearance was required for minor leases of less than 5 hectare area. The result was that there was no regulation of such mining which resulted in environmental degradation. Even bigger cluster was split up in less than 5 ha units to avoid law.
3. The Hon'ble Supreme Court observed that absence of regulation of such mining was not justified as it was threat to bio-diversity, could destroy riverine vegetation, cause erosion, pollute water sources, badly affecting riparian ecology, damaging ecosystem of rivers, safety of bridges, weakening of riverbeds, destruction of natural habitats of organisms living on the riverbeds, affects fish breeding and migration, spell disaster for the conservation bird species, increase saline water in the rivers.
4. The Hon'ble Supreme Court observed that such mining has direct impact on the physical habitat characteristics of the rivers such as bed elevation, substrate composition and stability, in-stream

roughness elements, depth, velocity, turbidity, sediment transport, stream discharge and temperature. Increase in demand of sand has placed immense pressure in the supply of sand resource and mining activities were going on illegally as well as legally without requisite restrictions. Lack of proper planning and sand management disturbs marine ecosystem and upset the ability of natural marine processes to replenish the sand.

5. The Hon'ble Supreme Court noted that core group was constituted by the MoEF&CC to examine the impact of minor minerals on riverbeds and ground waters. A draft report was prepared recommending mandatory preparation of mining plan on the pattern of mining plans for major minerals. Further recommendations are reclamation and rehabilitation of abandoned mines, proportion of hydro geo-logical balance for minerals below ground water table limiting depth of mining to 3 meter and identification on locations where mining should be permitted was required. There is need for identifying safety zones in the proximity of intendments. Thus, strict regulatory parameters were required for regulating mining of minor minerals. It was noted that in-stream mining lowers the stream bottom of rivers which may lead to bank erosion. Depletion of sand in the stream bed causes deepening of rivers which may result in destruction of aquatic and riparian habitats. It has impact on stream's physical habitat characteristics.

6. The grievance before the Tribunal is that the river bed mining was taking place at several locations in violation of judgment of the Hon'ble Supreme Court either without any valid lease or under leases

given without following the strict regulatory regime in terms of judgment of the Hon'ble Supreme Court or in violation of lease conditions.

Proceedings before NGT

7. This Tribunal passed several orders in the present matter since 05.08.2013¹ to check illegal sand mining from the riverbeds without environmental clearance or in violation of terms of environmental clearance. The State of Uttar Pradesh was directed to frame a policy to check illegal sand mining. MoEF&CC was also directed to prepare comprehensive guideline on the subject. The Tribunal considered regulatory regime applicable in some of the States in the light of the judgment of the Hon'ble Supreme Court in *Deepak Kumar* (supra), including in the States of Uttar Pradesh, Haryana, Madhya Pradesh, Maharashtra, Karnataka, Gujarat, West Bengal and Odisha. The MoEF&CC issued Sustainable Sand Mining Guidelines 2016, vide notification dated 15.01.2016. Thereafter, further directions were issued by the Tribunal in the light of report of the High-powered Committee².
8. Despite this, the menace of illegal sand mining in India continues unabated. As per reports, the sand business in India employs over 35 million people and is valued at well over \$126 billion per annum. In the year 2015-2016, there were over 19,000 cases of illegal minor minerals including sand in the country.³ In Uttarakhand, a 115 years old bridge collapsed due to overloaded sand trucks. In Maharashtra,

¹ In O.A. No 38/2015

² Order dated 08.08.2018 in Gurpreet Singh Bagga Vs. Ministry of Environment, Forest and Climate Change, E.A. No. 17/2016

³ <http://www.legalserviceindia.com/legal/article-73-why-is-illegal-sand-mining-harmful-.html>

26,628 cases of illegal sand mining were recorded in the year 2017. The State of Maharashtra has the highest number of cases of non-compliance of Sustainable Sand Mining Management Guidelines, 2016. The State of Kerala suffered hugely in 2004 Tsunami and 2018 floods which several report explain were aggravated by illegal sand extraction.⁴ The issue of illegal sand mining is also rampant in the states of Goa⁵, Bihar⁶, Tamil Nadu⁷, Uttarakhand⁸, Telangana⁹, Jammu and Kashmir¹⁰ amidst others.

9. Natural resources are 'public goods' and the Doctrine of Equality must guide the State in determining the actual mechanism for distribution of natural resources. It takes into account the rights and obligations of the State vis-a-vis its people and the demands that the people be granted equitable access to natural resources and they are adequately compensated for the transfer of these resources for public domain and regulation of rights and obligations of the State vis-à-vis private parties seeking to acquire the resources which demands that the procedure adopted and distribution is just and transparent.
10. Public Trust Doctrine primarily rests on the principle that certain resources like air, sea, water and forest have great importance to public as a whole and it is wholly unjustified to make them a subject of private ownership. The public trust doctrine enjoins upon the Governments to protect the resources for enjoyment of general public

⁴ <https://sandrp.in/2019/03/01/sand-mining-2018-is-it-a-national-menace/>

⁵ <https://timesofindia.indiatimes.com/city/goa/govt-is-ignoring-illegal-sand-mining/articleshow/67908428.cms>

⁶ <https://www.firstpost.com/india/illegal-sand-mining-part-3-bihar-govts-attempted-crackdown-has-sent-prices-soaring-officials-face-axe-as-rivers-in-ruin-6008351.html>

⁷ https://en.wikipedia.org/wiki/Sand_mining_in_Tamil_Nadu

⁸ <https://sandrp.in/tag/uttarakhand-sand-mining/>

⁹ <https://sandrp.in/2019/02/26/sand-mining-2018-telangana-and-andhra-pradesh/>

¹⁰ https://greaterkashmir.com/article/news.aspx?story_id=309365&catid=2&mid=53&AspxAutoDetectCookieSupport=1

rather than to permit the use for private ownership of commercial purposes.¹¹

11. When the State holds a resource that is freely available for the use of public, it provides for a high degree of judicial scrutiny on any action of the State in dealing with the subject in a prudent manner. It is the duty of the State to provide complete protection to the natural resources as a trustee of the public at large. Moreover, a policy to give free sand must be justified as a welfare measure but even this consideration cannot justify unregulated and unscientific mining unmindful of impact on environment. If in the course of mining, damage is caused, cost of the same must be recovered from such violators. In any case, the authorities cannot avoid their duty under the environmental law to prevent and restore the damage which is an inalienable duty of the State.

Sudarsan Das v. State of West Bengal

Vide order dated 04.09.2018 in O.A No. 173/2018, *Sudarsan Das v. State of West Bengal & Ors*, the Tribunal considered the issue of unchecked mechanised sand mining on the banks of river Subarnarekha by use of suction pumps, earth movers and netting in an area falling under Jaleshwar Tehsil, Balasore District, Odisha on the Odisha – West Bengal Boarder area and neighbouring district of West Medinapur in the State of West Bengal. The mining was being done by a method whereby ground water is allowed to seep into excavation of 40 to 50 feet beneath the river and collected in sumps and pumped away for disposal. No environmental clearance had been

¹¹Natural Resources Allocation in RE: Special Reference No. 1/2012, (2012)10 SCC1, para 77-78,89-92

taken nor consent taken from the Pollution Control Board. This was impacting the ecology of the river including its channel geometry, bed elevation, substratum composition and stability, instream roughness of the bed, flow velocity, discharge capacity, sediment transpiration capacity, turbidity, temperature, etc. Such indiscriminate mining was the cause of the river Subarnarekha changing its course every year and made susceptible to flooding during every monsoon, threatening the safety of the villages situated along the river bank due to the banks being severely eroded in villages Rajnagar, Mankia, Kanrpur, Totapada, Beherasahi and Praharajpur. The authorities confirmed that illegal mining was taking place at large scale without any Environmental Clearance under the Environment (Protection) Act, 1986 or Consent under the Water (Prevention and Control of Pollution) Act, 1974 or the Air (Prevention and Control of Pollution) Act, 1981. Sustainable Sand Mining and Management Guidelines, 2016 were also not being followed. There was adverse impact on the ecology. No Management Plan was prepared for replenishment of preventive steps. Safeguards suggested in the report of High-powered Committee in September, 2016¹² were also not been adopted.

¹² The report suggest follows:

- “i) Project Proponent must ensure that the security features of Transport Permission viz. (a) Printed on Indian Bank Association (IBA) approved Magnetic Ink Character Recognition Code (MICR) paper; (c) Unique Barcode; (d) Unique Quick Response Code (QR); (e) Fugitive Ink Background; (f) Invisible Ink Mark; (g) Void Pantograph; (h) Watermark.
- ii) Project Proponent must ensure that the CCTV camera, Personal Computer (PC), Internet Connection, Power Back up, access control of mine lease site; and arrangement for weight or approximation of weight of mined out mineral on basis of volume of the trailer of vehicle used at mine lease site are available.
- iii) Project Proponent must ensure the Scanning of Transport Permit or Receipt and uploading on Server.
- iv) The State Mines and Geology Department should print the Transport Permits/Receipt with security features enumerated at Paragraph (i) above and issue them to the mine lease holder through the District Collector. Once these Transport Permits or Receipts are issued, they would be uploaded on the server against that mine lease area. Each receipt should be preferably with pre-fixed quantity, so the total quantity gets determined for the receipts issued. When the Transport Permit or Receipt barcode gets scanned and invoice is generated,

the particular barcode gets used and its validity time is recorded on the server. So all the details of transporting of mined out material can be captured on the server and the Transport Permit or Receipt cannot be reused.

- v) The staff deployed for the purpose of checking of vehicles carrying mined mineral should be in a position to check the validity of Transport Permit or Receipt by scanning them using website, Android Application and SMS.
- vi) In case the Vehicle breakdown, the validity of Transport Permit or Receipt shall be extended by sending SMS by driver in specific format to report breakdown of vehicle. The server will register this information and register the breakdown. The State can also establish a call centre, which can register breakdowns of such vehicles and extend the validity period. The subsequent restart of the vehicle also should be similarly reported to the server/call centre.
- vii) The route of vehicle from source to destination should be tracked through the system using check points, Radio-frequency identification (RFID) Tags, and Global Positioning System (GPS) tracking.
- viii) The system shall enable the Authorities to develop periodic report on different parameters like daily lifting report, vehicle log/history, lifting against allocation, and total lifting. The system can be used to generate auto mails/SMS. This will enable the District Collector/Magistrate to get all the relevant details and will enable the authority to block the scanning facility of any site found to be indulged in irregularity. Whenever any authority intercepts any vehicle transporting illegal sand, it shall get registered on the server and shall be mandatory for the officer to fill in the report on action taken. Every intercepted vehicle should be tracked.”

Considerations required to be kept in mind for sustainable sand mining are:

- a. Parts of the river reach that experience deposition or aggradation shall be identified first. The Lease holder/ Environmental Clearance holder may be allowed to extract the sand and gravel deposit in these locations to manage aggradation problem.
- b. The distance between sites for sand and gravel mining shall depend on the replenishment rate of the river. Sediment rating curve for the potential sites shall be developed and checked against the extracted volumes of sand and gravel.
- c. Sand and gravel may be extracted across the entire active channel during the dry season.
- d. Abandoned stream channels on terrace and inactive floodplains be preferred rather than active channels and their deltas and flood plains. Stream should not be diverted to form inactive channel.
- e. Layers of sand and gravel which could be removed from the riverbed shall depend on the width of the river and replenishment rate of the river.
- f. Sand and gravel shall not be allowed to be extracted where erosion may occur, such as at the concave bank.
- g. Segments of braided river system should be used preferably falling within the lateral migration area of the river regime that enhances the feasibility of sediment replenishment.
- h. Sand and gravel shall not be extracted within 200 to 500 meter from any crucial hydraulic structure such as pumping station, water intakes, and bridges. The exact distance should be ascertained by the local authorities based on local situation. The cross-section survey should cover a minimum distance of 1.0 km upstream and 1.0 km downstream of the potential reach for extraction. The sediment sampling should include the bed material and bed material load before, during and after extraction period. Develop a sediment rating curve at the upstream end of the potential reach using the surveyed cross- section. Using the historical or gauged flow rating curve, determine the suitable period of high flow that can replenish the extracted volume. Calculate the extraction volume based on the sediment rating curve and high flow period after determining the allowable mining depth.
- i. Sand and gravel could be extracted from the downstream of the sand bar at river bends. Retaining the upstream one to two thirds of the bar and riparian vegetation is accepted as a method to promote channel stability.
- j. Flood discharge capacity of the river could be maintained in areas where there are significant flood hazard to existing structures or infrastructure. Sand and gravel mining may be allowed to maintain the natural flow capacity based on surveyed cross- section history.
- k. Alternatively, off-channel or floodplain extraction is recommended to allow rivers to replenish the quantity taken out during mining.
- l. The Piedmont Zone (Bhabhar area) particularly in the Himalayan foothills, where riverbed material is mined, this sandy-gravelly track constitutes excellent conduits and holds the greater potential for ground water recharge. Mining in such areas should be preferred in locations selected away from the channel bank stretches.
- m. Mining depth should be restricted to 3 meter and distance from the bank should be 3 meter or 10 percent of the river width whichever less.
- n. The borrow area should preferably be located on the river side of the proposed embankment, because they get silted up in course of time. For low embankment less than 6 m in height, borrow area should not be selected within 25 m from the toe/heel of the embankment. In case of higher embankment the distance should not be less than 50 m. In order to obviate development of flow parallel to embankment, cross bars of width eight times the depth of borrow pits spaced 50 to 60 meters centre-to-centre should be left in the borrow pits.
- o. Demarcation of mining area with pillars and geo-referencing should be done prior to start of mining.”

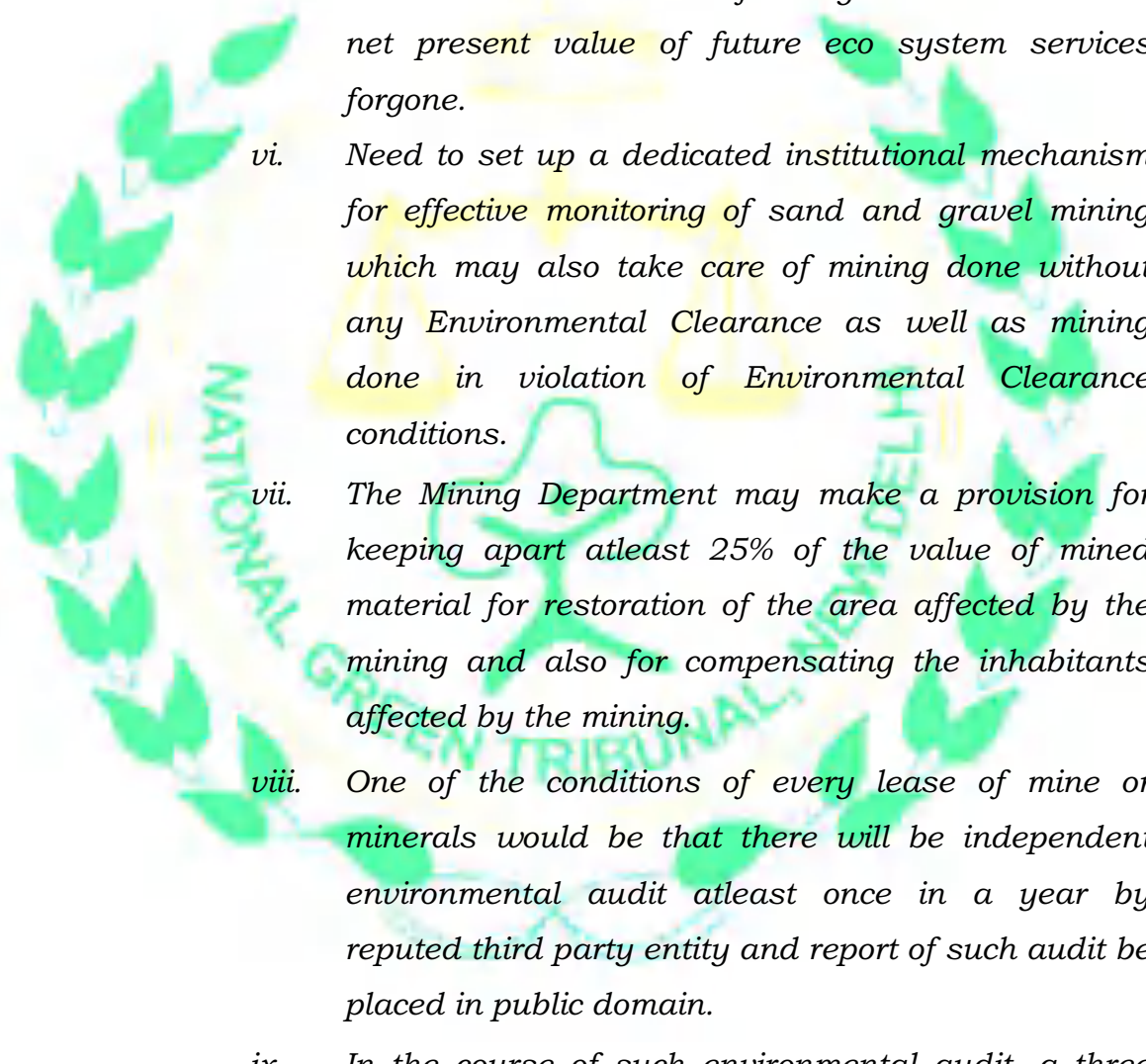
12. The Management Plan as per the guidelines is to require system of replenishment as well as preventive steps during the sand mining. Replenishment and reclamation of riverine sand are the integral part. Guidelines also deal with the issue of depth of mining and strict regulatory regime. The management of mining clusters should have a separate approach. Management of sand deposited after the floods should be treated as separate for mining. Monitoring system proposed includes safeguards during transport as well as checking of condition of mining.

13. The Tribunal noted that Ministry of Mines and Indian Bureau of Mines (IBM) had developed Mines Surveillance System (MSS), with assistance from Bhaskaracharya Institute for space applications and Geoinformatics (BISAG), Gandhinagar and Ministry of Electronics and Information Technology (MEITY). The Mining Surveillance System (MSS) is a satellite-based monitoring system which aims to establish a regime of responsive mineral administration by curbing instances of illegal mining activity through automatic remote sensing detection technology.

14. In view of above, the Tribunal directed¹³ the MoEF&CC to revise its guidelines as in-spite of the guidelines already issued, the monitoring mechanism was not working effectively. The directions of this Tribunal are:

“i. Mining Surveillance System discussed in para 23 above be finalized in consultation with ISRO Hyderabad.

¹³ Vide order dated 04.09.2018 in Original Application No. 173 of 2018 (Earlier O.A. No. 89/2017) (EZ) in the matter of Sudarsan Das Vs. State of West Bengal & Ors.

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- ii. *Safeguards suggested in Sustainable Sand Mining Guidelines published by the MoEF&CC in the year 2016.*
 - iii. *Suggestions in the High-Powered Committee Report.*
 - iv. *Requirement of demarcation of boundaries being published in respect of different leases in public domain.*
 - v. *Need to issue SOP laying down mechanism to evaluate loss to the ecology and to recover the cost of restoration of such damage from the legal or illegal miners. Such evaluation must include cost of mining material as well as cost of ecological restoration and net present value of future eco system services forgone.*
 - vi. *Need to set up a dedicated institutional mechanism for effective monitoring of sand and gravel mining which may also take care of mining done without any Environmental Clearance as well as mining done in violation of Environmental Clearance conditions.*
 - vii. *The Mining Department may make a provision for keeping apart atleast 25% of the value of mined material for restoration of the area affected by the mining and also for compensating the inhabitants affected by the mining.*
 - viii. *One of the conditions of every lease of mine or minerals would be that there will be independent environmental audit atleast once in a year by reputed third party entity and report of such audit be placed in public domain.*
 - ix. *In the course of such environmental audit, a three member committee of the local inhabitants will also be associated. Composition of three members committee may preferably include ex-servicemen, former teacher and former civil servant. The Committee will be nominated by the District Magistrate.”*

15. Such steps were to be worked out within two months and circulated to all States. The mechanism is to provide for a report of implementation from the concerned States every quarter. The matter needs to be reviewed after every six months by the MoEF & CC. The direction with regard to setting up of 'dedicated institutional mechanism' for monitoring of conditions of Environmental Clearance as granted under EIA Notification, 2006 in respect of sand and gravel mining as directed in para (vi) is for an All-Encompassing Body to monitor the conditions of Environmental Clearance with respect to all development projects. Report of the steps taken by MOEF&CC was to be furnished to this Tribunal by email at filing.ngt@gmail.com on or before 31.12.2018.

16. The Tribunal also issued directions to the State of West Bengal and Odisha to take steps as follows:

- “
- i. *The State of West Bengal and Odisha may demarcate the boundaries for regulating grant of sand mining lease within three months from today. No mining lease of minor minerals may be given in the area in question till demarcation is complete. All existing mining operations in those areas shall remain suspended till demarcation work is completed and attains finality. To carry out the demarcation, the Chief Secretaries of the two States may constitute a team of three suitable officers each within two weeks. The said teams may hold their first meeting within one month.*
 - ii. *The States of West Bengal and Odisha must ensure that mining in all sand mining blocks is undertaken strictly in accordance with the provisions of EIA Notification, 2006, MoEF*

Notification dated 15th January, 2016 and the Sustainable Sand Mining Management Guidelines, 2016. They must also ensure that no sand mining is permitted without due compliance of Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 as well as regulations governing clearances by the Central Ground Water Authority. The District Administration must be held accountable for any failure.

- iii. District Magistrates and Superintendents of Police, Balasore district in Odisha and Paschim Medinapur, West Bengal, respectively, shall seize all sump pumps, other machinery, tools, vehicles, etc. used for carrying out illegal sand mining.*
- iv. Apart from instituting appropriate criminal proceedings against those carrying out illegal mining, exemplary penalty shall be imposed against them by the concerned District Magistrates within three months from today to cover the cost of restoration of environment and to compensate the victims.*
- v. The Chief Secretaries of the two States shall also get prepared jointly a detailed restoration plan for river Subarnarekha and its riverbeds for which a Committee of experts shall be constituted from independent institutions, i.e., the CPCB, Indian School of Mines, Dhanbad and the respective State Pollution Control Boards as members. Such constitution may take place within one month.*
- vi. The Expert Committee shall carry out detailed study and submit the restoration plan, as far as may be practicable, within three months after its constitution.*

- vii. *The Committee shall also get the assessment done through Indian Council of Forestry Research and Education, Dehradun of the ecological damage on account of illegal mining by incorporating the following components: a) Cost of riverbed material. b) Cost of ecological restoration. c) Net present value of the future ecosystem services foregone.*
- viii. *The above steps may be facilitated by the Regional Office of the CPCB as nodal officer, by coordinating with the Chief Secretaries of the two States.*
- ix. *The damage suffered by the inhabitants caused by the illegal mining may also be assessed by the above Committee, which shall form a separate component of the Restoration Plan for river Subarnarekha as per direction No. (v) above. Cost of restoration plan shall be recovered as environmental compensation from the illegal miners, to be identified by the District Magistrate. The component of the compensation in respect of damages suffered by the inhabitants may be credited with District Legal Services Authority. The District Legal Services Authority may disburse the same to the victims of illegal mining, after proper identification.”*

17. An oversight Committee was formed headed by Justice R.K. Merathia, former Judge of Jharkhand High Court to oversee the execution of above directions which was to function for six months.

Consideration in Today's Proceedings

Sand Mining in the State of West Bengal and Odisha

18. The matter has been listed today to consider the report from the MoEF & CC which was to be furnished by 31.12.2018 in terms of

para 28 in *Sudarshan Das* (supra) and report of the oversight Committee which was to be furnished within three months in respect of steps taken by the State of West Bengal and Odisha in terms of direction of this Tribunal.

19. We may note that vide order dated 16.01.2019 in O.A. No. 606/2018, titled *Compliance of Municipal Solid Waste Management Rules, 2016*, the Tribunal flagged the issue of sand mining as one of the issues required to be monitored by the Chief Secretaries of the concerned States and to be reported to the Tribunal on personal appearance of Chief Secretaries before the Tribunal.

20. In pursuance of the said direction, Chief Secretaries of Odisha and West Bengal furnished their respective reports on 26.03.2019 and 02.04.2019. Learned counsels for the State of West Bengal and Odisha have relied upon the said reports during the hearing of present cases. The reports were not found to be satisfactory as per orders of the Tribunal dated 26.03.2019 and 02.04.2019 respectively and further directions were issued.

21. Question for consideration is further directions in the matter. We will consider this aspect after noticing developments in connected cases.

Sand Mining in the State of Gujarat

22. Following the above order in *Sudarsan Das* (supra), the issue of illegal sand mining in the State of Gujarat was dealt with in O.A. No. 360/2015, *National Green Tribunal Bar Association v. Virender Singh (State of Gujarat)*. The Tribunal passed several orders from time to time since 28.11.2016 and finally considered the report of the State

of Gujarat vide order dated 13.07.2018 to the effect that persons engaged in illegal mining were identified and proceeded against. The Tribunal directed the State of Gujarat to take further preventive and remedial steps and observed that compounding fee to be recovered should be fixed having regard not only to the cost of mined material but also the cost of restoration of the environment and cost of ecological services lost forever and should be separately accounted for, for restoration of the environment. Again, vide order dated 17.09.2018, the Tribunal considered the policy of the State of Gujarat but found that preventive and remedial steps proposed were not sufficient. Damage caused to the environment was not fully taken into account. It was required to include Net Present Value (NPV) of future ecosystem services foregone forever. It was also observed that the preventive steps should also include demarcation and publication of boundaries in different leases and the same may be placed in the public domain. The Tribunal also referred to other orders on the subject being orders dated 05.09.2018, 10.09.2018 and 13.09.2018 in *Original Application No. 44/2016- Mushtakeem Vs. MoEF & CC & Ors.*, *Original Application No. 304/2015- Jai singh & Anr. Vs. Union of India & Ors.* and *Original Application No. 186/2016 - Satendra Pandey Vs. Ministry of Environment, Forest & Climate Change & Anr.* The application was disposed of but the action taken report was required to be furnished. Accordingly, the matters have been put up today for consideration of the action taken report.

23. We may also note that vide order dated 04.01.2019 in *Original Application No. 110(T_{HC})/2012, Threat to life arising out of coal mining in south Garo Hills district v. State of Meghalaya & and Ors.*, the

issue of compensation and seizure of vehicles in the context of illegal rat hole mining in the State of Meghalaya was considered. On the subject of compensation to be recovered for damage to the environment, it was observed:

“31. Paying capacity and the amount which may act as deterrent to prevent further damage is also well recognised. Net Present Value of the ecological services foregone and cost of damage to environment and pristine ecology, the cost of illegal mined material, and the cost of mitigation and restoration are also relevant factors. The Committee may go into these aspects to determine the final figure.

32. We are satisfied that having regard to the totality of factual situation emerging from the record, damages required to be recovered are not, prima facie, less than Rs. 100 Crores. Accordingly, by way of an interim measure, we require the State of Meghalaya to deposit Rs. 100 crores within two months with the CPCB in this regard.”

On the subject of vehicles, it was observed:

“ 36. The Committee may also consider the following:-

Any cranes and trucks found to be involved in illegal mining or transportation which have not yet been seized may also be seized. The seized vehicles or equipments be released by the concerned District Magistrates only after recovering damages to the extent of 50% of the showroom 17 price of the vehicles or equipments. The said amount may also be credited to the restoration fund.”

24. We have perused the report filed by the State of Gujarat vide email dated 17.12.2018 to the effect that environment compensation scale has been enhanced which now can be between 21% to 41% value of the illegally mined material and if such value is found to be less than the cost of the damage to the environment, the matter is to be referred to the State Pollution Control Board. The above

compensation is in addition to the penalties under the Rules. However, the scale of penalty has not been specified.

25. Accordingly, further directions are required which may apply not only to the State of Gujarat but also other States. We may consider this aspect after taking note of developments in other States.

Sand Mining in the State of Karnataka

26. O.A. No. 366/2015 (M.A. No. 02/2019), *National Green Tribunal Bar Association v. Dr. Sarvabhoum Bagali (State of Karnataka)* and O.A. No. 368/2015 (M.A. No. 16/2019), *National Green Tribunal Bar Association v. Dr. Sarvabhoum Bagali (State of Maharashtra)* relate to the issue of sand mining in the State of Karnataka and Maharashtra. Vide order dated 25.09.2018, the matter was considered in the light of observations in O.A No. 173/2018 (Earlier O.A. No. 89/2017 (EZ) (I.A. No. 76/2019), *Sudarsan Das Vs. State of West Bengal & Ors* and Original Application No. 186/2016, *Satendra Pandey v. Ministry of Environment, Forest & Climate Change & Anr.* The States of Karnataka and Maharashtra were required to take steps as per the directions in the above matters, to the extent applicable and file an affidavit.

27. Accordingly, an affidavit has been filed on 06.03.2019 by the state of Karnataka stating that there was no sand *mafia* in the State of Karnataka and only there are exceptional instances. It is further submitted:

"I submit that all necessary steps are taken by Government of Karnataka and compliance report is submitted in this case, separately. If this Hon'ble Tribunal opines to establish any "Monitoring

Mechanism”, we welcome it. However, any suggestions or directions may kindly be issued to Government of Karnataka to (1) evaluate loss to the ecology (2) to recover cost of restoration from illegal miners (3) to monitor mining (4) to make provision for restoration (5) for compensation to the inhabitants and (6) for audit etc., the Government of Karnataka will obey the directions of this Hon’ble Court.”

28. Our attention has been drawn to a news article published in Bangalore Mirror dated 24.12.2018 appearing under the title “Karnataka: Sand mafia under scanner after lorry runs over official”¹⁴ and an article published in Decan Herald dated 17.09.2018 under the title “Karnataka is a leading State that witnesses the devastating effects of sand mining”¹⁵ to the effect that fourteen million metric tonnes of sand unaccounted for the State of Karnataka is as follows:

“The state government is receiving approximately Rs 150 crore as royalty from legitimate sand mining blocks every year. As per estimates, the state government is losing around Rs 200 crore per year due to illegal sand mining. Here is a ballpark estimation to find out the consumption of sand in the state. According to cement manufacturing companies’ data, around 18 million metric tonnes of cement is sold in the state every year. The cement-sand mix ratio is either 1:4 or 1:6 (four or six bags of sand per cement bag). Even if 1:4 ratio is taken, a whopping 70 million metric tonnes of sand is approximately used in the state every year. The official data from the Department

¹⁴<https://bangaloremirror.indiatimes.com/bangalore/others/karnataka-sand-mafia-under-scanner-after-lorry-runs-over-official/articleshow/67221261.cms>

¹⁵<https://www.deccanherald.com/exclusives/illegal-sand-mining-wrecking.html>

of Mines and Geology shows that from the blocks permitted by it, a total quantity of 30 million metric tonnes of sand (from all types of blocks - river sand, patta land, blocks allocated to government departments, and manufactured sand) is produced in the state. As per this, there is a difference of around 40 million metric tonnes of sand in comparison to the cement sold in the state.”

29. We may consider further directions after noting facts of other states.

Sand Mining in the State of Maharashtra

30. In the case of Maharashtra, an affidavit has been filed by the State of Maharashtra on 20.2.2019 to the effect that the State Government is in the process of framing Sand Mining Policy for which a Committee has been constituted.

31. Our attention has also been drawn to an article published in The Hindustan Times dated 27.01.2019 under the title “Maharashtra registers most cases of illegal mining between 2013-17”¹⁶ inter alia stating as follows:

“Maharashtra recorded 1,39,706 illegal mining cases between 2013 and 2017, the highest number in the country, revealed data submitted by the Union environment ministry before the Rajya Sabha on January 3.

However, the state had one of the lowest number of prosecutions in such cases. The state filed 712 first information reports (FIR) and one court case, while seizing around 1,39,000 vehicles used in illegal

¹⁶ <https://www.hindustantimes.com/india-news/maharashtra-registers-most-cases-of-illegal-mining-between-2013-17/story-2j69aqmsygzCcTBBB8emtN.html>

mining operations and collecting Rs 267 crores as fines from offender.

India recorded 4,16,410 cases during the same time, which means Maharashtra accounts for 33.5% of all cases in the country. Uttar Pradesh recorded 36,054 illegal mining cases, Madhya Pradesh 46,193, Karnataka 33,390, and Goa had 3 cases. The information was submitted in response to a query on the environmental impact of illegal mining.”

32. In view of above, further directions are required to be considered for the State of Maharashtra.

Sand Mining in the State of Punjab

33. Vide order dated 13.11.2018 in O.A. No. 874/2018 News item published in "The Tribune " Authored by Arun Sharma Titled "Mounds of sand on Sutlej banks, mining mafia digs in", a report was sought on the allegation of large scale illegal mining on the bank of River Satluj in District Ropar in the light of directions vide order dated 04.09.2018 in Sudershan Das (supra) and other orders. Accordingly, a report has been received vide email dated 25.02.2019 confirming that illegal mining had taken place. The observations in the inspection report are as follows:

- “1. No mining operation was observed during visit of the Committee at the mining sites located in the riverbed.*
- 2. The mining of minor minerals in the riverbed has taken place more than permitted depth of 3 meters, as specified in point no. 4(i) of Form – L appended to the Punjab Minor Mineral Rules, 2013, which is a violation of sustainable mining practice.*

3. *The specified boundaries or demarcation of mine lease area was not demarcated as required for checking illegal mining, substantiates the fact of illegal or unauthorized excavation of minerals.*
4. *From the existing natural level adjoining to the mining site, it we noticed that mining has been carried out in an unscientifically manner as:*
 - a) *The mining of minor mineral has been done beyond the permitted depth.*
 - b) *No strip of 7.5 m width of the lease boundary as seen left as per provisions of the Metalliferous Mines Regulations, 1961 in compliance to condition imposed in the Mining Plan approved by the State Geologist, Punjab, a serious violation for safety of banks.*
 - c) *The contractor has not maintained slope height not exceeding 45 degree from the horizontal width along the boundaries of mining site in compliance to condition no. 12 of the letter vide which mining plan was approved, negligence towards slope stability.*
 - d) *The contractor was not providing bench along the boundary of the mining site having height not exceeding 1.5 m and is width should not be less than the height as per condition no. 13 of the letter vide which mining plan was approve.*
1. *From the conditions of the area along the riverbed in revenue estate of village Baihara and Swarha, it seems that the mining has been carried out at the different locations in an unscientific way.*
2. *During the inspection, the impressions of heavy vehicles movement were observed. Also, it was found that road for movement of vehicle were in very bad shape as these roads have not been*

stabilized or metalled with any of construction material and no plantation was observed along the roads.

- 3. The development of water sumps as well as erosion of banks due to unscientific mining within the riverbed are threat to river ecological system and make it prone to flooding conditions during full flow. Also, it may cause the course of river to change rapidly and meandering to a great extent.*
- 4. No check post was observed during the visit along the routes leading to mining lease area.*
- 5. As per stipulation of environmental clearance, the contractor is required to maintain safety and stability of river banks i.e. 3 m or 10% of the width of the river, whichever is more will be left intact as no mining zone. Since no embankment of the riverbed was noticed and there was no demarcation of the mining site, as such, compliance of the above stipulation of the Environmental Clearance could not be verified.*
- 6. The contractor has neither done any plantation along with the lease boundary of mining site in compliance to the condition imposed in the approval letter of the Mining plan.*
- 7. The stone crusher units nearby the riverbed were observed by the committee. The stone crusher units were observed to be non-operational during visit of the committee, but stock piling of crushed material is indicative of their operation. The heavy machineries like JCB, pokland machines, dumper etc. were observed around the river, which may have been use for illegal mining in the area. Hence, the possession of these types of machines and working of stone crusher units need to be regulated. This issue needs to be monitored by the State.”*

34. The Committee further observed.

“The suggestions of the joint committee visit on 20.12.2018 in the report filed in OA no. 767 of 2018 titled as Dinesh Kumar Chadha versus State of Punjab & Others were as follows :

- The mining activity within the riverbed should not be permitted without the preparation of Comprehensive Mining plan/District Survey report as required in Sustainable Sand Mining Management Guidelines, 2016 issued by the MoEF by the State of Punjab with replenishment/scientific study by an institute of national importance and prior recommendations of MoEF & CC.*
- The State of Punjab may be asked to develop mechanism to stop the illegal extraction and transportation of riverbed material. The mechanism must include the environmental compensation for violators and vehicles used for the purpose to be seized along with prosecution of owners of such vehicles. Including cancellation of registration certificate of such vehicles.*
- The District Administration may consider establishing the check post barrier at suitable site to check vehicles carrying the riverbed material and to maintain strict vigil over overloading vehicles involved.*
- The Detailed Survey of river eco system comprising of identification of river stretches affected by unscientific mining should be carried out for preservation and exclusion of stretches from any type of extraction process or mining activity. In addition the auction of identified stretches may not*

be considered without approved annual replenishment report.

- The restoration plan of river ecosystem in mine lease area should be enforced for minimizing the impacts of unscientific mining and to improve the riparian habitat. The State of Punjab can be asked to execute the restoration plan within time bound manner.*
- The demarcation of auctioned mine lease area should be done urgently with pillars/fencing along with geo-referencing to protect the river ecosystem and to avoid bed degradation.*
- The raw material to be imported, processed, dispatched and balance stock shall be regulated strictly as per the policy guidelines for registration and working of stone crushers in the State of Punjab issued by the Department of Industries and Commerce vide notification dated 19.03.2015.*
- As regards to initiating action against the erring officials, the Heads of the concerned Departments should identify the erring officials who allowed to take place illegal mining and initiate action against these officials, after conducting detailed investigations.*

The same physical conditions have been noticed during the recent visit on 20.2.2019 at the mining sites located in the revenue estate of village Baihara and Swarha, as such, the suggestions may be considered by the court alongwith the followings:

- *The District Survey Report for the mining site in the area in order to identify depositions / aggradations stretches of the riverbed material should be prepared.*
- *Declaration of safety zones around infrastructures like National Highway, Bridge, Railway line etc. must be ensured for protection as per provisions of the Punjab Minor Minerals Rules, 2013.*
- *Replenishment report including time of replenishment for the mining area to be undertaken by the concerned Authorities for permitting mining.*
- *Strict vigilance to be implemented to ensure no illegal mining / transportation in the bed of river.*

As regards to facts noted regarding mining beneath the bridge on Sri Anandpur Sahib-Garshankar road, besides above, it is suggested as under:

- (i) *The Deptt. of Mining is required to ensure the compliance of stipulations of para 4 of Form 'L' appended to the Punjab Mining Minerals Rules, 2013 as regards to no mining area within a distance of 500m upstream /downstream of any high level bridge and 250m upstream / downstream of other bridges.*
- (ii) *The Mining department jointly with Deptt. of Irrigation is required to rejuvenate the area near and beneath the above mentioned bridge so as to ensure safety of the same and these departments are required to take necessary safeguards for further safety of the said bridge.”*

35. In view of above, directions are called for to the State of Punjab to deal with the issue of sand mining.

Sand mining in the State of Uttar Pradesh and Haryana

36. O.A. No. 44/2016, Mushtakeem v. MoEF&CC & Ors., involved illegal mining in Uttar Pradesh and Haryana on riverbeds of Yamuna. The matter was disposed of vide order dated 05.09.2018, following directions dated 04.09.2018 in Sudershan Das (supra). In terms of order dated 05.09.2018, no report has been received from the State of Uttar Pradesh. Thus further directions are necessary. A report has been received from Additional Chief Secretary, Haryana vide email dated 05.04.2019 to the effect that the State of Haryana was following the guidelines and will implement revised Sustainable Sand Mining Guidelines issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC) in terms of the order dated 04.09.2018, in O.A No. 173/2018 (Earlier O.A. No. 89/2017 (EZ) (I.A. No. 76/2019), *Sudarsan Das Vs. State of West Bengal & Ors.*
37. In view of the above, further directions are called for to the State of Uttar Pradesh and Haryana to deal with the issue of sand mining.

Sand Mining in the State of Madhya Pradesh

38. Though no case of the State of Madhya Pradesh is listed today, we have taken note of the problem sand mining in the State in O.A. No. 456/2018 Nityanand Mishra v. State of M.P. & Ors., which is pending before this Tribunal and sought report from Committee vide order dated 31.07.2018. Accordingly, a report is submitted & the same is on record of the said case. Extract from the report is as follows:

“Sand mining is directly affecting basking and nesting

*habitats of species in SGS. Mining of sand from the riverbed and river banks will negatively alter the river morphology, will increase sedimentation and turbidity and also disrupt the lateral connectivity within the river. Studies have already shown condition of Son River to be at a critical level with severely compromised river flows. Sand mining will only result in compounding what is an already sub-optimal riverine habitat. Any further degradation of this habitat will potentially make Son River uninhabitable for some of the most threatened fauna in the country. The data from offence registers of SGS as depicted in table 1 does indicate that there has been an increase in the number of cases with respect to the illegal sand mining in the sanctuary area. The information is about cases that were caught and processed by the Forest Department. **There are many cases that go unnoticed due to inadequate patrolling as everyone informs that one truck generates illegal revenue of Rs. 12,000 and per night 1000 trucks generate illegal revenue of Rs. 1,20,00,000.***

39. In view of above, further directions are necessary for the State of Madhya Pradesh to deal with the issue of sand mining.

Sand Mining in the State of Andhra Pradesh

40. We may also note that in the case of *Anumolu Gandhi V. State of Andhra Pradesh in Original Application No. 935/2018*, illegal sand mining causing damage to Krishna river in Vijayawada, Godavari river and their tributaries in the State of Andhra Pradesh and absence of remedial steps was considered. The Tribunal vide order dated 04.04.2019 directed the Chief Secretary of the State of Andhra Pradesh to forthwith prohibit all unregulated sand mining without following the procedure prescribed under the law in the judgment of the Hon'ble Supreme Court in *Deepak Kumar v. State of Haryana*. The Tribunal further directed Chief Secretary of the State to evolve a mechanism to assess and recover the cost of sand mining already incurred in the last three years and initiate

steps to recover compensation to meet the cost of restoration of environment. The Tribunal constituted a Committee comprising CPCB, MoEF&CC, National Institute of Mines, Dhanbad, IIT Roorkee and Madras School of Economics to undertake environment damage assessment within three months and furnish a report to this Tribunal by e-mail at ngt.filing@gmail.com.

41. In this light, further directions are called for to the State of Rajasthan and Andhra Pradesh to deal with the issue of sand mining.

Sand Mining in the State of Rajasthan and Himachal Pradesh

42. The problem of illegal sand mining contrary to the directions of the Hon'ble Supreme Court in Deepak Kumar vs. State of Haryana (supra) in the States of Rajasthan, Himachal Pradesh, Karnataka, Madhya Pradesh and Punjab was also considered by this Tribunal in Himmat Singh Shekhawat vs. State of Rajasthan & Ors. (O.A. No. 797/2018) vide order dated 15.03.2019. the Tribunal founds the reports submitted by the States to be unsatisfactory and accordingly directed furnishing of fresh action taken reports. The matter was directed to be listed on 11.07.2019. The said matter may now be listed on 23.07.2019 along with the present batch of matters.

Sand Mining in Bihar

43. This Tribunal vide its order dated 24.08.2018 in Amarshakti v. State of Bihar & Ors. O.A. No. 596/2018 dealt with the issue of illegal sand mining during monsoon in the rivers Son and Ganga at Koelbar and Patna in Bihar. The Tribunal directed the

Secretary, mines and minerals, Bihar to constitute a team comprising of officers of Mines and Minerals Department and District Magistrate and S.P. Patna to look into the allegations and report compliance to the Tribunal. Report dated 12.10.2018 was received from the Government of Bihar stated that 122 prosecutions were initiated and 297 persons arrested. 32 boats and 287 trucks were seized in District Saran. Action was also taken in District Bhojpur at Ara and District Vaishali at Hajipur. The Tribunal directed the Secretary, Government of Bihar to monitor the matter from time to time and continue to enforce the law.

Sand Mining in Uttarakhand

44. The issue of illegal sand mining in the State of Uttarakhand was also considered by this Tribunal vide its order dated 27.11.2018 in Anand Gopal Singh Bist v. State of Uttarakhand O.A. No. 751/2018 wherein, this Tribunal directed the District Magistrate Nanital and Principal Chief Conservator of Forest, Dehradun to jointly look into the matter. The Tribunal vide its order dated 14.02.2019 directed that the monitoring may continue and the Collector may ensure that Revenue Department performs its duty in accordance with law.

Sand Mining in other States

45. Illegal sand mining in violation of Sustainable Sand Mining Guidelines, 2016 has also been reported widely in the States of

Jammu and Kashmir¹⁷, Goa¹⁸, Kerala¹⁹, Telangana²⁰ and Tamil Nadu²¹.

46. General directions may be necessary even for Bihar, Uttarakhand, Jammu and Kashmir, Goa, Kerala, Telangana and Tamil Nadu which may also apply to any other States facing the issue of illegal sand mining.

Issues

47. Main issues are:

- (a) Revision of Sustainable Sand Mining Guidelines, 2016 by the MoEF&CC in the light of directions of this Tribunal vide order dated 04.09.2018 in Sudarsan Das (supra).
- (b) Compliance of Sustainable Sand Mining Guidelines, 2016 as may be revised by MoEF&CC as above.
- (c) Effective monitoring mechanism for preventive and remedial measures as directed in orders of this Tribunal, including surveillance system and recovery of compensation.
- (d) Directions in individual cases listed today.
- (e) Scale of compensation

48. We may now deal with the issues involved and directions required.

¹⁷https://greaterkashmir.com/article/news.aspx?story_id=309365&catid=2&mid=53&AspxAutoDetectCookieSupport=1

¹⁸ <https://timesofindia.indiatimes.com/city/goa/govt-is-ignoring-illegal-sand-mining/articleshow/67908428.cms>

¹⁹ Order dated 29.03.2019 in News Item Published In "Indian Express" Authored by Vishnu Verma in O.A. No. 76/2019

²⁰ <https://sandrp.in/2019/02/26/sand-mining-2018-telangana-and-andhra-pradesh/>

²¹ https://en.wikipedia.org/wiki/Sand_mining_in_Tamil_Nadu

Re (i): Revision of Sustainable Sand Mining Guidelines, 2016 by the MoEF&CC in the light of directions of this Tribunal vide order dated 04.09.2018 in Sudarsan Das (supra).

49. As noted in para 12 to 15 above, need for revision of Sustainable Sand Mining Guidelines, 2016 has been discussed by the Tribunal in order dated 04.09.2018. Further discussion is unnecessary. The 2016 Guidelines need revision in the light of report of High Powered Committee in September 2016, failure of Monitoring mechanism followed by State Boards, SEIAs, DEIAs and MSS system developed by Ministry of Mines & IBN with the assistance of BISAG and MAITY and other observations quoted in paras 12 to 15 above. Since no report has been received from MoEF&CC as per report dated 04.09.2018, the MoEF&CC may now take necessary steps in the matter in terms of order dated 04.09.2018 in *Sudarsan Das* (supra) latest by June 30, 2019 and file compliance report by 15.07.2019.

Re (ii): Compliance of Sustainable Sand Mining Guidelines, 2016 as may be revised by MoEF&CC as above.

50. As noted earlier in paras 17, 23, 27, 31 and 35, States of West Bengal, Odisha, Gujarat, Karnataka, Maharashtra, Punjab, Haryana and Uttar Pradesh are required to follow SSMG, 2016 as may be revised by MoEF&CC and even other States where illegal sand mining is taking place. All such States may take steps in terms of orders dated 04.09.2018 in *Sudarsan Das v. State of West Bengal & ors*, 05.09.2018 in *Mushtakeem v. MoEF&CC & Ors.*, 13.09.2018 in *Satendra Pandey v. MoEF&CC & Ors.* and 16.01.2019 titled Compliance of Municipal Solid Waste

Management Rules, 2016. The Chief Secretaries may monitor and furnish reports as earlier directed on the subject of sand mining.

Re (iii): Effective monitoring mechanism for preventive and remedial measures as directed in orders of this Tribunal, including surveillance system and recovery of compensation.

51. We have found in the discussion above, particularly in paras 8 to 11, 20, 21, 23, 29, 32, 33, 36, 39, 41 and 43 with regard to factual position in various States that monitoring mechanism-preventive and remedial measures is not effective and illegal sand mining is continuing. The same needs to be reviewed in the light of above discussion. The States may review monitoring mechanism in terms of several directions of the Tribunal and guidelines of MoEF&CC. As regards monetary compensation, the same has to be not only equal to cost of mined material and penalty to evade royalty but also to meet cost of restoration and NPV of eco services fore gone forever. Seizure of vehicles or other equipment may be dealt with as per rules and directions in *Threat to life arising out of coal mining in South Garo Hills district* (supra).

Re (iv): Directions in Individual Cases Listed Today. For the discussion and observation hereinabove, case is made out for issuing directions following discussion on the subject.

52. In *Sudarsan Das* (supra) one of the directions was that the Chief Secretaries of West Bengal and Odisha will prepare a restoration plan in consultation with the Central Pollution Control Board (CPCB), Indian School of Mines, Dhanbad and the Respective State Pollution Control Boards (SPCBs). We are informed that Indian School of Mines, Dhanbad declined to comply with the

order. This may call for remedial action against defiance by the said institution. Order of this Tribunal is a decree of the Court and can be executed in the manner provided under Section 51 CPC by ordering civil imprisonment or adopting other norms. Violation of order of this Tribunal is also a criminal offence punishable by imprisonment and fine. The Head of the Department concerned is liable to be proceeded against. Thus, the Director Indian School of Mines, Dhanbad will have to be required to appear in person to explain why action be not taken for violation of order of this Tribunal. The State of West Bengal, Orissa, Punjab and Gujarat need to send further action taken reports by 30.06.2019.

53. The State of Uttar Pradesh has not complied with the order dated 05.09.2018. This must not be done by way of last opportunity till 30.06.2019, failing which coercive measures will be adopted. Responsibility for compliance will be of the Chief Secretary.

54. In O.A. No. 173/2018, in view of the fact that term of the oversight Committee headed by Justice Ramesh Kumar Merathia, former Judge, High Court of Jharkhand was six months which period is over, the said Committee may now conclude its proceedings and furnish its final report with findings and recommendations on or before April 30, 2019. Further directions in the matter may be considered on the next date.

Re (v): Scale of Compensation

55. We have held that the scale of compensation proposed by the State of Gujarat does not fully comply with the 'Polluter Pays' principle which envisages that polluter is required to pay for complete restoration of the environment. This principle has been articulated further by the Hon'ble Supreme Court of India in *T.N. Godavarman Thirumulpad vs Union Of India & Ors*, (2006) 1 SCC 1 in the context of forests. In this matter, the Hon'ble Supreme Court appointed a committee of experts and following directions were given:

- 
- i. To identify and define parameters (scientific, biometric and social) on the basis of which each of the categories of values of forest land should be estimated.
 - ii. To formulate a practical methodology applicable to different biogeographical zones of India for estimation of the values in monetary terms in respect of each of the above categories of forest values.
 - iii. To illustratively apply this methodology to obtain actual numerical values for different forest types for each biogeographical zone in the country.
 - iv. To determine on the basis of established principles of public finance, who should pay the costs of restoration and /or compensation with respect to each category of values of forests.
 - v. Which projects deserve to be exempted from payment of NPV.

56. Similar criteria may have to be taken into account for arriving at an approximate scale of compensation. The compensation is to

include not only the full value of the illegally mined material but also cost of restoration of environment as well as cost of ecological services foregone forever. It should be deterrent so as not to render such illegal activity profitable. In *Sudarsan Das Vs. State of West Bengal & Ors.* (Supra), it was held that full value of the material, the cost of restoration and the NPV should form part of the compensation to be recovered. There has also to be action against the polluters and the erring officers. The vehicles or any other equipment used for illegal mining are required to be confiscated and to be released only on payment of atleast 50% of the showroom value as laid down in *Original Application No.110(THC)/2012, Threat to life arising out of coal mining in South Garo Hills District v. State of Meghalaya& Ors.* This scale can then apply for all States, as far as possible.

57. We consider it necessary to constitute a Committee comprising representatives of the MoEF&CC, Central Pollution Control Board (CPCB), Indian Institute of Forest Management, Bhopal, Institute of Economic Growth Delhi and Madras School of Economics to prepare a scale of compensation, after including the above components which can then be adopted in whole of the country. The report may be furnished within three months to the Tribunal by email at ngt.filing@gmail.com. The nodal agency for compliance and coordination will be CPCB. The Committee may also take professional service of an expert/ institution in the matter if it so desires.

Conclusions

58. We sum up our directions as follows:

- a) MoEF&CC may now take necessary steps in the matter in terms of order dated 04.09.2018 in *Sudersan Das* (supra) latest by June 30, 2019 and file compliance report by 15.07.2019, as already directed.
- b) The States of West Bengal, Gujarat, Karnataka, Maharashtra, Punjab, Uttar Pradesh, Haryana, Madhya Pradesh, Andhra Pradesh, Bihar, Uttarakhand, Jammu and Kashmir, Goa, Kerala, Telangana and Tamil Nadu and Himachal Pradesh may take steps in terms of orders dated 04.09.2018 in *Sudarsan Das v. State of West Bengal & ors*, 05.09.2018 in, 13.9.2018 in *Mushtakeem v. MoEF&CC & Ors.* and 16.01.2019 in Compliance of Municipal Solid Waste Management Rules, 2016. The Chief Secretaries may monitor and furnish reports as earlier directed.
- (c) The States of West Bengal, Gujarat, Karnataka, Maharashtra, Punjab, Uttar Pradesh, Haryana, Madhya Pradesh, Andhra Pradesh, Bihar, Uttarakhand, Jammu and Kashmir, Goa, Kerala, Telangana and Tamil Nadu and Himachal Pradesh may review monitoring mechanism in terms of directions of the Tribunal and guidelines of MoEF&CC.
- (d) The Director Indian School of Mines, Dhanbad may appear in person on 26.07.2019 to explain why action be not taken for violation of order of this Tribunal.
- (e) The State of West Bengal, Gujarat, Karnataka, Maharashtra, Punjab, Uttar Pradesh, Haryana, Madhya Pradesh, Andhra Pradesh, Bihar, Uttarakhand, Jammu and Kashmir, Goa,

Kerala, Telangana and Tamil Nadu and Himachal Pradesh may send further action taken reports by 30.06.2019.

(f) The Committee in terms of para 59 above may furnish its report within three months to the Tribunal by email at ngt.filing@gmail.com

59. A copy of this order be sent to MoEF&CC, Central Pollution Control Board (CPCB), Indian Institute of Forest Management, Bhopal, Institute of Economic Growth, Delhi and Madras School of Economics, Chennai by email.

List the matter for further consideration on 26.07.2019.

Adarsh Kumar Goel, CP

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

April 05, 2019
Original Application No. 360/2015
With other connected matters
AS

ANNEXURE-10

**Honorable NGT Court Order OA No.
360/2015 dated 26.02.2021 regarding
updatation of enforcement and
monitoring mechanism to control and
regulate illegal sand mining (including
riverbed sand mining)**

Item Nos. 02 to 20

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 360/2015

(With report dated 15.01.2021)

National Green Tribunal Bar Association

Applicant

Versus

Virender Singh (State of Gujarat)

Respondent

With

Original Application No. 366/2015

National Green Tribunal Bar Association

Applicant

Versus

Dr. Sarvabhoum Bagali (State of Karnataka)

Respondent

With

Original Application No. 368/2015

National Green Tribunal Bar Association

Applicant

Versus

Dr. Sarvabhoum Bagali (State of Karnataka)

Respondent

With

Original Application No. 173/2018
(Earlier O.A. No. 89/2017 (EZ))

Sudarsan Das

Applicant

Versus

State of West Bengal & Ors.

Respondent(s)

With

Original Application No. 874/2018

In Re: News item published in "The Tribune " Authored by Arun Sharma
Titled "Mounds of sand on Sutlej banks, mining mafia digs in"

With

Original Application No. 44/2016

Mushtakeem

Applicant

	Versus	
MoEF & CC & Ors.		Respondent(s)
	With	
	Original Application No. 517/2015	
Sandeep Kumar		Applicant
	Versus	
Ministry of Environment, Forests and Climate Change & Ors.		Respondent(s)
	With	
	Original Application No. 550/2015	
Virender Kumar		Applicant
	Versus	
Ministry of Environment, Forests and Climate Change & Ors.		Respondent(s)
	With	
	Original Application No. 530/2016	
Sandeep Kumar		Applicant
	Versus	
Ministry of Environment, Forests and Climate Change & Ors.		Respondent(s)
	With	
	Original Application No. 272/2016	
M/s Ganga Yamuna Mining Co.		Applicant
	Versus	
State of Haryana & Ors.		Respondent(s)
	With	
	Original Application No. 481/2016	
Joginder Singh		Applicant
	Versus	
Ministry of Environment & Forest		Respondent
	With	
	Original Application No. 540/2015	
Ved Pal Singh		Applicant

	Versus	
Ministry of Environment and Forests & Ors.		Respondent(s)
	With	
	Original Application No. 90/2016	
Chander Mohan Uppal		Applicant
	Versus	
State of U.P. & Ors.		Respondent(s)
	With	
	Execution Application No. 40/2017	
	IN	
	O.A. No. 517/2015	
Sandeep Kumar		Applicant
	Versus	
Ministry of Environment, Forests and Climate Change & Ors.		Respondent(s)
	With	
	Original Application No. 671/2017 (Earlier O.A.No.123/2014)	
Himmat Singh Shekhawat		Applicant
	Versus	
State of Rajasthan & Ors.		Respondent(s)
	With	
	Original Application No. 726/2018	
Rupesh Pethe		Applicant
	Versus	
State of M.P. & Ors.		Respondent(s)
	With	
	Original Application No. 456/2018 (Earlier O.A. No. 146/2014 (CZ))	
Nityanand Mishra		Applicant
	Versus	
State of M.P. & Ors.		Respondent(s)
	With	
	Original Application No. 1086/2018 (Earlier O.A.No.140/2014)	
Nanga Ram Dangi		Applicant
	Versus	

Secretary, Department of Environment &
Forests & Ors.

Respondent(s)

With

Original Application No. 575/2019

Yaduraj Singh Jat

Applicant

Versus

State of Rajasthan

Respondent

Date of hearing: 26.02.2021

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Applicant: Ms. Katyayni, Advocate in OA 1086/2018

Amicus Curiae: Mr. Raj Panjwani, Senior Advocate with Mr. Aagney Sail, Advocate

Respondent(s): Mr. Divya Prakash Pande, Advocate. for CPCB & MoEF & CC
Mr. Raj Kumar, Advocate for CPCB in OA 726/2018
Ms. Soni Singh, Advocate for CPCB in OA 456/2018
Mr. Attin Shankar Rastogi, Mr. Balendu Shekhar & Mr. Shlok Chandra, Advocates for MoEF & CC
Mr. Ankit Verma, Advocate for State of UP
Mr. Rahul Khurana, Advocate for State of Haryana
Mr. Darpan KM, Advocate for State of Karnataka
Ms. Madhumita Bhattacharjee, Advocate. for State of West Bengal
Mr. Vikas Mahajan, AAG for State of HP
Mr. Maulik Nanavati, Advocate for State of Gujarat
Ms. Soumya Priyadarshinee, Advocate for State of MP
Ms. Sakshi Popli, Advocate for DPCC

ORDER

1. The issue for consideration in this group of matters relates to updation of enforcement and monitoring mechanism to control and regulate illegal sand mining (including riverbed sand mining) in the light of directions in the judgments of the Hon'ble Supreme Court, including in *Deepak Kumar v. State of Haryana & Ors.*: (2012) 4 SCC 629 and *Goa Foundation v. Union of India & Ors.* (2014) 6 SCC 590 and orders of this Tribunal.

2. Some of the matters have been pending for about seven years while others have been tagged to the pending matters later, from time to time, in view of common question. We need not refer to the individual facts and all the earlier order. It will suffice to refer to some of the significant orders passed from time to time given in a tabular form as follows:

Sl. No.	Party name	Date of orders	Particulars
1.	OA No. 173/2018 Sudarsan Das v. State of West Bengal & Ors.	04.09.2018	Inter alia directing revision of monitoring mechanism by the MoEF&CC.
2.	OA No. 44/2016 Mushtakeem v. MoEF&CC & Ors.	05.09.2018	
3.	OA No. 186 of 2016 Satendra Pandey Vs. Ministry of Environment, Forest & Climate Change & Anr	13.09.2018	Inter alia disapproving dispensing with requirement of public hearing and requiring evaluation by DEIAA.
4.	OA 606/2018, Compliance of Municipal Solid Waste Management Rules, 2016	16.01.2019	Requiring the Chief Secretaries to monitor the subject of unregulated and unscientific sand mining
5.	O.A. No. 360/2015, National Green Tribunal Bar Association v. Virender Singh (State of Gujarat)	05.04.2019	Inter alia consideration of scale of compensation and revised monitoring mechanism
6.	OA No. 44/2016 Mushtakeem v. MoEF&CC & Ors.	19.02.2020	Inter alia modifying the mechanism for release of vehicles
7.	OA No. 360/2015 National Green Tribunal Bar Association v. Virender Singh (State of Gujarat)	17.08.2020	Inter alia considering the scale of compensation proposed by the CPCB
8.	O.A. No. 40/2020, Pawan Kumar v. State of Bihar & Ors.	14.10.2020	Inter alia engagement of experts from NABT/QCCI for preparation of DSR/ replenishment study
9.	O.A. No. 726 of 2018 Rupesh Pethe v. State of M.P. & Ors.,	04.11.2020	

3. We may now refer to the developments which have taken place during pendency of the matters and then proceed to decide the surviving issues, as further discussed in para 24:

- a. enforcement of SSMG-2016 and EMGSM-2020,**
- b. compensation regime,**
- c. procedure for seizure and release of vehicles,**

d. periodic interaction among the stakeholders as discussed in later part of the judgment,

e. designing and reviewing monitoring mechanism from time to time including grievance redressal.

‘Sustainable Sand Mining and Management Guidelines, 2016’ (SSMG-2016) and “Enforcement and Monitoring Guidelines for Sand Mining, 2020” (EMGSM-2020)

4. In the course of proceedings, the Ministry of Environment, Forest and Climate Change (MoEF&CC) issued ‘Sustainable Sand Mining and Management Guidelines, 2016’ (SSMG-2016) under the provisions of the Environment (Protection) Act, 1986 (EP Act, 1986) on 15.01.2016. Further, in the light of the September 2016 report of the High-Powered Committee (constituted by the Tribunal), headed by the Secretary, MoEF&CC and suggestions as noted in order dated 04.09.2018 in OA 173/2018, *Sudarsan Das v. State of West Bengal & Ors.*, the Tribunal directed revision of the guidelines.¹ Accordingly, the MoEF&CC has issued “Enforcement

¹ Para 25 of the said order is as follows:

“25. In view of above discussion, we are of the view that since the subject of mining is also required to be regulated for protection of environment and it is to take care of this requirement, MoEF&CC has issued directions from time to time under Section 3 and 5 of the Environment (Protection) Act, 1986. The MoEF&CC needs to revise its directions keeping in mind the following:

- i. Mining Surveillance System discussed in para 23 above be finalized in consultation with ISRO Hyderabad.
- ii. Safeguards suggested in Sustainable Sand Mining Guidelines published by the MoEF&CC in the year 2016.
- iii. Suggestions in the High Power Committee Report.
- iv. Requirement of demarcation of boundaries being published in respect of different leases in public domain.
- v. Need to issue SOP laying down mechanism to evaluate loss to the ecology and to recover the cost of restoration of such damage from the legal or illegal miners. Such evaluation must include cost of mining material as well as cost of ecological restoration and net present value of future eco system services forgone.
- vi. Need to set up a dedicated institutional mechanism for effective monitoring of sand and gravel mining which may also take care of mining done without any Environmental Clearance as well as mining done in violation of Environmental Clearance conditions.
- vii. The Mining Department may make a provision for keeping apart atleast 25% of the value of mined material for restoration of the area affected by the mining and also for compensating the inhabitants affected by the mining.
- viii. One of the conditions of every lease of mine or minerals would be that there will be independent environmental audit atleast once in a year by reputed third party entity and report of such audit be placed in public domain.
- ix. In the course of such environmental audit, a three-member committee of the local inhabitants will also be associated. Composition of three members committee may

and Monitoring Guidelines for Sand Mining, 2020” (EMGSM 2020), uploaded on the website on 27.01.2020 and communicated to all the States. Salient features thereof will be noted later.

Issue of EC procedure being handled by SEIAA instead of DEIAA, after public hearing and other necessary steps, procedure for revision of DSR preparation and enforcement mechanism in States, including compensation regime and seizure and release of vehicles

5. Vide order dated 13.09.2018 in O.A. No. 186/2016, *Satyender Pandey Vs. MoEF*, further direction was issued against dispensing with the requirement of public hearing and evaluation by SEIAA in terms of the judgment of the Hon’ble Supreme Court in *Deepak Kumar, supra* thereby the guidelines/notification dated 15.01.2016 dispensing with such requirement was held to be hit by the judgment of the Hon’ble Supreme Court in *Deepak Kumar, supra* and thus not enforceable.

6. On 05.04.2019, the Tribunal conducted comprehensive review of the matter and noted following issues required consideration. Directions were issued with reference to the said issues:

- “(a) Revision of Sustainable Sand Mining Guidelines, 2016 by the MoEF&CC in the light of directions of this Tribunal vide order dated 04.09.2018 in Sudarsan Das (supra).**
- (b) Compliance of Sustainable Sand Mining Guidelines, 2016 as may be revised by MoEF&CC as above.**
- (c) Effective monitoring mechanism for preventive and remedial measures as directed in orders of this Tribunal, including surveillance system and recovery of compensation.**
- (d) Directions in individual cases listed today.**
- (e) Scale of compensation.”**

7. Considering the extent of illegality in the process, apart from directing revision of the Guidelines as above, the Tribunal directed the

preferably include ex-servicemen, former teacher and former civil servant. The Committee will be nominated by the District Magistrate.”

States² to review their monitoring mechanism in the light of observations of this Tribunal in earlier orders, including orders dated 04.09.2018 in *Sudarsan Das v. State of West Bengal & Ors*, 05.09.2018 in *Mushtakeem v. MoEF&CC & Ors.* and 16.01.2019 in OA 606/2018, *Compliance of Municipal Solid Waste Management Rules, 2016*. **Though direction was issued to the States who were parties before the Tribunal, the directions are of general nature applicable to sand mining in all the State /UTs.** The Tribunal also considered compliance reports from different States after finding that the response of the State was not satisfactory.

Seizure and Release of vehicles involved in illegal mining

8. Another issue bearing on the enforcement mechanism is the action against the vehicles used in illegal sand mining. Seizure of such vehicles is required and release of seized vehicles lightly defeats the purpose of the coercive measures. Since the vehicles are in a way weapon of offence, the same cannot be dealt with in the manner disputed property is dealt with under section 451 Cr.PC. by releasing the same in favour of the ostensible owner by taking an entrustment/indemnity bond/*sapurdginama*. In *Sujit Kumar Rana*, (2004) 4 SCC 129 and order dated 26.03.2019 in Cr. A. 524/2019, *State of Madhya Pradesh v. Uday Singh*, it was held that special procedure for seizure and release of such vehicles prevails over the procedure under Section 451 Cr.P.C. This Tribunal earlier directed, in the case of illegal mining in Meghalaya that such vehicles should be released only on the payment of 50% of the showroom value. The same was affirmed by the Hon'ble Supreme Court in *2019 (8) SCC 177*. Similar order was passed by the Tribunal on 10.01.2019 in O.A. No. 670/2018, *Atul*

² The States of West Bengal, Gujarat, Karnataka, Maharashtra, Punjab, Uttar Pradesh, Haryana, Madhya Pradesh, Andhra Pradesh, Bihar, Uttarakhand, Jammu and Kashmir, Goa, Kerala, Telangana and Tamil Nadu and Himachal Pradesh

Chouhan v. State of U.P., which stands affirmed by the Hon’ble Supreme Court vide order dated 07.05.2019 in C.A. No. 1590/2019. **Thus, the procedure under Cr.P.C. for release of vehicles on *superdari* without stringent conditions would not apply in respect of action taken for enforcement of Sustainable Guidelines issued under the Environment (Protection) Act, 1986 (EP Act) and for enforcement of orders of this Tribunal under Section 15 of the National Green Tribunal Act, 2010 (NGT Act).** However, having regard to the difficulty expressed by the State that requirement to pay 50% of the showroom value of the vehicle was resulting in vehicles not being released at all, the earlier order was modified on 19.02.2020 to the effect that following scale of amount be recovered for release of the seized vehicles:-

Sr. No.	Category of Vehicle	Penalty Amount
1	<i>Vehicles/Equipments/Excavators with showroom value more than Rs. 25 lacs and less than 5 years old.</i>	Rs. 4 lacs
2	<i>Vehicles/Equipments/Excavators with showroom value more than Rs. 25 lacs and more than 5 years but less than 10 years old.</i>	Rs. 3 lacs
3	<i>For the remaining Vehicles older than 10 years/Equipments/ Excavators which are otherwise legally permissible to be operated and not covered by Serial No. 1 and 2.</i>	Rs. 2 lacs
Note – I: <i>On repetition of the offence by the same vehicle/ equipment, Order dated 05.04.2019 will be applicable.</i> Note – II: <i>The option of release may be available for a period of one month from the date of seizure and thereafter, the vehicles may be confiscated and auctioned.</i>		

9. Following further directions were issued :-

“6. The State may issue an appropriate Office Order/Rule to the above effect and publish the same. Needless to say that any private contract between a financier and a debtor cannot affect the States’ sovereign power to protect the environment and take incidental coercive measure for enforcement of rule of law. Lien of the State will override any private interest. The above compensation regime will be over and above any existing Rules or provisions. The amount collected may be

remitted to the State PCBs/PCCs for being utilized for restoration of the environment.

7. *The above course of action will be permissible to all the States at their option.*”

Scale of compensation for violations on polluter pays principle

10. Vide order dated 17.08.2020, the Tribunal considered the CPCB report dated 30.01.2020, in pursuance of earlier orders on scale of compensation to be recovered for violation of norms for mining on polluter pays principle and the matter was deferred for further consideration of such scale and further orders in the light of the EMGSM 2020. **On the issue of scale of compensation for violations, the Tribunal held that the same has to be calculated having regard to the polluter pays principle and not mere loss of royalty. This requires taking into account value of the illegally mined material and cost of restoration of the environment.** CPCB did the exercise by constituting an expert Committee. The Tribunal considered the report as follows:-

- “8. The Committee considered two approaches:
- (I) **Approach 1: Direct Compensation based on the market value of extraction, adjusted for ecological damages.**
- (II) **Approach 2: Computing a Simplified NPV for ecological damages.**
9. In the first approach, the criteria adopted is:
- Exceedance Factor (EF).
 - Risk Factor (RF).
 - Deterrence Factor (DF).

10. Approach 1 is demonstrated by Table 1 as follows:

“

Table No. 01: Approach 1				
Permitted Quantity (in MT or m³)	Total Extraction (in MT or m³)	Excess Extraction (in MT or m³)	Exceedance in Extraction:	Compensation Charge (in Rs.)
X	Y	Z = Y-X	Z/ X	$D * (1+RF + DF)$ Where D = Z x Market Value-of-the-material-per-MT-or-m³

				<i>DF = 0.3 if Z/X = 0.11 to 0.40 DF = 0.6 if Z/X = 0.41 to 0.70 DF = 1 if Z/X >= 0.71</i>
				<i>RF = 0.25, 0.50, 0.75, 1.00 (as per table 2)</i>

11. Approach 2 is demonstrated by following formula:

*“Till such time as data and information for a comprehensive NPV is worked out in a site specific manner to account for all (or atleast the major) ecological damages, a simplified NPV, proxied on the market value of the illegally extracted amount may be computed. In this case the NPV approach would imply that **the total benefits from the activity of sand mining (as represented by the market value of the extracted amount) be deducted from the total ecological costs** imposed by the activity. In the absence of data on benefits and costs separately, we recommend a modification of the formula as shown below:*

Total Benefits(B) = Market Value of illegal extraction : D (refer Table 1)

*Total Ecological Costs = Market Value Adjusted for risk factor: D * RF (refer Table1).*

For present purposes, it is assumed that the Benefits would accrue only in the first year (in which the extraction of the illegally mined material takes place), while the ecological costs would continue to be felt over a period of time. NPV is to be calculated for a period of 5 years on the net value, Σ (C-B), at a discount rate ranging from 8%-5%, varying in inverse with the risk factor. Thus, where the highest risk factor (say 1) is applicable, the discount rate applicable would be the lowest (say 5% in this case).”

12. Final recommendation is as follows:

*“Thus, it is recommended that the annual net present value (NPV) of the amount arrived at after taking the difference between the costs and the benefits through the use of the above approach, maybe calculated for a period of 5 years at a discount rate of 5% for mining which is in a severe ecological damage risk zone. The rationale for levying this NPV is based on expert opinion that reversal and/or restoration of the ecological damages is usually not possible within a short period of time and rarely is it feasible to achieve 100% restoration, even if the sand deposition in the river basin is restored through flooding in subsequent years. The negative externalities of the mining activity are therefore to be accounted for in this manner. Ideally, the worth of all such damages, including costs of those which can be restored should be charged. **However, till data on site-specific assessments becomes available, this approach may be***

adopted in the interim. In situations where the risk categorization charged. However, till data on site-specific assessments becomes available, this approach may be adopted in the interim. In situations where the risk categorisation is unavailable or pending calculation, the following Discount Rates may be considered:

Severity	Mild	Moderate	Significant	Severe
Risk Level	1	2	3	4
Risk Factor	0.25	0.50	0.75	1.0
Discount	8%	7%	6%	5%

11. Annexure-A appended to the report gives the calculation as follows:

“Compensation Charge (Scenario II - explicit accounting of NPV)

Market Value of Illegally Mined Material (D) 5000*400 = 2000000/-

Annual Value of Foregone Ecological Values D*RF = 2000000/-

- **Present Value of Foregone Ecological Values (@ 5% discount rate and over 5 years)**

$$\begin{aligned}
 PV &= \sum_{t=1}^5 \frac{(D+RT)}{(1+r)^t} \\
 &= \frac{\sum (2000000)}{(1+0.05)^1} + \frac{(2000000)}{(1+0.05)^2} + \frac{(2000000)}{(1+0.05)^3} + \frac{(2000000)}{(1+0.05)^4} + \frac{2000000}{(1+0.05)^5} \\
 &= \text{Rs. } 86,58,953/-
 \end{aligned}$$

- *Net Present Value (after netting out market value of illegally mined material) - i.e., Total Compensation to be levied*

$$\begin{aligned}
 &= NPV=PV-D \\
 &= \text{Rs. } 66,58,953/-
 \end{aligned}$$

Compensation Charge in above case:

Approach 1 (no explicit accounting of NPV)	Approach 2 (explicit accounting of NPV)
D*(1+RF+DF)	@ 5% discount rate and over 5 years
Rs. 46,00,000/-	Rs. 66,58,953/-

12. The Tribunal directed undertaking of scenario analysis, as suggested on behalf of the applicant and to furnish a further report accordingly. Further report dated 12.10.2020 has been filed by the CPCB reiterating its earlier report. **We propose to approve approach-2 in the report.** Apart from the above, a report dated 15.01.2021 has been filed by

the Oversight Committee for the State of UP³ to which reference will be made later.

Procedure for DSR/EC

13. Vide order dated 14.10.2020 in O.A. No. 40/2020, *Pawan Kumar v. State of Bihar & Ors.*, the issue of preparation of District Survey Report (DSR) by Experts was considered. Vide Notification dated 25.07.2018 issued by the MoEF&CC, under Section 3(2)(v) of the EP Act, 1986 amending EIA Notification dated 14.09.2006, procedure for preparation of DSR for sand mining/riverbed mining was laid down. **The DSR is crucial as it contains Environment Management plan, including the replenishment study and other safeguards and is the basis to consider the environment impact of mining based on which decision to grant the Environmental Clearance is taken.** The Tribunal held that for such crucial exercise, the **Experts should be out of those accredited by the National Accreditation Board of Education and Training/ Quality Control Council of India (NABT/QCCI) in terms of O.M. of MoEF&CC dated 16.03.2010.** Verification by the District Magistrate and evaluation by the SEAC was also necessary. Accordingly, following directions were issued in relation to a matter arising from the State of Bihar:-

*“(ii) As the DEIAA is not functioning as a consequence of the decision of the Tribunal in Satendra Pandey (supra), **the DSR shall be prepared through a consultant(s) accredited by the National Accreditation Board of Education and Training/ Quality Control Council of India in terms of O.M. of MoEF&CC dated 16.03.2010.***

*“(iii) **The DSR so prepared shall be submitted to the District Magistrate who shall verify the DSR only in respect of the relevant facts pertaining to the physical and geographical features of the district which shall be distinct from the scientific findings based on the parameters prescribed in the SSMMG-2016. After such verification, the District Magistrate shall forward the DSR for examination and evaluation by the State Expert Appraisal Committee (SEAC) having regarding to the fact***

³ constituted by this Tribunal to oversee compliance of environmental issues, on suggestions of the State Government.

that the SEIAA comprises of technical/scientific experts. The SEAC after appraisal of the report shall forward it to the SEIAA for consideration and approval if it meets all scientific/technical requirements.

(iv) While preparing the DSR, the MoEF&CC Accredited Agency/Consultant shall scrupulously follow the procedure and the parameters laid down under the SSMMG-2016 and EMGSM-2020 read in sync with each other.”

14. Considering the above, vide order dated 04.11.2020 in O.A. No. 726 of 2018, *Rupesh Pethe v. State of M.P. & Ors.*, the Tribunal directed that the above direction ought to be followed pan India, as follows:-

“5. The above direction may be followed by the State of MP also for the sake of uniformity. Further information required to be furnished is about the extent of illegal mining, extent of action taken, including the compensation recovered, vehicles seized and other coercive measures and impact of such action. The State of M.P. may compile relevant directions on the subject including the binding order of any Courts or Tribunal. This exercise may be undertaken jointly by the Secretary Geology and Mining, Member Secretary State PCB and Member Secretary SEIAA. In light of above, the State may further revise its policy and exercise. Let further compliance status be furnished before the next date by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF.

6. We are of the view that the above directions need to be followed by all other States where the issue of mining is relevant.

7. A copy of this order be forwarded to the Chief Secretaries of all the States and UTs by e-mail for compliance.”

Adverse impact of unscientific/unregulated Sand Mining

15. It is undisputed that there is huge degradation of environment on account of unregulated sand mining remains which is otherwise lucrative activity. It poses threat to bio-diversity, could destroy riverine vegetation, cause erosion, pollute water sources, badly affecting riparian ecology, damaging ecosystem of rivers, safety of bridges, weakening of riverbeds, destruction of natural habitats of organisms living on the riverbeds, affects fish breeding and migration, spell disaster for the conservation bird

species, increase saline water in the rivers. It has direct impact on the physical habitat characteristics of the rivers such as bed elevation, substrate composition and stability, in-stream roughness elements, depth, velocity, turbidity, sediment transport, stream discharge and temperature. Increase in demand of sand has placed immense pressure in the supply of sand resource and mining activities were going on illegally as well as legally without requisite restrictions. Lack of proper planning and sand management disturbs marine ecosystem and upset the ability of natural marine processes to replenish the sand. The Hon'ble Supreme Court (in Deepak Kumar, supra) noted that core group was constituted by the MoEF&CC to examine the impact of minor minerals on riverbeds and ground waters. A draft report was prepared recommending mandatory preparation of mining plan on the pattern of mining plans for major minerals. Further recommendations are reclamation and rehabilitation of abandoned mines, proportion of hydro geo-logical balance for minerals below ground water table limiting depth of mining to 3 meter and identification on locations where mining should be permitted was required. There is need for identifying safety zones in the proximity of intendments. Thus, strict regulatory parameters were required for regulating mining of minor minerals. It was noted that in-stream mining lowers the stream bottom of rivers which may lead to bank erosion. Depletion of sand in the stream bed causes deepening of rivers which may result in destruction of aquatic and riparian habitats. It has impact on stream's physical habitat characteristics.

16. *In State (NCT of Delhi) v. Sanjay*, (2014) 9 SCC 772, at page 790, it was observed :

“32. *The policy and object of the Mines and Minerals Act and Rules have a long history and are the result of an increasing awareness of*

*the compelling need to restore the serious ecological imbalance and to stop the damages being caused to the nature. The Court cannot lose sight of the fact that **adverse and destructive environmental impact of sand mining has been discussed in the UNEP Global Environmental Alert Service Report. As per the contents of the Report, lack of proper scientific methodology for river sand mining has led to indiscriminate sand mining, while weak governance and corruption have led to widespread illegal mining. While referring to the proposition in India, it was stated that sand trading is a lucrative business, and there is evidence of illegal trading such as the case of the influential mafias in our country.***

33. The mining of aggregates in rivers has led to severe damage to rivers, including pollution and changes in levels of pH. Removing sediment from rivers causes the river to cut its channel through the bed of the valley floor, or channel incision, both upstream and downstream of the extraction site. This leads to coarsening of bed material and lateral channel instability. It can change the riverbed itself. The removal of more than 12 million tonnes of sand a year from Vembanad Lake catchment in India has led to the lowering of the riverbed by 7 to 15 cm a year. Incision can also cause the alluvial aquifer to drain to a lower level, resulting in a loss of aquifer storage. It can also increase flood frequency and intensity by reducing flood regulation capacity. However, lowering the water table is most threatening to water supply exacerbating drought occurrence and severity as tributaries of major rivers dry up when sand mining reaches certain thresholds. Illegal sand mining also causes erosion. Damming and mining have reduced sediment delivery from rivers to many coastal areas, leading to accelerated beach erosion.

34. The Report also dealt with the astonishing impact of sand mining on the economy. It states that tourism may be affected through beach erosion. Fishing, both traditional and commercial, can be affected through destruction of benthic fauna. Agriculture could be affected through loss of agricultural land from river erosion and the lowering of the water table. The insurance sector is affected through exacerbation of the impact of extreme events such as floods, droughts and storm surges through decreased protection of beach fronts. The erosion of coastal areas and beaches affects houses and infrastructure. A decrease in bed load or channel shortening can cause downstream erosion including bank erosion and the undercutting or undermining of engineering structures such as bridges, side protection walls and structures for water supply.

35. Sand is often removed from beaches to build hotels, roads and other tourism-related infrastructure. In some locations, continued construction is likely to lead to an unsustainable situation and destruction of the main natural attraction for visitors—beaches themselves. Mining from, within or near a riverbed has a direct impact on the stream's physical characteristics, such as channel geometry, bed elevation, substratum composition and stability, instream roughness of the bed, flow velocity, discharge capacity, sediment transportation capacity, turbidity, temperature, etc. Alteration or

modification of the above attributes may cause hazardous impact on ecological equilibrium of riverine regime. This may also cause adverse impact on instream biota and riparian habitats. This disturbance may also cause changes in channel configuration and flow paths

.....Today, demand for sand and gravel continues to increase. Mining operators, instead of working in conjunction with cognizant resource agencies to ensure that sand mining is conducted in a responsible manner, are engaged in full-time profiteering. Excessive in-stream sand and gravel mining from riverbeds and like resources causes the degradation of rivers. In-stream mining lowers the stream bottom, which leads to bank erosion. Depletion of sand in the stream-bed and along coastal areas causes the deepening of rivers and estuaries and enlargement of river mouths and coastal inlets. It also leads to saline water intrusion from the nearby sea. The effect of mining is compounded by the effect of sea level rise. Any volume of sand exported from stream-beds and coastal areas is a loss to the system. Excessive in-stream sand mining is a threat to bridges, river banks and nearby structures. Sand mining also affects the adjoining groundwater system and the uses that local people make of the river. Further, according to researches, in-stream sand mining results in the destruction of aquatic and riparian habitat through wholesale changes in the channel morphology. The ill effects include bed degradation, bed coarsening, lowered water tables near the stream-bed and channel instability. These physical impacts cause degradation of riparian and aquatic biota and may lead to the undermining of bridges and other structures. Continued extraction of sand from riverbeds may also cause the entire stream-bed to degrade to the depth of excavation.”

Need for regulation under the Water, Air and EP Acts by PCBs, apart from the Mining authorities under the Mining law

17. Again, in Goa Foundation, supra (prs 74-76) it was observed that **mining was required to be regulated not only by the Mining department but also by the PCBs under the Water and Air Act and by the MoEF under the EP Act. It is made clear that the environment laws override other laws and any provision to the contrary in the Mines Act will not stay in the way of enforcing the environment norms. In this regard reference may also be made to report of the Ministry of Mines entitled “Sand Mining Framework” which will not stand in the way of modified mechanism in accordance with this order.**

Salient features of the EMGSM-2020

18. We may note the salient features of the EMGSM-2020, which are supplemental to existing SSMG-2016 and seek to provide effective enforcement and monitoring from the stage of identification of source to its dispatch and end use which requires involvement of all stakeholders viz. Central Government, State Government, Leaseholders/Mine Owners, Distributors, Dealers, Transporters and Consumers (bulk & retail). EMGSM refer to the judgment of the Hon'ble Supreme Court in *Deepak Kumar Vs. State of Haryana & Ors. (2012) 4 SCC 629* making EC mandatory irrespective of the area of mining lease, followed by monitoring in terms of the Environment Management Plan, using IT and IT enabled services. **Monitoring has to be with reference to quantity of mined material, transportation with a view to promote environmental protection, limit negative physiological, hydrogeological and social impacts underpinning sustainable economic growth.** Observations in the order of this Tribunal dated 04.09.2018 in O.A. 173/2018 in *Sudarsan Das vs. State of West Bengal & Ors.* has also been referred to as follows:

"There can be no two views that an effective institutional monitoring mechanism is required not only at the stage when Environmental Clearance is granted but also at subsequent stages".

"The guidelines focus on the preparation of District Survey Report and the Management Plan" ...

We are of the view that all the safeguards which are suggested in sustainable sand mining guidelines as well as notification dated 15.01.2016 ought to be scrupulously followed." ...

It is a known fact that in spite of the above-suggested guidelines being in existence, on the ground level, illegal mining is still going on. The existing mechanism has not been successful and effective in remedying the situation." ...

Since there is an utter failure in the current monitoring mechanism followed by the State Boards, SEIAAs and DEIAAs, it is required to be revised for effective monitoring of sand and gravel mining and a dedicated monitoring mechanism be set up."

Further reference has been made to the directions in the order dated 05.04.2019 requiring the 17 States, which were party before the Tribunal

viz. West Bengal, Gujarat, Karnataka, Maharashtra, Punjab, Uttar Pradesh, Haryana, Madhya Pradesh, Andhra Pradesh, Bihar, Uttarakhand, Jammu and Kashmir, Goa, Kerala, Telangana and Tamil Nadu and Himachal Pradesh, to follow the revised Guidelines and to review their respective monitoring mechanism. It is then stated that with the object of regulating the mining, the sources of sand and steps required are mentioned which provide for District Survey Report (DSR), Mining Plan, replenishment study, consideration of environment impact while granting EC, laying down conditions for EC, monitoring of transportation to the end user to ensure that only legally mined material is transported. There is need to balance between deposition and extraction of sand as per replenishment study, maintaining surveillance, using Unmanned Artificial Vehicles (UAVs)/Drone for reserves estimation, quantity estimation, land use monitoring. Details about all these aspects have been mentioned in the said Guidelines. With regard to post EC monitoring, there is a provision for environment audit, monitoring of sale and purchase by developing online portal and laying down the levels of monitoring i.e. Level 1- Reach/ Stockyard level monitoring, Level 2 - Transportation monitoring, Level 3 - End consumer monitoring/ bulk consumer, Level 4 - Indirect monitoring. Reference has then been made to the High-Powered Committee incorporating safeguards to be adopted by the project proponents. There is also provision for assessment of compensation for the ecological damage by the State/ PCB/ any other Authority. Inter District and Inter State boundaries are separately dealt with. The uniform monitoring mechanism stipulates:

“ 9.4. **Monitoring Mechanism**

xxx xxx.....xxx.....

1. *All precaution shall be taken to ensure that the water stream flows unhindered and process of Natural river meandering doesn't get affected due to mining activity.*
2. *River mining from outside shall not affect rivers, no mining shall be permitted in an area up to a width of 100 meters from the active edge of embankments or distance prescribed by the Irrigation department.*
3. *The mining from the area outside river bed shall be permitted subject to the condition that a safety margin of two meters (2 m) shall be maintained above the groundwater table while undertaking mining and no mining operation shall be permissible below this level unless specific permission is obtained from the Competent Authority. Further, the mining should not exceed nine-meter (9 m) at any point in time.*
4. *Survey shall be carried out for identifying the stretches having habitation of freshwater turtles or turtle nesting zones. Similarly, stretches shall be identified for other species of significant importance to the river ecosystem. Such stretch with adequate buffer distance shall be declared as no-mining zone and no mining shall be permitted. The regulatory authority as defined for granting Environmental Clearance, while considering the application of issuance of ToR and/or EC for the adjacent block (to non-mining zone) of mining shall take due precaution and impose requisite conditions to safeguard the interest of such species of importance.*
5. *District administration shall provide detailed information on its website about the sand mines in its district for public information, with an objective to extend all information in public domain so that the citizens are aware of the mining activities and can also report to the district administration on any deviation observed. Appropriate feedback and its redressal mechanism shall also be made operational. The details shall include, but not limited to, lease area, geo-coordinates of lease area and mineable area, transport routes, permitted capacity, regulatory conditions for operation including mining, environmental and social commitments etc.*
6. *A website needs to be maintain to track the movement of centralised sand mining and a Centralised server system should be made to manage the data related to sand mining across India.*
7. *The mineral concession holders shall maintain electronic weighbridges at the appropriate location identified by the district mining officer, in order to ensure that all mined minerals from that particular mine are accounted for before the material is dispatched from the mine. The weighing bridge shall have the provision of CCTV camera and all dispatch from the mine shall be accounted for.*

8. *The mineral movement shall be monitored and controlled through the use of transit permit with security features like printing on IBA approved MICR papers, Unique bar/QR, fugitive ink background, invisible ink mark, void pantographs and watermarks papers or through use of RFID tagged transit permits and IT /IT-enabled services. Such monitoring system shall be created and made operationalised by State Mining department and district level mining officer shall be responsible for ensuring that all legal and operational mines are connected and providing the requisite information on the system. Regular check and associated report shall be submitted to DLTF and uploaded on the website.*

9. **State Government shall constitute a District Level Task Force (DLTF) under the Chairmanship of Deputy Commissioner/District Magistrate/Collector with Superintendents of Police and other related senior functionaries (District Forest Officer, District transport officer, Regional officer- SPCBs, Senior Officer of Irrigation Department, District Mining Officer) with one/two independent member nominated by the Commissioner concerned. The independent member shall be retired government officials/teacher or ex-serviceman or ex-judiciary member.**

The DLTF shall keep regular watch over the mining activities and movement of minerals in the district. The DLTF shall have its regular meeting, preferably every month to reconcile the information from the mining activity, and other observations made during the month and take appropriate corrective and remedial action, which may include a recommendation for revoking mining lease or environmental clearance. The DLTF may constitute an independent committee of the expert to assess the environmental or ecological damage caused due to illegal mining and recommend recovery of environmental compensation from the miner's concern. The recommendation may also include action under the provision of E(P) Act, 1986.

10. *The area not identified for mining due to restriction or otherwise are also to be monitored on a regular basis by the DLTF. Any observations of mining activity from the restricted area shall be reported and corrective measures shall be initiated on an urgent basis by the DLTF.*

11. *The dispatch routes shall be defined in the Environmental Clearance and shall be avoided through densely habituated area and the increase in the number of vehicle movement on the road shall be in agreement with the IRC guidelines / carrying capacity of the road. The alternate and dedicated route shall be explored and preferred for movement of mining to avoid inconvenience to the local habitat. The mining production capacity, by volume/weight, shall be governed by total permissible dispatch calculated based on*

the carrying capacity of dispatch link roads and accordingly, the production should be regulated.

12. *The movement of minerals shall be reconciled with the data collected from the mines and various Naka/check posts. Other measures may also include a general survey of the potential mineable area in the district which has not been leased/auctioned or permitted for mining due to regulatory or other reasons.*
13. *The location and number of check post requirement shall be reviewed by DLTF on a regular basis so that appropriate changes in location/number could be made as per the requirement. Such review shall be carried out on a regular basis for the district on inter-state boundary or district providing multiple passages between two districts of different states.*
14. ***The district administration shall compile the information from their district of the permitted and legal mined out minerals and other details and share such information and intelligence with the officials of the adjoining district (Inter or/and Intra State) for reconciliation. The information shall include the area of operation, permissible quantity, mined out minerals (production) the permitted route etc., and other observations, especially where the mine lease boundary is congruent with the district boundary. Such coordination meeting shall be held on a quarterly basis, alternatively in two district headquarters or any other site in two districts decided mutually by the District Magistrate.***
15. ***The mining department shall include submission of an annual environmental audit report as one of the conditions in the mining lease agreement. The annual audit for each river bed mining lease shall be carried out and the audit report shall be uploaded on the website of district administration. The audit shall be carried out by an independent team of 3 members nominated by District Collector/Magistrate/Commissioner comprising of Ex-Serviceman, Ex-Government officials of repute, Professor or Person having experience of mining/environment. The guidelines and method of the audit shall reflect adequately the monitor-able parameters and output and reflect the compliance status with respect to the conditions imposed by the regulatory authorities including conditions of Environmental clearance.***
16. *The in-situ and ex-situ environmental mitigative measures stipulated as EMP, CER, CSR and other environmental and safety conditions in mines including the welfare of labours shall properly reflect in the audit report.*

9.5 Suggestive additional requirements are

i. The requirement at the Mine Lease Site:

- a. *Small Size Plot (Up to 5 hectares): Android Based Smart Phone.*
- b. *Large Size Plots (More than 5 hectares): CCTV camera, Personal Computer (PC), Internet Connection, Power Back up.*
- c. *Access control of mine lease site.*
- d. *Arrangement for weight or approximation of the weight of mined out mineral on the basis of the volume of the trailer of vehicle used.*

ii. Scanning of Transport Permit or Receipt and Uploading on Server:

- a. *Website: Scanning of receipt on mining site can be done through barcode scanner and computer using the software;*
- b. *Android Application: Scanning on mining site can be done using Android Application using a smartphone. It will require internet availability on SIM card;*
- c. *SMS: Transport Permit or Receipt shall be uploaded on the server even by sending SMS through mobile. Once Transport Permit or Receipt get uploaded, a unique invoice code gets generated with its validity period.*

iii. Proposed working of the system:

The State Mining Department should print the Transport Permit or Receipt with security features and issue them to the mining leaseholder through the District Collector. Once these Transport Permits or Receipts are issued, they would be uploaded on the server against that mine lease area. Each receipt should be preferable with pre-fixed quantity, so the total quantity gets determined for the receipts issued. When the Transport Permit or Receipt barcode gets scanned and invoice is generated, that particular barcode gets used and its validity time is recorded on the server. So all the details of transporting of mined out material can be captured on the server and the Transport Permit or Receipt cannot be reused.

iv. Checking On Route:

The staff deployed for the purpose of checking of vehicles carrying mined mineral should be in a position to check the validity of Transport Permit or Receipt by scanning them using the website, Android Application and SMS.

v. Breakdown of Vehicle:

In case the vehicle break-down, the validity of Transport Permit or Receipt shall be extended by sending SMS by the driver in specific format to report the breakdown of the vehicle. The server will register this information and register the breakdown. The State can also establish a call center, which can register breakdowns of such vehicles and extend

the validity period. The subsequent restart of the vehicle also should be similarly reported to the server or call center.

vi. Tracking of Vehicles:

The route of the vehicle from source to destination can be tracked through the system using checkpoints, RFID Tags, and GPS tracking.

vii. Alerts or Report Generation and Action Review:

The system will enable the authorities to develop a periodic report on different parameters like daily lifting report, vehicle log or history, lifting against allocation, and total lifting. The system can be used to generate auto mails or SMS. This will enable the District Collector or District Magistrate to get all the relevant details and shall enable the authority to block the scanning facility of any site found to be indulged in irregularity. Whenever any authority intercepts any vehicle transporting illegal sand, it shall get registered on the server and shall be mandatory for the officer to fill in the report on action taken. Every intercepted vehicle shall be tracked.

The monitoring of mined out mineral, environmental clearance conditions and enforcement of Environment Management Plan will be ensured by the regulatory authority and the State Pollution Control Board or Committee. The monitoring arrangements envisaged above shall be put in place. The monitoring of enforcement of environmental clearance conditions shall be done by the Central Pollution Control Board, Ministry of Environment, Forest and Climate Change and the agency nominated by the Ministry for the purpose.

*Some of the State has followed the SSMMG-2016 and has also improvised or customized on the provisions given therein, and are successfully in operation. Salient provision adopted at different stages of sand mining in the state of Tamil Nadu is given as **Annexure VIII**.*

9.6 Actions against illegal excavation and transport

Solapur district administration in Maharashtra had adopted a multi-pronged strategy to penalize the persons involved in illegal excavation and transport which resulted in a significant increase in revenue earned by the state. Following rules and procedures as mentioned in these guidelines will add to the costs of PP. Those involved in illegal activities are not required to bear these costs and this will make their supply in the market cheaper (though illegal). This will put the players running their business by following rules and procedures laid down by the government to disadvantage as far as the selling price is considered. Therefore, it is necessary to come down heavily on those involved in illegal excavation/transport, so that there is no incentive for players to abide by the rules.

The following action may be taken to achieve this deterrence against illegal business:

1. The action should be taken under all legal options available simultaneously. Thus, after identifying the case of illegal excavation, storage and/or transport of minor minerals (including sand), fine should be levied as per the land revenue laws/code(s) of the state. In addition, FIR should be lodged in the police station under relevant sections of law including sec 379 IPC. In addition, action under the Motor Vehicle Act, 1989 and relevant rules should initiate to cancel/suspend the driving license of the driver and permit of the vehicle. Further, action should be initiated under provisions in the Income Tax Act, 1961 for unaccounted income and under the Central Goods and Services Act, 2017 for nonpayment of GST. (Earlier this was done under the state act pertaining to Value Added Tax/Sales Tax). Habitual offenders should also be taken up under local state laws for externment and/or preventive action. It is clarified that as per law, it is possible to take all actions under various laws simultaneously for one offence. What is prohibited in law is an action under the same law for the same act more than once.
2. The action should be taken against all persons responsible. Often, there is a tendency to penalize only the drivers of the vehicles. The mafia of illegal mining and transport is much bigger and drivers are only one part of the system. It is necessary to identify all those involved in the offence. It is usually not possible to reach the place of excavation without creating a motorable pathway up to the same through land which may be private land. Such role of such landowners needs to be looked into for each offence and proceeded against simultaneously. Further, the role of vehicle owners needs to be probed. Role of the person who allowed his land to be used for illegal excavation and storage should also be examined. Lastly, the person who purchases such sand should also be probed. The legal proceedings stated above needs to be initiated against all of these together. An attempt should be made to fix the financial responsibility in joint and several ways so that recovery is easier.
3. There may be discretion available in law about the extent of the penalty to be levied. If such discretion is very wide, then it is advisable that guidelines may be laid down to reduce such discretion in law for levying penalties. For example, in Maharashtra, Land Revenue Code, fine of any amount of penalty up to thrice the value of the sand can be levied. Solapur district administration had instructed Tahsildars and SDMs not to use discretion and levy the fine of three times the value. Availability of discretion makes junior level functionaries susceptible to pressures and it may also lead to corrupt practices.

4. *It is emphasized that actions, as stated above, are most important to ensure that the IT-based system works. If these exemplary actions are not taken against everyone, it shall create a strong disincentive to those involved in legal excavation and transportation. For IT-based (or any other) legal system to work, it is necessary to ensure that illegal system stops working altogether.”*

19. Several formats have been suggested in the Annexures, apart from salient provisions in the State of Tamil Nadu before execution of the mining lease and after execution of such lease including **judicious mined closure plan, reclamation, removal of sheds and maintaining of record for future reference.**

Compliance Status in States – Context of UP

20. We now refer to the Oversight Committee report dated 15.01.2021 for the State of UP with regard to status of compliance of Sustainable Guidelines as follows:-

“

S. No.	Directions by Hon’ble NGT	Compliance Status (Yes/No)	Compliance Status
1.	Status of the progress in ensuring issues related to illegal sand mining in the State of Uttar Pradesh	Partially Complied	For effective control of illegal mining and transportation of minerals, a seven-member District level Task Force has been constituted under the chairmanship of District Magistrate vide Govt. Order no. 616/86-2018-371/2005 dated 20.03.2018. Under the Integrated Mines Surveillance System (IMSS), all the mine areas have been geo fenced. PTZ cameras at the mines have been installed. Weigh Bridges fitted with cameras have been installed at all mines and have been integrated with the Control Centre at Head Quarters. At present, there are 36000 registered vehicles and 310 Weigh Bridges have been established.
2.	Demarcation of boundaries for regulating grant of sand mining lease	Partially Complied	Rule-23 of the Uttar Pradesh Sub-Divisional (Avoidance) Rules, 1963 as amended, provides for the advertisement of an area with Geo-coordinates and Rule-17 mentions the Geo- coordinates of all boundaries of the area sanctioned. These are being followed by all the District Magistrates.

3.	<i>Environmental Compensation imposed on leasing of minor minerals in any area to cover the restoration cost of environment and to compensate the victims</i>	Partially Complied	<i>There is provision for execution of mining lease deed only after demarcation under rule-17 of the Mining lease Approval Rules, 1963.</i>
4.	<i>Status of the constitution of a team to carry out demarcation by the Chief Secretary</i>	Partially Complied	<i>Under Rule-17 of the Uttar Pradesh Sub-Divisional (Avoidance) Rules, 1963, there is a provision for survey/demarcation of the area by an authorized officer/employee of the Directorate of Geology and Mining. A separate team is not justified at the level of Chief Secretary</i>
5.	<i>Mining in all blocks is undertaken as per provisions of EIA Notification, 2006; MOEF Notification dated 15.1.2016 and the Sustainable Sand Mining Management Guidelines, 2016</i>	Partially Complied	<i>i. Rule 34(4) of Rules-1963 contains the provision for obtaining Environmental Clearance before commencement of mining in the sequence of notification dated 14.09.2006 and the notification as amended from time to time. ii. According to the Sustainable Sand Mining Management Guidelines, 2016 issued by MOEF&CC, mining work is restricted from the riverbed during the monsoon season. Thus, mining work is restricted in the month of July, August and September in the State.</i>
6.	<i>No sand mining is permitted without due compliance of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 as well as regulations governing clearances by the Central Ground Water Authority</i>	Partially Complied	<i>Rule- 41(J)(1) of the 1963 Rules envisages that no mining operations in the leveled river bed shall be carried out beyond the depth of 3 meters or water level whichever is less/lower. The conditions mentioned in the Environmental Cleanliness Certificate issued by the State Level Environmental Impact Authority (SEIAA), are being followed.</i>
7.	<i>District authorities shall seize all sump pumps, other machinery, tools, vehicles, etc. used for carrying out illegal sand mining.</i>	Partially Complied	<i>Report awaited</i>
8.	<i>Any penalty imposed or not by concerned Department to cover the restoration cost of environment and to compensate the victims.</i>	Partially Complied	<i>The orders of Hon'ble NGT dated 18.02.2016 in OA No. 184/2013 Gurpreet Singh Baggha vs. MOEF, regarding recovery of penalty/ environmental damage from the concerned lease holders are being complied at district level.</i>
9.	<i>Status of a detailed restoration plan for the concerned river and its river beds</i>	Partially Complied	<i>Mining work is being done on the basis of approved mining scheme by including the restoration plan in the mining plan.</i>

10	Status of the assessment done through Indian Council of Forestry Research and Education, Dehradun of the ecological damage on account of illegal mining by incorporating the given components: a) Cost of river bed material b) Cost of ecological restoration c) Net present value of the future ecosystem services.	Partially Complied	In OA No. 184/2013 Gurpreet Singh Bagga vs. MOEF, the action is being taken by conducting assessment of environmental damage in compliance with Indian Council of Forestry Research and Education, Dehradun.
11	Action against the polluters and the erring officers	Not Complied	Report awaited
12	Status of CCTV Cameras installation at mining points to verify the amount of sand extracted	Partially Complied	Rule-35(2) of Uttar Pradesh Minor Mineral Regulations, 1963 provides that the mining lease holder whose mining lease area is more than 5 hectares, shall constructs checkpost/gate and install 4 CCTV cameras capable of recording at 360° visibility at his own expense for monitoring. Under the supervision of the DMs.
13	Status of regular patrolling by the police to inspect the mining operations	Partially Complied	For effective control over illegal mining and transportation of minerals, a seven-member district level task force has been set up under the chairmanship of DM vide order no. 616/86-2018-371/2005 dated 20.03.2018. Deputy Superintendent of Police level officers of Police department are members of this task force. The mining areas are constantly monitored by this task force.
14	Status of daily reports regarding mining to be filed by SHO/ Mining officer to be sent to District Magistrate.	Partially Complied	According to the information received from the DM, Prayagraj in compliance of the order of Hon'ble NGT passed in OA No. 670/2018 in re: Atul Singh Chauhan vs. MOEF&CC and Ors., regular checking of illegal mining transportation is being done by the Task force constituted at the district level. The District Collector/ Senior Superintendent of Police, Prayagraj are regularly informed.
15	Status of vehicles confiscation	Partially Complied	In compliance of orders of Hon'ble NGT in OA No. 670/2018 in re: Atul Singh Chauhan vs. MOEF&CC and Ors., in district Prayagraj 06 chargesheets were filed in the financial year 2018- 19; 80 chargesheets filed in 2019-20 and in the year 2020-21 till the month of November, 2020, 150 FIRs and 214 cases have been filed in the competent Courts, including the order passed by Hon'ble NGT. Similar instructions have also been issued to the other districts regarding the above.

16	<i>Status of EC imposed and realized by the CPCB till date in this regard</i>	Partially Complied	In compliance of Order dated 05.04.2019 of Hon'ble NGT, Principal Bench in O.A. 360 of 2015 (13 clubbed cases), CPCB in NGT on 06.01.2020 the "Recommendations on Scale of Compensation to deal with the cases of illegal sand mining" were made by the Committee of Experts constituted by Hon'ble NGT. The Committee of Expert recommended two approaches regarding the scale of compensation to deal with the cases of illegal sand mining: 1. Direct Compensation based on the market value of extraction, adjusted for ecological damages 2. Computing a Simplified NPV for ecological damages. The above referred recommendations were initially taken up by Hon'ble NGT during the hearing on 08.01.2020 wherein Hon'ble NGT expressed prima facie deficiencies in the recommendations and directed for rectification of the deficiencies before the next date. Accordingly, the Committee of Experts reviewed and revised its recommendations, and CPCB filed in NGT on 30.01.2020 the revised "Recommendations on Scale of Compensation to deal with the cases of illegal sand mining" of the Committee of Experts constituted by Hon'ble NGT. The scale of compensation was calculated by adopting two approaches. For details of approach, I & II refer Appendix- VI. It was also suggested by the Hon'ble NGT vide its order dated 17/08/2020 to consider the suggestions of Shri Panjwani which were noted at point no 13 needs to be looked into by the same Committee and thereafter the Scale of Compensation finalized (Refer Appendix- VII). In compliance of the Hon'ble NGT direction, the matter was examined by the same expert Committee at CPCB, Delhi & found that more or less the formula suggested by committee and the methodology suggested by Shri Panjwani is similar except some of the factors. The details of same are noted at point no. 3 of the affidavits is submitted before the Hon'ble NGT by CPCB on 12.10.2020. Copy of same is enclosed as Appendix-VIII.
17	<i>Status of EC imposed and realized by the UPPCB till date in this regard</i>	Partially Complied	In compliance of Order dated 08.01.2020 of Hon'ble NGT in O.A. 360 of 2015 are given at Appendix -IX of the report

18	Status of setting up of dedicated institutional mechanism for monitoring of conditions of Environmental Clearance as granted under EIA Notification, 2006 in respect of sand and gravel mining.	Partially Complied	Under the supervision of the DMs in the districts, the conditions of the Environmental Clearance Certificate are complied with by the PCBs/ Departmental officers. A separate institutional mechanism has been established for the same.
19	Safeguards based on High Powered Committee report and observations into the Sustainable Sand Mining and Management Guidelines, 2016.	Partially Complied	MOEF& CC is following the Sustainable Sand Mining Management Guidelines, 2016. (Refer Appendix- X)
20	Necessary steps have been taken by District Administration for the effective monitoring mechanisms for preventive and remedial measures including surveillance system for recovery of compensation.	Not Complied	Action will be taken after necessary amendments in environmental regulations. As per information given by the Mr. A.K. Tiwari, UPPCB on 07.01.2021 that: Comments: In compliance of Hon'ble NGT order dated 17.08.2020 in OA No. 360/2015 and as per provision of 'Enforcement & Monitoring Guidelines for Sand Mining' Jan., 2020 issued by MOEF&CC, Govt. of India, action is to be taken by concerned District Administration. (Refer Appendix- XI)
21	Necessary steps have been taken by MOEF & CC to restore effective impact assessment and safeguards; any action taken against the erring officers	Not Complied	Report awaited
22	Status of Chief Secretary filed the report regarding recovery of compensation (i.e. damage to environment)	Not Complied	Report awaited

23	Whether there is any progress towards amendments of the Act/Rules so that the Courts can order for the fine as ordered by Hon'ble NGT.	Not Complied	As per information given by the Mr. A.K. Tiwari, UPPCB on 07.01.2021 that: Comments: In compliance of Hon'ble Supreme Court Judgement dated the 27.02.2012 in I.A. No. 12-13 in Special Leave Petition (C) No. 19628-19629 of 2009, in the matter of Deepak Kumar etc. Vs. State of Haryana and Others and in compliance of Hon'ble NGT directions dated 04.09.2018 in O.A. No. 173/2018 in the matter of Sudarsan Das Vs. State of West Bengal, MOEF&CC, Govt. of India has issued 'Enforcement & Monitoring Guidelines for Sand Mining' Jan., 2020 which has the following provisions regarding illegal mining: "As per the provision of 23 (C) of MMDR Act, the State Government is empowered to make rules for preventing illegal mining, and transportation & storage of illegal minerals. All such mining which qualifies under illegal shall be dealt with in the provision of MMDR Act the concern authorities". In the above circumstance the necessary amendments in Mining Regulation/ The Uttar Pradesh SubDivisional (Avoidance) Rules, 1963 is to be initiated by the Mines & Geology Department, Govt. of U.P. (Refer Appendix- XI).

Additional Information provided by Mines Department

- The Mines Department has established a Command Centre at the Directorate of Geology and Mines at Lucknow from where they operate the Integrated Mines Surveillance System for the entire State. They are using Artificial Intelligence based Software and taking the help of Drones and Cloud Services for monitoring mining activity in the State. Drone Videography has been done in sensitive districts- Fatehpur, Banda, Prayagraj and Saharanpur. Besides the CCTV Cameras, they are using RFID tags to monitor the movement of vehicles.***
- They have made a provision in the Rules to blacklist a person for upto 2 years if found guilty of illegal mining/illegal transportation. So far 125 persons/firms have been blacklisted.*
- They have amended the Rules to allow storage of minerals beyond 5Km radius from the riverbed. This has been done to prevent illegal mining from river bed under the alibi of storage.*
- They have established a Vehicle Tracking System to check the misuse of Transport Pass and Overloading. To begin with, this system has been introduced in the most sensitive districts of Hamirpur, Banda, Fatehpur, Jalaun and Jhansi.***

5. *New areas have been identified based on survey conducted according to Sustainable Mining Guidelines and they are being included in the DSR.*
6. *Instead of the printed MM-11, online royalty payment has been introduced through E- MM- 11.*
7. *Security features have been introduced in E-MM 11 to check its misuse.*
8. *Transport of minerals even from stores is being regulated through electronic E- forms.*

Observation of the Oversight Committee: *The Committee felt that the compliance of the Mining Department needs to be verified by independent sources. CPCB and UPPCB are being directed by the Committee to jointly verify the compliance. The report would be submitted in three months time.*

VI. RECOMMENDATIONS

1. *There have been a number of complaints regarding illegal mining specially in Districts of Hamirpur, Banda, Fatehpur, Jalaun, Prayagraj, Saharanpur and Jhansi. The Oversight Committee, while enclosing the newspaper cuttings has asked for a status report from the Directorate of Mining, which so far has not been received. **Illegal Mining is mining done without a Mining Plan in utter violation of environmental norms and is a grave threat to ecology and environment.** The State Government should have a zero tolerance on illegal mining and the Directorate of Mining and District Administration should immediately enquire into all such cases and if found correct take stringent legal action against the guilty.*
2. *Environmental Clearance takes into account all the environmental concerns. Mining plan is the instrument through which it is enforced. However, for mining activity going on illegally, there is neither any EC nor any mining plan. Illegal mining invariably leads to reckless damage to environment. Hence, utmost efforts are required in surveillance, patrolling and enforcement. **Electronic surveillance through UAVs/Remote Sensing is a good surveillance option especially in areas where sand mafias are active. Night vision drones could be used for checking mining activity at night. Sensitive spots need to be identified and police presence- both static presence and dynamic patrolling needs to be beefed up there. DMs / SSPs be made directly responsible for checking illegal mining.***
3. *DSRs need to be prepared very carefully. They should be based on Physical surveys and replenishment studies. **Since sand deposition is a dynamic issue, they need to be regularly updated. While awarding lease deeds, important environmental parameters like deposition and replenishment of sand, areas of erosion, distance from infrastructural structures need be considered.***

4. ***In the absence of replenishment studies and physical inspection before award, many times sites are awarded where there is no sand. The lease holder per force indulges in mining adjoining areas, some of which may be environmentally not very suitable. Before award of LOI, physical inspection should be mandatory.***
5. ***Areas where only few leases are operative and the rest are not settled/surrendered need to be carefully analyzed. There could be a chance of cartel formation and mining of sand illegally from other vacant mining plots under the garb of the operative lease. (In district Prayagraj, there is only one operative lease out of 51 leases).***
6. ***Storage Godowns should be at least 5 kms away from the river bank. Otherwise, illegal mining can be carried on under the garb of storage by the leaseholder himself.***
7. ***Geo-fencing of sites, their physical demarcation, allotment of geo-coordinates to all the pillars and their constant physical inspection and electronic surveillance is a must to ensure that the mining activity is as per the approved mining plan and no illegal mining, detrimental to environment, is going on.***
8. ***There has to be a mechanism to ensure that the actual mining activity conforms to the approved Mining Plan and the approved Environment Management Plan (EMP). Besides the statutory system of Departmental inspections, there has to be a system of annual mandatory Environmental Audit by experts. Environment Department can empanel some experts/expert institutions with standard TORs and Remuneration terms which could be utilized by the Mines Department on a regular basis. This way the District Administrations can access good technical experts with standard conditions in a transparent way without bothering about tedious time-consuming tender formalities.***
9. ***There has to be an effective mechanism for restoration of environment in case of its degradation due to mining. A portion of the royalty could be reserved for it as Environment Restoration Fund. The Environment Department can empanel some reputed institutions with standard terms for preparing environmental restoration plans which could be used directly by the Mining Department without the arduous formalities. These plans could be funded by the Environment Fund as mentioned above. Already a number of mineral rich districts like Sonbhadra have a sizeable District Mineral Fund at the disposal of the District Collector. However, since there is no mechanism available at the level of District Collector for preparation of Environment Restoration Plans, this fund is normally used for works other than environmental restoration.***

10. *All the mining activity should strictly comply with Provisions of EIA Notification 2006, Sustainable Sand Mining Guidelines, 2016; The Environmental Protection Act, 1986; The Water (Prevention and Control of Pollution) Act, 1974; The Air (Prevention and Control of Pollution) Act, 1981 and Regulations of Central Ground Water Authority.*
11. ***Direction may be issued to the Principal Secretary, Mining to take immediate steps for amendment of rules so that the Courts may order the fine as ordered by the Hon'ble NGT."***

Stand of State of MP

21. The State of MP has filed an affidavit on 13.01.2021 that necessary changes have been made in accordance with the directions of this Tribunal dated for procedure for granting EC in accordance with the directions of this Tribunal in the order dated 13.9.2018 in Satendra Pande, by constituting a Committee. Order dated 12.10.2020 was issued by the State of Madhya Pradesh on the subject. There is a proposal to amend the Minor Minerals Rules and also to introduce technology to prevent illegal mining using QR Code for transit passes, pool SMS facility to ascertain validity of electronic passes, google distance matrix to avoid multiple usage of single transit pass, web portal and mobile App to verify validity of electronic transit pass. It is not necessary to refer to the affidavits of other individual States in view of the fact that final and updated directions are now being issued in the light of which all the States/UTs are expected to take further steps in the matter.

Stand of State of Rajasthan

22. In the status report, filed by the State of Rajasthan on 16.10.2020, it is stated that the Chief Secretary Environment Cell has been established. It holds regular meetings with the District Magistrates. Meeting was also held with the Director General of Police (law and order), Secretary Home, Director Mines, all District Collectors, Dy. Conservators of Forest and other concerned officers. Directions have been issued for formation of SITs,

monitoring cases of illegal mining, setting up of special check posts on the routes used for illegal mining, ensuring CCTV surveillance, strict recovery of environmental compensation fee, etc. Directions have issued to District Magistrates to create awareness at Panchayat level. The Chief Secretary proposes proposed to issue comprehensive guidelines. Mining Department has also taken up a project for creating redressal portal and mobile app for reporting illegal mining.

Today's Consideration

23. The extent of challenge posed by illegal sand mining was noted by the Tribunal in the order dated 05.04.2019 in OA 360/2015 as follows:-

*“8. Despite this, the menace of illegal sand mining in India continues unabated. **As per reports, the sand business in India employs over 35 million people and is valued at well over \$126 billion per annum. In the year 2015-2016, there were over 19,000 cases of illegal minor minerals including sand in the country.**⁴ In Uttarakhand, a 115 years old bridge collapsed due to overloaded sand trucks. In Maharashtra, 26,628 cases of illegal sand mining were recorded in the year 2017. The State of Maharashtra has the highest number of cases of non-compliance of Sustainable Sand Mining Management Guidelines, 2016. The State of Kerala suffered hugely in 2004 Tsunami and 2018 floods which several report explain were aggravated by illegal sand extraction.⁵ The issue of illegal sand mining is also rampant in the states of Goa⁶, Bihar⁷, Tamil Nadu⁸, Uttarakhand⁹, Telangana¹⁰, Jammu and Kashmir¹¹ amidst others.”*

24. In view of resume of above orders and responses, the issue which survives for consideration is enforcement of the 2016 and 2020 guidelines, read with orders dated 19.2.2020, 14.10.2020, 4.11.2020 and observations herein, by evolving appropriate comprehensive monitoring

⁴<http://www.legalserviceindia.com/legal/article-73-why-is-illegal-sand-mining-harmful-.html>

⁵<https://sandrp.in/2019/03/01/sand-mining-2018-is-it-a-national-menace/>

⁶<https://timesofindia.indiatimes.com/city/goa/govt-is-ignoring-illegal-sand-mining/articleshow/67908428.cms>

⁷<https://www.firstpost.com/india/illegal-sand-mining-part-3-bihar-govts-attempted-crackdown-has-sent-prices-soaring-officials-face-axe-as-rivers-in-ruin-6008351.html>

⁸https://en.wikipedia.org/wiki/Sand_mining_in_Tamil_Nadu

⁹<https://sandrp.in/tag/uttarakhand-sand-mining/>

¹⁰<https://sandrp.in/2019/02/26/sand-mining-2018-telangana-and-andhra-pradesh/>

¹¹https://greaterkashmir.com/article/news.aspx?story_id=309365&catid=2&mid=53&AspxAutoDetectCookieSupport=1

mechanism, with designated accountable officers, grievance redressal mechanism, envisaging strict action against violators, including assessment and recovery of compensation for the violations, seizure of vehicles and review at higher levels in the State.

Compensation

25. In the light of discussion in para 12 above, having regard to the totality of the situation, **we accept the report of the CPCB and direct that the scale of compensation calculated with reference to approach II be adopted by all the States/UTs.** Though compensation assessment for damage to the environment is a dynamic concept, depending on variables, floor level formula can be worked out to avoid arbitrariness inherent in unguided discretion. **The CPCB may issue an appropriate statutory direction for the facility of monitoring and compliance to the Environment Secretaries of all the States/UTs who may forthwith evolve an appropriate mechanism for assessment and recovery of compensation in all Districts of the State. The recovered compensation may be kept in a separate account and utilized for restoration of environment by preparing an appropriate action plan under the directions of the Environment Secretary with the assistance of such individual/ institutions as may be considered necessary.**

Interaction for Effective enforcement

26. The above discussion shows that the problem has defied solution and unless tackled seriously, damage to the environment will continue. Clear road map is thus required with effective monitoring mechanism. Report of the Oversight Committee for UP and affidavit of the State of MP, the report from Rajasthan and some other States also show that effective

mechanism is lacking. For clarity on all issues, periodic interaction of stake holders, particularly the enforcement authorities is required. This will also facilitate engagement of accredited agencies/experts for preparing DSRs/replenishment studies. In the Central Government, the concerned authorities include Mining Ministry, Environment Ministry, Jalshakti Ministry and CPCB. In States, Departments of Mining, Environment, SEIAA, PCB and District Magistrates.

Enforcement of Monitoring Mechanism and review by the Chief Secretary at State level and Secretary MoEF&CC at National level

27. We direct all the States/UTs to strictly follow the SSMG-2016 read with EMGSM-2020 reinforced by mechanism for preparation of DSRs (in terms of directions of this Tribunal dated 14.10.2020 in Pawan Kumar, supra and 04.11.2020 in Rupesh Pethe, supra), Environment Management Plans, replenishment studies, mine closure plans, grant of EC (in terms of direction dated 13.09.2018 in Satendra Pandey, supra), assessment and recovery of compensation (as per discussion in Para 25), seizure and release of vehicles involved in illegal mining (in terms of order dated 19.02.2020 in Mushtakeem, supra), other safeguards against violations, grievance redressal, accountability of the designated officers and periodical review at higher levels. As already noted, EMGSM-2020 contemplates extensive use of digital technology, including remote sensing.

28. We further direct that periodic inspection be conducted by a five-members Committee, headed and coordinated by the SEIAA and comprising CPCB (wherever it has regional office), State PCB and two expert members of SEAC dealing with the subject. Where CPCB regional office is not available, if MoEF&CC regional office is available, its Regional Officer will be included in the Committee.

Where neither CPCB nor MoEF&CC regional office exists, Chairman, SEIAA will tie up with the nearest institution of repute such as IIT to nominate an expert for being included in the Committee. Such inspection must be conducted at least thrice for each lease i.e. after expiry of 25% the lease period, then after 50% of the period and finally six months before expiry of the lease period for midway correction and assessment of damage, if any. The reports of such inspections be acted upon and placed on website of the SEIAA. Every lessee, undertaking mining, must have an environment professional to facilitate sustainable mining in terms of the mining plan and environmental norms. This be overseen by the SEIAA. Environment Departments may also develop an appropriate mobile App for receiving and redressing the grievances against the sand mining, including connivance of the authorities and also a mechanism to fix accountability of the concerned officers. Recommendations of the Oversight Committee for the State of UP quoted earlier may be duly taken into account.

The mechanism must provide for review at the level of the Chief Secretary at least once in every quarter, in a meeting with all concerned Departments in the State. The Chief Secretary UP may ensure further action in the light of the report of the Oversight Committee.

Similarly, at National level, such review needs to be conducted atleast once in a year by the Secretary, Environment in coordination with the Secretaries Mining and Jalshakti Ministries the CPCB.

Publication of Annual Reports

29. We further direct all the States/UTs to publish their annual reports on the subject and such annual reports may be furnished to

MoEF&CC by 30th April every year giving status till 31st March. First such report as on 31.03.2022 may be filed with the MoEF&CC by all the States/UTs on or before 30.04.2022. The report may also be simultaneously posted on the website of the Environment Department of the States/UTs. Based on such reports, MoEF&CC may consider supplementing its Guidelines from time to time. The MoEF&CC may prepare a consolidated report considering the reports from the States/UTs and publish its own report on the subject, preferably by 31st May every year.

Interaction at National Level

30. We direct the Secretary MoEF to convene a meeting in coordination with the CPCB and Mining and Jalshakti Ministries of Central Government and such other experts/individuals at National level and representatives of States within three months for interaction on the subject which may be followed by such meetings being convened by the Chief Secretaries in all States in next three months. Holding of such meetings will provide clarity on enforcement strategies and help protection of environment.

All the applications are disposed of. Individual issues may be gone into in accordance with the mechanism to be involved as above.

A copy of this order be forwarded to the MoEF&CC, CPCB, Secretaries, Ministries of Jalshakti and Mining, GoI, Chief Secretaries, Environment Secretaries, SEIAA and State PCBs/PCCs and District Magistrates of all the States/UTs by e-mail for compliance.

Adarsh Kumar Goel, CP

S.K. Singh, JM

Dr. Nagin Nanda, EM

February 26, 2021
Original Application No. 360/2015
and other connected matters
DV & A

ANNEXURE-11

**Honourable NGT Order before
Principal Bench in the O.A. NO 85/2018
(WZ) dated 30.09.2020**

Item Nos. 04 to 08 (Pune Bench)

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

(Through Video Conferencing)

Appeal No. 03/2020 (WZ)
(Earlier Original Application No. 85/2019 (WZ))
(I.A. No. 63/2020)
With
Appeal No. 04/2020 (WZ)
(Earlier Original Application No. 86/2019 (WZ))
With
Appeal No. 05/2020 (WZ)
(Earlier Original Application No. 87/2019 (WZ))
With
Appeal No. 06/2020 (WZ)
(Earlier Original Application No. 88/2019 (WZ))
With
Appeal No. 07/2020 (WZ)
(Earlier Original Application No. 89/2019 (WZ))

Sabarmati Majoor Kamdar Sahkari Mandli Ltd. Appellant(s)

Versus

State of Gujarat & Ors. Respondent(s)

With

Narendrasinh Baldevsinh Rathod Appellant(s)

Versus

State of Gujarat & Ors. Respondent(s)

With

Narendrasinh Baldevsinh Rathod Appellant(s)

Versus

State of Gujarat & Ors. Respondent(s)

With

Narendrasinh Baldevsinh Rathod Appellant(s)

Versus

State of Gujarat & Ors. Respondent(s)

With

Vishnuji Panaji Vanzara Appellant(s)

Versus

State of Gujarat & Ors.

Respondent(s)

Date of hearing: 30.09.2020

**CORAM: HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. SATYAWAN SINGH GARBYAL, EXPERT MEMBER**

For Appellant(s) : Ms. Aastha Mehta, Ms. Sangna Kansagra &
Mr. Bhanji Solanki, Advocates

For Respondent (s): Mr. D. M. Gupte, Advocate for R-2 (MoEF&CC)
Mr. Maulik Nanavati, Advocate for R-3

ORDER

1. Since a common question of law and fact is involved in all the appeals, thus all the appeals are taken together.
2. These appeals have been filed against the order passed by the respondent no. 3- State Environment Impact Assessment Authority (SEIAA) whereby the Environment Clearance (EC) granted to the appellants were cancelled. It has been stated by the appellants that EC which was granted in favour of the appellants was valid and legal one for operating the sand mining and has followed all due procedure while applying for the same. It is further stated that the authorities after due and careful deliberation have granted EC to the appellants.
3. The ground on which the appellant's EC has been cancelled by the SEIAA is that the mining lease is within 500 meters of human habitation and the said fact has been concealed in Form-1. The human habitation which has been considered by the SEIAA is "Aluva Hills" a luxurious weekend home scheme which caters to only a few property owners. The said Aluva Hills is not an approved and/or registered place of continuous human habitation. The villages of Rajpur and Aluva, which are registered villages with

continuous human habitation have been shown and disclosed by the appellant since the Form-1 stage. The fulcrum of the entire issue is whether the standard contemplated under Sustainable Sand Mining Management Guidelines, 2016 ("2016 Guidelines") is applicable for the purpose of alleging any violation or an arbitrary standard of 500 meter which has no basis under law can be used by the authorities for the purpose of rejecting the EC. It is submitted that the criteria of 500 meter from human habitation has no basis in any guideline or under any statute. Sand mining is governed by the criteria and safeguards prescribed in 2016 Guidelines, which does not prescribe 500 meter within human habitation. The basis of alleging concealment is false, since Aluva Hills is not a permanent human habitation. The appellant's EC has been rejected on completely frivolous and arbitrary grounds.

4. It is argued that the appellant has been granted the sand mining in said lease area and till date the appellant has not started his operations on the said area. There is no allegation of any illegality in the mining activity till today against the appellant. The controversy as to cancellation of EC is based on an erroneous observation made in the meeting dated 16.07.2019 held by respondent no. 4 - State Level Expert Appraisal Committee (SEAC) which is as follows:

"Committee noted that aforementioned Project Proponents have concealed the facts for the location of human habitation within 500 meter area (including Aluva Hills) from periphery of the lease while applying for the Environmental Clearance....."

Hence, after deliberation, committee noted that aforementioned Project Proponents could not explain their stand before the Committee regarding willful hide of the facts while submitting application for obtaining EC.

In view of the above, it was unanimously decided to recommend to SEIAA for cancellation the environmental clearances accorded to all the leases mentioned above in tabular column.”

5. It is further argued by the learned counsel for the appellant that respondent no. 4 has taken the EC issued in favour of the appellant society with reference to clause 8(v) of Environment Impact Assessment Notification, 2006 in the 528th meeting held on 16.07.2019 or respondent no. 4 in the minutes of meeting of 528th meeting mentioned that respondent no. 5 has received representation from the residents of Aluva Hills dated 17.12.2008 raising grievance that earlier EC application was rejected due to existence of human habitation at 120 meters from the subject lease area and subsequently, project proponent has not mentioned about the fact of the surrounding entities and has obtained EC. The human habitation which has been considered by the SEIAA is Aluva Hills a luxurious weekend home scheme which caters to only a few property owners. The scheme of Aluva Hills is not a densely populated zone, neither it is a fully built up area since the plots in the said scheme are spread across acres.
6. Office of the respondent no. 6- Geologist, Gandhinagar, Gujarat has requested to take appropriate action to respondent no. 4 on three aspects. The appellant further stated that in the meeting dated 03.01.2019, respondent no. 4 after deliberation decided to carry out joint inspection with the help of Regional Officer, State Pollution Control Board and Geologist, District Gandhinagar. The appellant stated that the appellant society was called upon to clarify all the aspects and after joint inspection carried out by the above-mentioned officers, submitted report on 06.03.2019 to

respondent no. 4. The appellant further stated that appellant has submitted his submissions with presentation dated 16.07.2019 before the respondent no. 4. In the above report, it was mentioned that there are in all six leases, including the subject lease, existing within 500 meters distance from the nearest human habitation. After discussion of all the aspects, respondent no. 4 has noted that appellant society and other lease holders have concealed the facts for the location of human habitation within 500 meters area from the periphery of lease (boundary) while applying for the EC and, therefore, on the sole ground of concealment of the fact under clause 8(v) of the EIA Notification, 2006 recommended to respondent no. 4 for cancellation of the EC accorded to all the lease holders. The aforesaid recommendation was considered in the 258th meeting held on 30.07.2019 of respondent no. 3 and decided to cancel EC, as recommended by respondent no. 4. The appellant further states that on the basis of decision taken by respondent no. 3 order dated 23.08.2019 cancelling the EC issued in favour of the appellant society was communicated.

7. It is further argued that the impugned order is directly in contravention of standards established under 2016 Guidelines. The said Guidelines prescribe different Environment Standard in Clause 49 which is titled "Protection of Infrastructure" which provides that the mining shall not be undertaken in mining lease located in 200-500 infrastructure meter of bridge, 200 meter upstream and downstream of water supply/irrigation scheme, 100 meters from the edge of National Highway and railway line, 50 meters from a reservoir, canal or building, 25 meter from the edge of State Highway and 10 meters from the edge of other roads except

on special exemption by the Sub-Divisional level Joint Inspection committee.

8. In the case of *Sudarshan Das vs. State of West Bengal*, Original Application No. 173 of 2018 vide order dated 04.09.2019, this Tribunal directed that all safeguards which are suggested in Sustainable Sand Mining Guidelines as well as notification dated 15.01.2016 ought to be scrupulously followed.
9. The version of the respondent was that Aluva Hills and human habitation is within 500 meters of lease area. It is submitted that Aluva Hills ought not to be considered as human habitation since the same is only a scheme for weekend homes. Aluva Hills cannot be termed as continuous human habitation. The said scheme falls within the village Aluva which has been disclosed as human habitation on all prior occasions.
10. While the learned counsel appearing for the respondent had submitted that the appellant had admitted the fact that there is habitation within the area prescribed and as shown by the respondents, the SEIAA has not considered Rule 18(6) of Gujarat Minor Mineral Concession Rules 2017 which also does not stipulate criteria for 500 meters. The said Rule makes it amply clear that mining operations cannot be carried out within 500 meters from an approved continuous habitation.
11. The learned counsel appearing for the Ministry of Environment, Forest and Climate Change (MoEF&CC) has argued that the respondent- Ministry has formulated the new guidelines i.e. “Enforcement & Monitoring Guidelines for Sand Mining” (EMGSM 2020) supplemental to the existing guidelines i.e. Sustainable Sand

Management Guidelines 2016, which focus on the effective monitoring of the sand mining since from the identification of sand mineral sources of its dispatch and end-use by consumers and the general public. Further, this document will serve as a guideline for collection of critical information of enforcement of the regulatory provision(s) and also highlights the essential infrastructural requirements necessary for effective monitoring for sustainable sand mining.

12. Learned counsel appearing for the MoEF&CC has submitted that the Monitoring Guidelines as issued by the Ministry is required to be followed. It is to be noted that enforcement of Monitoring Guidelines for Sand Mining was issued in January, 2020 by the Ministry of Environment and Forest. The relevant paras are quoted below:

“a) Parts of the river reach that experience deposition or aggradation shall be identified. The Leaseholder/ Environmental Clearance holder may be allowed to extract the sand and gravel deposit in these locations to manage aggradation problem.

b) The distance between sites for sand and gravel mining shall depend on the replenishment rate of the river. Sediment rating curve for the potential sites shall be developed and checked against the extracted volumes of sand and gravel.

c) Sand and gravel may be extracted across the entire active channel during the dry season.

d) Abandoned stream channels on the terrace and inactive floodplains be preferred rather than active channels and their deltas and flood plains. The stream should not be diverted to form the inactive channel.

e) Layers of sand and gravel which could be removed from the river bed shall depend on the width of the river and replenishment rate of the river.

f) Sand and gravel shall not be allowed to be extracted where erosion may occur, such as at the concave bank.

g) Segments of the braided river system should be used preferably falling within the lateral migration area of the river regime that enhances the feasibility of sediment replenishment.

h) Sand and gravel shall not be extracted up to a distance of 1 kilometre (1 km) from major bridges and highways on both sides, or five times (5x) of the span (x) of a bridge/public civil structure (including water intake points) on up-stream side and ten times (10x) the span of such bridge on down-stream side, subjected to a minimum of 250 meters on the upstream side and 500 meters on the downstream side.

i) The sediment sampling should include the bed material and bed material load before, during and after the extraction period. Develop a sediment rating curve at the upstream end of the potential reach using the surveyed cross-section. Using the historical or gauged flow rating curve, determine the suitable period of high flow that can replenish the extracted volume. Calculate the extraction volume based on the sediment rating curve and high flow period after determining the allowable mining depth.

j) Sand and gravel could be extracted from the downstream of the sand bar at river bends. Retaining the upstream one to two-thirds of the bar and riparian vegetation is accepted as a method to promote channel stability.

k) The flood discharge capacity of the river could be maintained in areas where there is a significant flood hazard to existing structures or infrastructure. Sand and gravel mining may be allowed to maintain the natural flow capacity based on surveyed cross-section history. Alternatively, off-channel or floodplain extraction is recommended to allow rivers to replenish the quantity taken out during mining.

l) The Piedmont Zone (Bhabhar area) particularly in the Himalayan foothills, where riverbed material is mined, this sandy-gravelly track constitutes excellent conduits and holds the greater potential for groundwater recharge. Mining in such areas should be preferred in locations selected away from the channel bank stretches.

m) Mining depth should be restricted to 3 meters and distance from the bank should be $\frac{1}{4}$ th of river width and should not be less than 7.5 meters.

n) The borrow area should preferably be located on the riverside of the proposed embankment because they get silted in the course of time. For low embankment, less than 6 m in height, borrow area should not be selected within 25 m from the toe/heel of the embankment. In the case of the higher

embankment, the distance should not be less than 50 m. In order to obviate the development of flow parallels to the embankment, crossbars of width eight times the depth of borrow pits spaced 50 to 60 meter center-to-center should be left in the borrow pits.

o) Demarcation of mining area with pillars and geo-referencing should be done prior to the start of mining.

p) A buffer distance /un-mined block of 50 meters after every block of 1000 meters over which mining is undertaken or at such distance as may be the directed/prescribed by the regulatory authority shall be maintained.

q) A buffer distance /unmined block of 50 meters after every block of 1000 meters over which mining is undertaken or at such distance as may be the directed/prescribed by the regulatory authority shall be maintained.

r) River bed sand mining shall be restricted within the central 3/4th width of the river/rivulet or 7.5 meters (inward) from river banks but up to 10% of the width of the river, as the case may be and decided by regulatory authority while granting environmental clearance in consultation with irrigation department. Regulating authority while regulating the zone of river bed mining shall ensure that the objective to minimize the effects of riverbank erosion and consequential channel migration are achieved to the extent possible. In general, the area for removal of minerals shall not exceed 60% of the mine lease area, and any deviation or relaxation in this regard shall be adequately supported by the scientific report.

s) Mining Plan for the mining leases (non-government) on agricultural fields/Patta land shall only be approved if there is a possibility of replenishment of the mineral or when there is no riverbed mining possibility within 5 KM of the Patta land/Khatedari land. For government projects mining could be allowed on Patta land/Khatedari land but the mining should only be done by the Government agency and material should not be used for sale in the open market.”

4.1.1 Preparation of District Survey Report.

“Sustainable Sand Mining Guidelines, 2016” issued by MoEF&CC requires preparation of District Survey Report (DSR), which is an important initial step before grant of mining lease/LoI. The guidelines emphasize detailed procedure to be followed for the purpose of identification of areas of aggradation/ deposition where mining can be allowed and identification of areas of erosion and proximity to infrastructural structures and installation where mining should be prohibited.

Calculation of annual rate of replenishment, allowing time for replenishment after mining, identification of ways of scientific and systematic mining; identifying measures for protection of environment and ecology and determining measures for protection of bank erosion, benchmark (BM) with respect to mean Sea Level (MSL) should be made essential in mining channel reaches (MCR) below which no mining shall be allowed.

The NGT in its Judgment dated 08.12.2017 in the matter of Anjani Kumar vs State of Uttar Pradesh & Ors. inter-alia mentioned the following regarding sand mining in the Uttar Pradesh.

“It states that the main object of preparation of District Survey Report is to ensure identification of areas of aggradation/deposition where mining can be allowed and identification of areas of erosion and proximity to infrastructural structures and installation where mining should be prohibited and calculation of annual rate of replenishment and allowing time for replenishment after mining area. Thus, the environmental protection requires a strictly regulated mining in terms of area, quantity as well as most importantly replenishment thereof.”

“The data collection and declared for preparation of DSR shall take precedence over other data and would form the foundation for providing mining lease in terms of Appendix-x to the Notification dated 15th January 2016 must be prepared by the statutory authority stated therein i.e. DEIAA prior to awarding of permits for carrying on mining activity in any part of the State of UP.”

The Hon’ble High Court of Jharkhand at Ranchi in its orders dated the 11th April, 2018 and 19th June, 2018 in W.P. (PIL) No. 1806 of 2015, in the matter of Court on its Own Motion Versus the State of Jharkhand & Others with W.P. (PIL) No. 290 of 2013, in the matter of Hemant Kumar Shilkarwar Versus the State of Jharkhand & Others, has inter-alia directed the preparation of District Survey Report for minor minerals other than Sand and Bajri or delegation of the powers for preparation of format of District Survey Report of minor minerals other than sand and Bajri to the State Government and/or District Environment Impact Assessment Authority and District Expert Appraisal Committee. To comply with the direction of Hon’ble High Court the Ministry has issued S.O. 3611(E) dated 25.07.2018, wherein, the procedure of preparation of DSR is mentioned. But it is felt that still there is other information that needs to be reported in DSR to make it a comprehensive DSR.

Therefore, preparation of District Survey Report is a very important step and sustainable sand mining in any part of the country will depend on the quality of District Survey Report.

Considering the importance of district survey report, the Ministry of Environment Forest and climate change, after consultation with experts dealing with mining-related matters, formulated the following guidelines for the preparation of comprehensive District Survey Report for sand mining:

a) District Survey Report for sand mining shall be prepared before the auction/e-auction/grant of the mining lease/Letter of Intent (LoI) by Mining department or department dealing the mining activity in respective states.

b) The first step is to develop the inventory of the River Bed Material and Other sand sources in the District. In order to make the inventory of River Bed Material, a detailed survey of the district needs to be carried out, to identify the source of River Bed Material and alternative source of sand (M-Sand). The source will include rivers, de-siltation of reservoir/dams, Patta lands/Khatedari Land, M-sand etc.

The revenue department of Kerala already conducted river mapping and sand auditing of around 20 rivers of Kerala which is a good example wherein the profile of rivers was created at regular intervals and aggradation/deposition was identified along with water level. In the same study, benchmarks were also created at a prominent location at regular interval for future surveying. Such study helps the mining departments to identify the source of sand.

Thus, it is proposed that for preparation of district survey report, the auditing of rivers needs to be carried out. There is already a provision under MMDR Act 2015 for National Mineral Exploration Trust (MET) wherein a 2% of royalty amount to be deposited in the trust. This fund is used for mineral exploration in the country. The Sand Auditing is also a sort of identification of mineral and State Government may request Central Govt. for providing funds for river auditing. The Central Govt. (Ministry of Mines) may also explore the possibilities for providing the funds for river auditing. The other option is that State Govt. may conduct such studies by its own fund and the same may be recovered from the leaseholders to whom the mining lease will be allocated.

c) District Survey Report is to be prepared in such a way that it not only identifies the mineral-bearing area but also define the mining and no mining zones considering various environmental and social factors.

d) Identification of the source of Sand & M-Sand. The sources may be from Rivers, Lakes, Ponds, Dams, De-silting locations, Patta land/Khtedari lands. The details in case of Rivers such as [name, length of river, type (Perennial or Non-Perennial), Villages, Tehsil, District], in case of Lakes, Ponds, Dams, De-silting locations [Name, owned/maintained by (State Govt./PSU), area, Villages, Tehsil, District] in case of Patta land/Khtedari lands [Owner Name, Sy No, Area, Agricultural/Non-Agricultural, Villages, Tehsil, District], in case of M-Sand Plant [Owner Name, Sy No, Area, Quantity/Annum, Villages, Tehsil, District], needs to be recorded as per format given in **Annexure-I**.

e) Defining the sources of Sand/M-Sand in the district is the next step for identification of the potential area of deposition/aggradation wherein mining lease could be granted. Detailed survey needs to be carried out for quantification of minerals. The purpose of mining in the river bed is for channelization of rivers so as to avoid the possibility of flooding and to maintain the flow of the rivers. For this, the entire river stretch needs to be surveyed and original ground level (OGL) to be recorded and area of aggradation/deposition needs to be ascertained by comparing the level difference between the outside riverbed OGL and water level. Once the area of aggradation/deposition are identified, then the quantity of River Bed Material available needs to be calculated. The next step is channelization of the river bed and for this central $\frac{3}{4}$ th part of the river, width needs to be identified on a map. Out of the $\frac{3}{4}$ th part area, where there is a deposition/aggradation of the material needs to be identified. The remaining $\frac{1}{4}$ th area needs to be kept as no mining zone for the protection of banks. The specific gravity of the material also needs to be ascertained by analyzing the sample from a NABL accredited lab. Thus, the quantity of material available in metric ton needs to be calculated for mining and no mining zone.

Note: As physical survey with conventional method is time-consuming, use of unmanned aerial vehicle (UAV) may be explored to carry out the survey and finalizing the original ground level and for developing a 3D model of the area.

f) The permanent boundary pillars need to be erected after identification of an area of aggradation and deposition outside the bank of the river at a safe location for future surveying. The distance between boundary pillars on each side of the bank shall not be more than 100 meters.

g) Identifying the mining and no mining zone shall follow with defining the area of sensitivity by ascertaining the distance of the mining area from the protected area, forest, bridges, important structures, habitation etc. and based on the sensitivity the area needs to be defined in sensitive and non-sensitive area.

h) Demand and supply of the Riverbed Material through market survey needs to be carried out. In addition to this future demand for the next 5 years also needs to be considered.

i) It is suggested that as far as possible the sensitive areas should be avoided for mining, unless local safety condition arises. Such deviation shall be temporary & shall not be a permanent feature.

j) The final area selected for the mining should be then divided into mining lease as per the requirement of State Government. It is suggested the mining lease area should be so selected as to cover the entire deposition area. Dividing a large area of deposition/aggradation into smaller mining leases should be avoided as it leads to loss of mineral and indirectly promote illegal mining.

k) Cluster situation shall be examined. A cluster is formed when one mining lease of homogenous mineral is within 500 meters of the other mining lease. In order to reduce the cluster formation mining lease size should be defined in such a way that distance between any two clusters preferably should not be less than 2.5 Km. Mining lease should be defined in such a way that the total area of the mining leases in a cluster should not be more than 10 Ha.

l) The number of a contiguous cluster needs to be ascertained. Contiguous cluster is formed when one cluster is at a distance of 2.5 Km from the other cluster.

m) The mining outside the riverbed on Patta land/Khatedari land be granted when there is possibility of replenishment of material. In case, there is no replenishment then mining lease shall only be granted when there is no riverbed mining possibility within 5 KM of the Patta land/Khatedari land. For government projects, mining could be allowed on Patta land/Khatedari land but the mining should only be done by the Government agency and material should not be used for sale in the open market. Cluster situation as mentioned in para k above is also applicable for the mining in Patta land/Khatedari land.

n) The State Government should define the transportation route from the mining lease considering the maximum production from the mines as at this stage the size of mining leases, their location, the quantity of mineral that can be mined safely etc. is available with the State Government. It is suggested that the transportation route should be selected in such a way that the movement of trucks/tippers/tractors from the villages having habitation should be avoided. The transportation route so selected should be verified by the State Government for its carrying capacity.

o) Potential site for mining having its impact on the forest, protected area, habitation, bridges etc, shall be avoided. For this, a sub-divisional committee may be formed which after the site visit shall decide its suitability for mining. The list of mining lease after the recommendation of the Committee needs to be defined in the following format given in as **Annexure-II**. The Sub-Divisional Committee after the site visit shall make a recommendation on the site for its suitability of mining and also records the reason for selecting the mining lease in the Patta land. The details regarding cluster and contiguous cluster needs to be provided as in **Annexure-III**. The details of the transportation need to be provided as in **Annexure IV**.

p) **Public consultation**-The Comments of the various stakeholders may be sought on the list of mining lease to be auctioned. The State Government shall give an advertisement in the local and national newspaper for seeking comments of the general public on the list of mining lease included in the DSR. The DSR should be placed in the public domain for at least one month from the date of publication of the advertisement for obtaining comments of the general public. The comments so received shall be placed before the sub-divisional committee for active consideration. The final list of sand mining areas [leases to be granted on riverbed & Patta land/Khatedari land, desiltation location (ponds/lakes/dams), M-Sand Plants (alternate source of sand)] after the public hearing needs to be defined in the final DSR in the format as per **Annexure-V**. The details regarding cluster and contiguous cluster needs to be provided in **Annexure-VI**. The details of the transportation need to be provided in **Annexure-VII**.

5.0 REPLENISHMENT STUDY

The need for replenishment study for river bed sand is required in order to nullify the adverse impacts arising due to excessing sand extraction. Mining within or near riverbed has a direct

impact on the stream's physical characteristics, such as channel geometry, bed elevation, substratum composition and stability, in-stream roughness of the bed, flow velocity, discharge capacity, sediment transport capacity, turbidity, temperature etc. Alteration or modification of the above attributes may cause an impact on the ecological equilibrium of the riverine regime, disturbance in channel configuration and flow-paths. This may also cause an adverse impact on instream biota and riparian habitats. It is assumed that the riparian habitat disturbance is minimum if the replenishment is equal to excavation for a given stretch. Therefore, to minimize the adverse impact arising out of sand mining in a given river stretch, it is imperative to have a study of replenishment of material during the defined period.

5.1 Generic Structure of Replenishment Study

Initially replenishment study requires four surveys. The first survey needs to be carried out in the month of April for recording the level of mining lease before the monsoon. The second survey is at the time of closing of mines for monsoon season. This survey will provide the quantity of the material excavated before the offset of monsoon. The third survey needs to be carried out after the monsoon to know the quantum of material deposited/replenished in the mining lease. The fourth survey at the end of March to know the quantity of material excavated during the financial year. For the subsequent years, there will be a requirement of only three surveys. The results of year-wise surveys help the state government to establish the replenishment rate of the river. Based on the replenishment rate future auction may be planned.

The replenishment period may vary on nature of the channel and season of deposition arising due to variation in the flow. Such period and season may vary on the geographical and precipitation characteristic of the region and requires to be defined by the local agencies preferable with the help of the Central Water Commission and Indian Meteorological Department. The excavation will, therefore, be limited to estimated replenishment estimated with consideration of other regulatory provisions.

5.2 Methodology for Replenishment Study

The replenishment estimation is based on a theoretical empirical formula with the estimation of bedload transport comprising of analytical models to calculate the replenishment estimation. The iso-pluvial maps of IMD can be used for estimation of rainfall. Catchment yield is computed using different standard empirical formulas relevant to the geographical and channel attributes. eg. Strange's Monsoon runoff curves for runoff coefficient). Peak flood discharge for the study area can be calculated by using

Dickens, Jarvis and Rational formula at 25, 50 and 100 years return period. The estimation of bed load transport using Ackers and White Equation or similar can be made. A simulation model is used with basic data generated from the field in the pre-study and post-study period (preferably pre-monsoon and post-monsoon) to estimate the volume of replenished material. The particle size distribution and bulk density of the deposited material are required to be assessed from a NABL recognized laboratory. Considering the bulk density and the volume, the estimation of replenishment in weight will be calculated after considering safeguards and stability of the slopes and riverine regime. Some of the common methods used for field data acquisition for replenishment study

5.2.1. Physical survey of the field by the conventional method

i. The conventional survey technical using DGPS and other survey tools are used to define the topography, contours and offsets of the lease area. The survey should clearly depict the important attributes of the stretch of the river and its nearby important civil and other feature of importance. Such information will provide the eligible spatial area for mining. The contour and the elevation benchmarks will provide the baseline data for assessing the pre and post-study period scenario.

ii. Physical benchmarks are to be fixed at appropriate intervals (preferable 1 in 30 m) and the Reduced Level (RL) shall be validated from a nearby standard RL. These RL should be engraved on a steel plate (Bench Plate) and shall be fixed and placed at locations which are free from any damages and are available in pre and post-study period. The bench plates shall be available for use during the mining period as reference for all mining activity. Reference pillar may also be used in place of Bench Plates with visible and readable demarcation on the ground as common reference points to control the topographic survey and mining activity.

iii. Baseline data on elevation status for a grid of 10 m x 10 m is preferred to have accuracy in the assessment. It is expected that two consecutive cross-sections in longitudinal and lateral direction should not be more than 10-meter distance apart, however, the regulatory authority may fix these intervals depending on the geographical and site-specific conditions, only and after providing the scientific reason for such deviation.

iv. The changes observed in the elevation in pre and post scenario at each node should be depicted in graphical forms with an appropriate scale to estimate the area of deposition and erosion. These graphical presentations should depict the active channel regime and the flow bed elevation with other important

features required to be considered for estimation of the mining area. The area of deposition and erosion shall be calculated for each cross-section after giving due regard to the stability and safety of active channel banks, and other features of importance. The elevation level shall be in reference to the nearest bench-plates established for the purpose.

v. The levels (MSL & RL) of the corner point of each grid should be identifiable and safety barriers (Non-Mining) demarcated as restricted in consensus with Mineral Concession Rules of respective State, and the provision mentioned in this Sustainable Sand Mining Management Guidelines.

vi. A clear identification is required to be highlighted between grids under mineable and grids under the non-mineable area. These baseline data (pre and post) be subjected to stimulation with the help of data mine software to derive at the replenishment area and corresponding volume and estimated weight.

vii. The database should be structured in a tabulated form clearly depicting the nomenclature of the section lines, latitude and longitude of the starting point, chain-age and respective levels of all the points taken on that section line.

viii. Net area shall be derived after the summation of the area of deposition minus area of erosion for each cross-section. The volume will be estimated by multiplying the distance between two cross-sections with the average of net area of these two consecutive cross-sections.

ix. One sample per 900 square meters (30 m x 30 m) shall be preferred sample density for assessment of bulk density for estimation of deposition rate. Care should be taken that the sample for assessment of bulk density is taken from the deposition zone and not from erosion. However, depending on the site condition, river morphology and geographical condition, sample density may be adjusted. Reason for such deviation shall be appropriately highlighted in the report with supporting scientific data.

5.2.4 Replenishment study shall have the details of

- List of instruments
- List of software
- Establishment of Benchmark by putting No. of pillar points and various Ground Control Points (GCP) at the site.
- Ground Control Points (GCP) Collection: - Various GCPs were observed by using DGPS for Permanent Benchmarks and for control points.

- *The summary of the elevation data from each section's profile based on the post-monsoon the survey should have mentioned in the table form.*
- *The detail of post-monsoon survey data in the tabular form shall be*
- *The detailed comparison of both pre-monsoon and post-monsoon elevation data shall be attached*
- *Cross-sectional depiction of deposition and erosion for each section in pre and post-deposition season shall be given supported by relevant field study data and plan.*

13. The matter of sand mining and its effects has been discussed in the case of *K. Rajasekar vs. The Chief Secretary to Government* decided on 16.02.2018 by Hon'ble the Madras High Court and relevant paragraphs are quoted below:

"12. The learned counsel for the writ petitioners in the respective writ petitions contended that the State has been undertaking mining operations without any regard to the environment. The agents engaged by the State for mining and transportation of sand indulged in all kinds of illegal activities and the same resulted in causing considerable damage to the environment. By placing reliance on the report submitted by the Court Commissioners, it was contended that time has come to stop the sand quarrying operations across the River Cauvery and Coleroon in the interest of the ecology. It was further contended that the natural resources, which is the public wealth has been looted by the State in collusion with the intermediaries.

13. The learned Advocate General by placing reliance on the affidavit filed by the Principal Secretary to the Government, Public Works Department and the supporting affidavit filed by the Chief Secretary to the Government submitted that the State would undertake sand mining after satisfying all the legal requirements and without adversely affecting the ecology. According to the learned Advocate General, the State would discharge the obligation undertaken without causing any kind of damage to the environment. The learned Advocate General took us through the proposal indicated in the affidavit filed by the Principal Secretary to the Government to demonstrate that in case the steps suggested by the Government is taken, it would enable the State to undertake mining operations without affecting the environment. The learned Advocate General submitted that there are enough shoals of sand at Mayanur, Sriramasamuthiram/ Sipilaputhur, Chinthalavadi,

M.Puthur, Sirugamani, Musiri (West), Panayakurichi and Vittalapuram and made a request to grant permission to the State to undertake sand quarrying operations in those sites subject to the clearance to be obtained from the environmental authorities. The learned Advocate General submitted that sand would be quarried without private participation. It was submitted that on account of the interim order, cost of sand was shooted up and common man is the ultimate sufferer.

24. The adverse effect of sand mining without a proper mine plan was indicated by the Hon'ble Supreme Court in [Deepak Kumar and others v. State of Haryana and others](#) [(2012) 4 SCC 629]

9. Extraction of alluvial material from within or near a streambed has a direct impact on the stream's physical habitat characteristics. These characteristics include bed elevation, substrate composition and stability, instream roughness elements, depth, velocity, turbidity, sediment transport, stream discharge and temperature. Altering these habitat characteristics can have deleterious impacts on both instream biota and the associated riparian habitat. The demand for sand continues to increase day by day as building and construction of new infrastructures and expansion of existing ones is continuous thereby placing immense pressure on the supply of the sand resource and hence mining activities are going on legally and illegally without any restrictions. Lack of proper planning and sand management cause disturbance of marine ecosystem and also upset the ability of natural marine processes to replenish the sand.

25. Quarrying of river sand, it is true, is an important economic activity in the country with river sand forming a crucial raw material for the infrastructural development and for the construction industry but excessive instream sand and gravel mining causes the degradation of rivers. Instream mining lowers the stream bottom of rivers which may lead to bank erosion. Depletion of sand in the streambed and along coastal areas causes the deepening of rivers which may result in destruction of aquatic and riparian habitats as well. Extraction of alluvial material as already mentioned from within or near a streambed has a direct impact on the stream's physical habitat characteristics.

Conditions imposed by the Environment Authority

25. The environmental clearance issued for mining of sand contained the following mandatory conditions:-

i) The Licensee must use minimum number of poclains and it should not be more than two in the project site.

ii) The District Administration should assess the site for Environmental impact at the end of first year to permit the continuation of the operation.

iii) *The Annual replenishment report certified by the authorised agency must be submitted to the prescribed authority. In case, the replenishment is low, the mining activity/production levels shall accordingly be decreased/stopped.*

iv) *There shall be no quarrying of sand in any river bed or adjoining area or any other area which is located within 500 m radial distances from the location of any bridge, water supply system, infiltration well or pumping installation.*

v) *The ultimate working depth shall be 1 m from the present natural river bed level and the thickness of the sand available shall be more than 3 m in the proposed quarry site.*

vi) *The sand quarrying shall not be carried out below the ground water table under any circumstances. In case, the ground water table occurs within the permitted depth at 1 meter, quarrying operation shall be stopped immediately.*

vii) *The sand mining should not disturb in any way the turbidity, velocity and flow pattern of the river water.*

viii) *The mining activity shall be monitored by the Taluk level Force once in a month by conducting physical verification.*

ix) *After closure of the mining, the licensee shall immediately remove all the sheds put up in the quarry and all the equipments used for operation of sand quarry. The roads/pathways shall be levelled to let the river resume its normal course without any artificial obstruction to the extent possible.*

x) *The mined out pits to be backfilled where warranted and area should be suitably landscaped to prevent environmental degradation.*

32. *The natural resources are valuable assets of the State. It is the primary duty of the State to conserve the natural resources for our future generation. The citizens must be in a position to enjoy the resources without causing damage to the environment and the ecology. There must be an institutional framework and enforcement mechanism to prevent illegal and excess quarrying.*

33. *The mining should be undertaken by the State without any adverse impact on the environment. The State alone is responsible for this sorry state of affairs. There is no proper mechanism to check the illegal quarrying and the excess sand mining. The authorities who are given the mandate to operate the sand quarry are not at all concerned with the environment and ecology. They are conducting mining activities in collusion with the mining mafia and looting the natural wealth.*

34. *The River sand is an essential raw material for construction activity. The cost of construction nowadays depends upon very much on the cost of sand. The State for*

supply of sand to the people at affordable rate ought to have quarried the River sand judiciously and in compliance with the environmental norms and without causing destruction of Rivers. There is no dispute that depletion of sand in the stream bed would result in deepening of rivers and it would have a cascading effect on the environment. Therefore, a balance has to be struck taking into account the need to preserve the ecology and the need for quarrying River Sand for the economic development of the State.

40. The Hon'ble Supreme Court in [M.C.Mehta v. Kamal Nath](#) [1997 (1) Supreme Court Cases 388] made it clear that if there is a law made by the State legislature, the Courts can serve as an instrument of determining legislative intent in the exercise of its powers of judicial review:

“35. We are fully aware that the issues presented in this case illustrate the classic struggle between those members of the public who would preserve our rivers, forests, parks and open lands in their pristine purity and those charged with administrative responsibilities who, under the pressures of the changing needs of an increasingly complex society, find it necessary to encroach to some extent upon open lands heretofore considered inviolate to change. The resolution of this conflict in any given case is for the legislature and not the Courts. If there is a law made by Parliament or the State Legislatures the courts can serve as an instrument of determining legislative intent in the exercise of its powers of judicial review under the constitution.”

43. The quarrying operations, even in those quarries where there are shoals of sand, must be undertaken only by abiding the norms and conditions of the environmental clearance. The quarry site shall be closed immediately after removing the available shoals of sand. The area and the depth of the quarry shall be in accordance with the permission granted by the environmental authorities. Such quarrying operations would be subject to the result of the Special Leave Petition pending before the Hon'ble Supreme Court in SLP No.2831 of 2018.

45. The Government must undertake a scientific study with the help of experts to identify the mineral deposits and its exact location. The State must excavate the minerals only from the places identified by the experts and by following the conditions imposed by the environmental authorities. Interlinking roads inside the river must be removed to check the illegal mining and transportation of minerals. The levelling of roads inside the river shall be done on a phased manner and giving priority. The sand mining shall not be undertaken in respect of locations where illegal sand mining has already been carried out.

46. The State must ensure that the sand quarries would adhere to the norms regarding extent and depth. The boundary of the quarry shall be demarcated by following the

procedure set-out under Clause 2 (ii) of the conditions imposed by the environmental authority.

50. The Court Commissioners have observed that clearance from the State Environment Impact Assessment Authority (SEIAA) has been routinely obtained for river sand mining without divulging the material factors like existence of Bridge, Water supply system etc. The SEIAA without conducting field inspection and cross checking the details permitted quarrying. There is no mechanism now to ascertain as to whether the conditions imposed by the SEIAA have been complied with by the licensee. This issue must be addressed by the Government and SEIAA. Before granting permission for the sites, where sand is available, the SEIAA must visit the place indicated in the application for sand mining. The boundaries of the site must be shown in the mine plan and excavation must be within the boundaries. The Project Director must fix the pucca permanent pillar boundaries for excavation. The Project Director must ensure that stones are erected at 50 metre intervals along the boundaries with the marking of Shoal height, River Bed Height and depth to be excavated. The State must streamline the entire process right from site selection to operation of quarry and supply of sand in an ecologically friendly and environmentally sustainable manner. The entire quarry sites must have CCTV. There must be IP cameras set up in all the poclains for monitoring the overloading. The State must include environmental experts from reputed Central/State Institutions preferably from Indian Institute of Technology to be part of the District Task Force. It must be the responsibility of the concerned District Collector to oversee, monitor and streamline the functioning of the sand quarrying. The Taluk and District level task force must be sensitized. The officials of the Public Works Department and others involved in the process must be given training periodically in relation to environmental and legal aspects of sand quarrying. The Government must fix liability on officials, who are violating the conditions of the clearance or permitting excess quarrying. The jurisdictional Revenue, Police, Geology and Transport department officials must be taken to task in case of illegal quarrying or transportation of sand without permission. The State Appellate Forum constituted by the order in G.O.Ms.No.27 Industries Department dated 17 February 2015 must be a vibrant body. The Government must set up a centralised control room to monitor sand quarrying operations, one at Chennai and the other at Trichy as undertaken in the affidavit. The Centralised Monitoring through CCTVs must be taken up through live streaming from the control room. There must be a Customer Care Centre to receive complaints and take action on such complaints. The action taken report must be sent to the complainant and it must be available on line.”

14. We have two things, sovereignty of the State and the doctrine of public trust. We have to make a balance between the two though

the State has every authority to utilize the land but Public Trust Doctrine says that the property of the public should be utilized for the public purposes and not for the private purposes. The water bodies, lake, air and land all these are the public properties and should be made available to all for maintaining the health and environment. This Doctrine of public trust and precautionary measures was discussed in public interest litigation no. 87/ 2006; Bombay Environmental Action Group Vs. State of Maharashtra 2018 SCC onlinebombay 2680.2019(1) Bombay CRI and it was held as follows:-

“Apex Court observed thus:

“2. The Indian society has, for many centuries, been aware and conscious of the necessity of protecting environment and ecology. Sages and saints of India lived in forests. Their preachings contained in vedas, upanishads, smritis, etc. are ample evidence of the society’s respect for plants, trees, earth, sky, air, water and every form of life. The main motto of social life is to live in harmony with nature. It was regarded as a sacred duty of everyone to protect them. In those days, people worshipped trees, rivers and sea which were treated as belonging to all living creatures. The children were educated by elders of the society about the necessity of keeping the environment clean and protecting earth, rivers, sea, forests, trees, flora, fauna and every species of life.”

“ The ancient Roman Empire developed a legal theory known as the “doctrine of the public trust”. It was founded on the premise that certain common properties such as air, sea, water and forests are of immense importance to the people in general and they must be held by the Government as a trustee for the free and unimpeded use by the general public and it would be wholly unjustified to make them a subject of private ownership. The doctrine enjoins upon the Government to protect the resources for the enjoyment of the general public rather than to permit their use for private ownership or commercial exploitation to satisfy the greed of a few.”

In the case of M.C. Mehta v. Kamal Nath, in paragraph 34 and 35, the Apex Court held thus:

“34. Our legal system - based on English common law - includes the public trust doctrine as part of its jurisprudence. The State is the trustee of all natural resources which are by nature meant for public use and enjoyment. Public at large is

the beneficiary of the sea-shore, running waters, airs, forests and ecologically fragile lands. The State as a trustee is under a legal duty to protect the natural resources. These resources meant for public use cannot be converted into private ownership.

35. We are fully aware that the issues presented in this case illustrate the classic struggle between those members of the public who would preserve our rivers, forests, parks and open lands in their pristine purity and those charged with administrative responsibilities who, under the pressures of the changing needs of an increasingly complex society, find it necessary to encroach to some extent upon open lands heretofore considered inviolate to change. The resolution of this conflict in any given case is for the legislature and not the courts. If there is a law made by Parliament or the State Legislatures the courts can serve as an instrument of determining legislative intent in the exercise of its powers of judicial review under the Constitution. But in the absence of any legislation, the executive acting under the doctrine of public trust cannot abdicate the natural resources and convert them into private ownership, or for commercial use. The aesthetic use and the pristine glory of the natural resources, the environment and the ecosystems of our country cannot be permitted to be eroded for private, commercial or any other use unless the courts find it necessary, in good faith, for the public good and in public interest to encroach upon the said resources.”

In the case of Fomento Resorts & Hotels Limited v. Minguel Martins 4, In paragraphs 53 to 55 and 65, the Apex Court held thus:

55. The public trust doctrine enjoins upon the Government to protect the resources for the enjoyment of the general public rather than to permit their use for private ownership or commercial purposes. This doctrine puts an implicit embargo on the right of the State to transfer public properties to private party if such transfer affects public interest, mandates affirmative State action for effective management of natural resources and empowers the citizens to question ineffective management thereof.

54. The heart of the public trust doctrine is that it imposes limits and obligations upon government agencies and their administrators on behalf of all the people and especially future generations. For example, renewable and non-renewable resources, associated uses, ecological values or objects in which the public has a special interest (i.e. public lands, waters, etc.) are held subject to the duty of the State not to impair such resources, uses or values, even if private interests are involved. The same obligations apply to managers of forests, monuments, parks, the public domain and other public assets. Professor Joseph L. Sax in his classic article, “The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention” (1970), indicates that the public trust

doctrine, of all concepts known to law, constitutes the best practical and philosophical premise and legal tool for protecting public rights and for protecting and managing resources, ecological values or objects held in trust.

55. The public trust doctrine is a tool for exerting long-established public rights over short-term public rights and private gain. Today every person exercising his or her right to use the air, water, or land and associated natural ecosystems has the obligation to secure for the rest of us the right to live or otherwise use that same resource or property for the long-term and enjoyment by future generations. To say it another way, a landowner or lessee and a water right holder has an obligation to use such resources in a manner as not to impair or diminish the people's rights and the people's long-term interest in that property or resource, including down slope lands, waters and resources.

65. We reiterate that natural resources including forests, water bodies, rivers, seashores, etc. are held by the State as a trustee on behalf of the people and especially the future generations. These constitute common properties and people are entitled to uninterrupted use thereof. The State cannot transfer public trust properties to a private party, if such a transfer interferes with the right of the public and the court can invoke the public trust doctrine and take affirmative action for protecting the right of people to have access to light, air and water and also for protecting rivers, sea, tanks, trees, forests and associated natural ecosystems.” (emphasis added) 54. Public at large has a right to enjoy and have a benefit of our forests including mangroves forest. The pristine glory of such forests must be protected by the State. The mangroves protect our environment. Therefore, apart from the provisions of various statutes, the doctrine of public trust which is very much applicable in India makes it obligatory duty of the State to protect and preserve mangroves.

PRECAUTIONARYPRINCIPLE

55. In the case of M.C. Mehta (Badhkal and Surajkund Lakes matter) v. Union of India, the Apex Court held thus:

“10. In M.C. Mehta v. Union of India [(1987) 4 SCC 463] this Court held as under:

“The financial capacity of the tanneries should be considered as irrelevant while requiring them to establish primary treatment plants. Just like an industry which cannot pay minimum wages to its workers cannot be allowed to exist, a tannery which cannot set up a primary treatment plant cannot be permitted to continue to be in existence for the adverse effects on the public. Life, public health and ecology have priority over unemployment and loss of revenue problem.”

The “Precautionary Principle” has been accepted as a part of the law of the land. Articles 21, 47, 48-A and 51-A(g) of the Constitution of India give a clear mandate to the State to protect and improve the environment and to safeguard the forests and wildlife of the country. It is the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures. The “Precautionary Principle” makes it mandatory for the State Government to anticipate, prevent and attack the causes of environment degradation. We have no hesitation in holding that in order to protect the two lakes from environmental degradation it is necessary to limit the construction activity in the close vicinity of the lakes.”

15. India is endowed with extraordinarily diverse and distinctive traditional water bodies found in different parts of the country, commonly known as ponds, tanks, lakes, vayalgam, ahars, bawdis, talabs and others. They play an important role in maintaining and restoring the ecological balance. They act as sources of drinking water, recharge groundwater, control floods, support biodiversity, and provide livelihood opportunities to a large number of people. Currently, a major water crisis is being faced by India, where 100 million people are on the frontlines of a nationwide water crisis and many major cities facing an acute water shortage. The situation will worsen as United Nations and Niti Ayog reports say that the demand for water will reach twice the available supply, and 40 per cent of India’s population will not have access to clean drinking water by 2030. One of the reasons is our increasing negligence and lack of conservation of waterbodies. Since independence, the government has taken control over the waterbodies and water supply. With a colonial mindset, authorities move further and further away in the quest of water supply, emphasizing more on networks, infrastructure and construction of dams. This, over time, has led to the neglect of

waterbodies and catchments areas. As a result, we have started valuing land more than water. In the last few decades, waterbodies have been under continuous and unrelenting stress, caused primarily by rapid urbanisation and unplanned growth. Encroachment of waterbodies has been identified as a major cause of flash floods in Mumbai (2005), Uttarakhand (2013), Jammu and Kashmir (2014) and Chennai (2015). Further, waterbodies are being polluted by untreated effluents and sewage that are continuously being dumped into them. Across the country, 86 waterbodies are critically polluted, having a chemical oxygen demand or COD concentration of more than 250 mg/l, which is the discharge standard for a polluting source such as sewage treatment plants and industrial effluent treatment plants. In urban India, the number of waterbodies is declining rapidly. For example, in the 1960s Bangalore had 262 lakes. Now, only 10 hold water.

Similarly, in 2001, 137 lakes were listed in Ahmedabad. However, by 2012, 65 were already destroyed and built upon. Hyderabad is another example. In the last 12 years, it has lost 3,245 hectares of its wetlands. The decline in both the quality and quantity of these waterbodies is to the extent that their potential to render various economic and environmental services has reduced drastically. Although there are sufficient policies and acts for protection and restoration of waterbodies, they remain insufficient and ineffective.

16. Realizing the seriousness of the problem confronting waterbodies, the Centre had launched the Repair, Renovation and Restoration of Water Bodies scheme in 2005 with the objectives of comprehensive improvement and restoration of traditional water bodies. These included increasing tank storage capacity, ground water recharge,

increased availability of drinking water, improvement of catchment areas of tank commands and others. However, in this regard, not much has been seen on the ground.

17. It is of utmost importance for meeting the rising demand for water augmentation, improving the health of waterbodies as they provide various ecosystem services that are required to manage microclimate, biodiversity and nutrient cycling. Many cities are working towards conservation of waterbodies like the steps initiated in the capital city of Delhi for instance. In turning Delhi into a city of lakes, rejuvenation of 201 waterbodies has been finalised. Of these, the Delhi Jal Board (DJB) plans to revive 155 bodies while the Flood and Irrigation Department will revive 46. DJB claims that the aim is to achieve biological oxygen demand or BOD to 10ppm and total suspended solids to 10mg/l. Also the establishment of the Wetlands Authority by the Delhi government is a welcome step towards notifying and conserving natural waterbodies. In order to achieve the goal of revival of waterbodies, it is important to understand that one solution may not fit all the waterbodies. Depending on the purpose, ecological services, livelihood and socio-cultural practices, the approach will vary from one waterbody to another. However the issues with regard to lack of data and action plans, encroachments, interrupted water flow from the catchment, siltation, violations of laws, solid waste deposit and polluted water, involvement of too many agencies, etc. have to be taken into consideration.
18. Action needs to be taken towards:

- i. Attaining sustainability. Thus, emphasis on long-term goals, operation and maintenance should be included along with the allocation of budget.
 - ii. Success of the lakes should be tested on all three fronts namely economic, environmental and social. Many studies point that a deliberate effort has to be made on the social front for which better publicity of the environmental benefits of the project and enhancing environmental awareness, especially among the local community is required.
 - iii. Encouraging local people to collaborate with other stakeholders to successfully utilise resources and ensure the protection and conservation of waterbodies.
 - iv. Traditionally, water was seen as a responsibility of citizens and the community collectively took the responsibility of not only building but also of maintaining the water bodies. This needs to be brought back into the system.
 - v. Thus, an integrated approach taking into account the long-term sustainability, starting from the planning stage where looking at every waterbody along with its catchment, is required.
19. The natural source of air, water and soil cannot be utilized, if the utilization results in irreversible damage to environment. There has been accelerated degradation of the environment primarily on account of lack of effective enforcement of environmental laws and non-compliance with statutory norms. It has been repeatedly held by the Supreme Court that the right to live is a fundamental right under Article 21 of the Constitution and it includes the right to enjoyment of pollution free water and air for full enjoyment of life.

The definition of sustainable development which gave more than three decades back still holds goods. The phrase covers the development that meets the need of the present without compromising the availability of future generation to meet their own needs. Sustainable development means the type or extent of development that can take place and which can be sustained by nature / ecology with or without mitigation. In these matters the required standards now is that the risk of harm to the environment or to human health is to be decided in public interest according to a reasonable person test. Life, public health and ecology has priority over unemployment and loss of revenue.

20. It is argued by the learned counsel that while passing the order impugned, no opportunity of hearing was given to the appellants and there is no compliance of principles of natural justice. It cannot be doubted that the principles of natural justice cannot be put into a strait-jacket formula and that its application will depend upon the fact situation obtaining therein. It cannot be applied in a vacuum without reference to the relevant facts and circumstances of the case. This is what has been held by the Supreme Court in *K.L. Tripathi Vs. State Bank of India & Ors.*, AIR 1984 SC 273; *N.K. Prasada Vs. Government of India & Ors.*, (2004) 6 SCC 299; *State of Punjab Vs. Jagir Singh*, (2004) 8 SCC 129; *Karnataka SRTC & Anr. Vs. S.G. Kotturappa & Anr.*, (2005) 3 SCC 409; and in *Viveka Nand Sethi Vs. Chairman, J&K Bank Ltd.*, (2005) 5 SCC 337.
21. In *Chairman, Board of Mining Examination and Chief Inspector of Mines & Anr. Vs. Ramjee*, AIR 1977 SC 965 the Court has observed that natural justice is not an unruly horse, no lurking landmine,

nor a judicial cure-all. If fairness is shown by the decision-maker to the man proceeded against, the form, features and the fundamentals of such essential processual propriety being conditioned by the facts and circumstances of each situation, no breach of natural justice can be complained of. Unnatural expansion of natural justice, without reference of the administrative realities and other factors of a given case, can be exasperating. The Courts cannot look at law in the abstract or natural justice as a mere artifact. Nor can they fit into a rigid mould the concept of reasonable opportunity. If the totality of circumstances satisfies the Court that the party visited with adverse order has not suffered from denial of reasonable opportunity, the Court will decline to be punctilious or fanatical as if the rules of natural justice were sacred scriptures.

22. In *Union of India Vs. Tulsiram Patel*, AIR 1985 SC 1416 the Hon'ble Supreme Court held:-

“Though the two rules of natural justice, namely, nemo judex in causa sua and audi alteram partem, have now a definite meaning and connotation in law and their content and implications are well understood and firmly established, they are nonetheless not statutory rules. Each of these rules yields to and changes with the exigencies of different situations. They do not apply in the same manner to situations which are not alike. These rules are not cast in a rigid mould nor can they be put in a legal straitjacket. They are not immutable but flexible.”

23. It is equally well settled that the principles of natural justice must not be stretched too far and in this connection reference may be made to the decisions of the Supreme Court in *Sohan Lal Gupta & Ors. Vs. Asha Devi Gupta & Ors.*, (2003) 7 SCC 492; *Mardia*

Chemicals Ltd. Vs. Union of India, AIR 2004 SC 2371 and Canara Bank Vs. Debasis Das, AIR 2003 SC 2041.

24. In *Hira Nath Mishra & Ors. Vs. The Principal, Rajendra Medical College, Ranchi & Anr. AIR 1973 SC 1260*, the Hon'ble Supreme Court held that principles of natural justice are not inflexible and may differ in different circumstances. Rules of natural justice cannot remain the same applying to all conditions.

25. The Constitution Bench of the Supreme Court in *Managing Director ECIL, Hyderabad Vs. B. Karunakar, AIR 1994 SC 1074* made reference to its earlier decisions and observed:-

“In A.K. Kraipak & Ors. Vs. Union of India & Ors., AIR 1970 SC 150, it was held that the rules of natural justice operate in areas not covered by any law. They do not supplant the law of the land but supplement it. They are not embodied rules and their aim is to secure justice or to prevent miscarriage of justice. If that is their purpose, there is no reason why, they should not be made applicable to administrative proceedings also especially when it is not easy to draw the line that demarcates administrative enquiries from quasi-judicial ones. An unjust decision in an administrative inquiry may have a more far reaching effect than a decision in a quasijudicial inquiry. It was further observed that the concept of natural justice has undergone a great deal of change in recent years. What particular rule of natural justice should apply to a given case must depend to a great extent on the facts and circumstances of that case, the framework of the law under which the inquiry is held and the constitution of the tribunal or the body of persons appointed for that purpose. Whenever a complaint is made before a Court that some principle of natural justice has been contravened, the Court has to decide whether the observance of that rule was necessary for a just decision on the facts of that case. The rule that inquiry must be held in good faith and without bias and not arbitrarily or unreasonably is now included among the principles of natural justice.” (Emphasis added)."

26. The Hon'ble Supreme Court in *Bihar School Examination Board Vs. Subhas Chandra Sinha & Ors., AIR 1970 SC 1269* while considering

the cancellation of the entire examination because of use of mass copy considered the scope of the principles of natural justice in such a matter and observed:-

“It was not necessary for the Board to give an opportunity to the candidates if the examinations as a whole were being cancelled. The Board had not charged any one with unfair means so that he could claim to defend himself. The examination was vitiated by adoption of unfair means on a mass scale. In these circumstances it would be wrong to insist that the Board must hold a detailed inquiry into the matter and examine each individual case to satisfy itself which of the candidates had not adopted unfair means. The examination as a whole had to go.....”

27. After referring to the aforesaid decision, the Supreme Court in *Chairman J&K State Board of Education Vs. Feyaz Ahmed Malik, AIR 2000 SC 1039*, emphasised that the Board is entrusted with the duty of proper conduct of examinations.

28. In *Biswa Ranjan Sahoo & Ors., Vs. Sushanta Kumar Dinda & Ors., AIR 1996 SC 2552*, the Hon’ble Supreme Court had the occasion to examine whether principles of natural justice were required to be followed in a matter where because of large scale malpractice in the selection process, the selection was cancelled and in this context it was observed:-

“Nothing would become fruitful by issuance of notice. Fabrication would obviously either be not known or no one would come forward to bear the brunt. Under these circumstances, the Tribunal was right in not issuing notice to the persons who are said to have been selected and given selection and appointment.”

29. In *Union of India & Ors. Vs. O. Chakradhar, AIR 2002 SC 1119*, the Hon’ble Supreme Court considered the question whether it was necessary to issue individual show cause notices to each selected

person when the entire selection was cancelled because of widespread and all pervasive irregularities affecting the result of selection and it was observed:-

“The illegality and irregularity are so intermixed with the whole process of the selection that it becomes impossible to sort out right from the wrong or vice versa. The result of such a selection cannot be relied or acted upon. It is not a case where a question of misconduct on the part of a candidate is to be gone into but a case where those who conducted the selection have rendered it wholly unacceptable.”

30. In the case of *S.P. Chengalvaraya Naidu (dead) by L.Rs. Vs. Jagannath (dead) by L.Rs. & Ors.*, AIR 1994 SC 853, the Hon'ble Supreme Court refused to interfere on the ground of breach of principles of natural justice by observing that a person, whose case is based on falsehood, has no right to approach the Court. He can be summarily thrown out at any stage of the litigation.
31. It is further to be noted that the Court is to proceed as to whether non-observance of any of the principles enshrined in statutory rules or principles of natural justice have resulted in deflecting the course of justice. Even, if in a given case, like the fact of the present case there may be some deviation but it has not resulted in grave injustice or has not prejudiced the cause of the petitioner because the decision taken by the respondent was based on the scientific report. This Court does not function as a Court of appeal on the finding of scientific report submitted by the experts. On examining the facts and circumstances of the present case, it cannot be held that the process adopted or decision made by the respondents is in anyway arbitrary or irrational or in any way in violation of the principles of natural justice.

32. Article 21 of the Constitution of India which provides that no person shall be deprived of his right to life or personal liberty, except according to the procedure established by law, is interpreted by the Indian courts to include in this right to life, the right to clean and decent environment. Right to decent environment, as envisaged under Article 21 of the Constitution of India also gives, by necessary implication, the right against environmental degradation. It is in the form of right to protect the environment, as by protecting environment alone can we provide a decent and clean environment to the citizenry. Right to clean environment is a guaranteed fundamental right. Various courts, particularly the superior courts in India are vested with wide powers, especially in terms of Articles 32 and 226 of the Constitution of India to deal with issues relating to the fundamental rights of the persons. The courts, in fact, can even impose exemplary damages against the polluter. Proper and healthy environment enables people to enjoy a quality life which is the essence of the right guaranteed under Article 21. The State and the citizens are under a fundamental obligation to protect and improve the environment including forests, lakes, rivers, wild life and to have compassion for living creatures. Right to have living atmosphere congenial to human existence is a right to life. The State has a duty in that behalf and to shed its extravagant unbridled sovereign power and to forge in its policy to maintain ecological balance and hygienic environment. The power to issue directions and other powers should be exercised by the State to effectuate and further the goals of approved scheme, zonal plans, etc. The hazards to health and environment of not only the persons residing in illegal colonisations but of the entire town

as well as the provisions and schemes of the relevant Acts have to be taken into consideration. The most vital necessities, namely air, water and soil having regard to the right to life under Article 21 cannot be permitted to be misused or polluted so as to reduce the quality of life of others. Risk of harm to the environment or to human health is to be decided in public interest, according to a “reasonable person’s” test. Life, public health and ecology have priority over unemployment and loss of revenue. It is often said that development and protection of environment are not enemies but are two sides of the same coin. If without degrading the environment or by minimising the adverse effects thereupon by applying stringent safeguards, it is possible to carry on developmental activities applying the principle of sustainable development, in that eventuality, development has to go on because one cannot lose sight of the need for development of industry, irrigation resources, power projects, etc. including the need to improve employment opportunities and the generation of revenue. A balance has to be struck. Courts have exercised the power of imposing exemplary damages against the pollutants in order to protect the environment and to restore the damage done to the environment as well. In fact, even the disturbance in the environment by undesirable sound of various kinds, amounts to noise pollution. It is a shadowy public enemy whose growing public menace has increased in the modern age of industrialisation and technological advancement. Noise has become one of the major pollutants and has serious effects on human health. Consistent judicial opinion in India has recognised the right to live in freedom from noise pollution as a fundamental right also, protected under

Article 21 of the Constitution. If anybody increases the volume of speech and that too with the assistance of artificial devices so as to compulsorily expose unwilling persons to hear a noise raised to unpleasant or obnoxious levels, then the person speaking is violating the right of others to a peaceful, comfortable and pollution-free life guaranteed under Article 21. Courts have even held that Article 19(1)(a) cannot be pressed into service for defeating the fundamental right guaranteed under Article 21 of the Constitution. Thus, the right of an individual to healthy and clean environment including air, water, soil and noise-free environment is of paramount consideration and it is impermissible to cause environmental pollution and particularly in violation of the prescribed standards. Since the different facets of environment are relatable to life and human rights and concern a person's liberty, it is necessary that resources are utilised in a planned manner. Wherever industrialisation has an impact on utilisation of essential resources like air, water and soil and results in irreversible damage to environment, then it may be impermissible to utilise these resources in that fashion. In the recent times, there has been accelerated degradation of the environment, primarily on account of lack of effective enforcement of laws and non-compliance with the statutory norms. Concentrated industrialisation in some pockets has been the other reason for enhanced damage to the environment. It emerges from the desire of the people to operate from the areas where the industry presently exists.

33. The right to development itself cannot be treated as a mere right to economic betterment or cannot be limited as a misnomer to simple construction activities. It encompasses much more than economic

well-being and includes within its definition the guarantee of fundamental human rights. It includes the whole spectrum of civil, cultural, economic, political and social process, for the improvement of people's wellbeing and realisation of their full potential. It is an integral part of human rights. Of course, development is the essence of any pragmatic and progressive society. But essentially, development besides being inter-generational, must be balanced to its ecology and environment. Sustainable development means that the richness of the earth's bio-diversity would be conserved for future generations by greatly slowing or if possible halting extinctions, habitat and ecosystem destruction, and also by not risking significant alterations of the global environment that might-by an increase in sea level or changing rainfall and vegetation patterns or increasing ultraviolet radiation-alter the opportunities available for future generations. Sustainable development has been defined in many ways but the most frequently quoted definition is from the Brundtland Report which states as follows:

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- The concept of needs, in particular the essential needs of the world's poor, to which overriding priority should be given; and
- The idea of limitations imposed by the state of technology and social organisation on the environment's ability to meet present and future needs.

34. The earlier school of thought was that development and ecology are opposed to each other but with the passage of time and development of law, this concept has undergone tremendous change and is no longer acceptable. Now operates the principle of sustainable development. It takes within its ambit the application of 'principle of proportionality' and the 'precautionary principle'. In other words, one must, while promoting development, not only ensure that no substantial damage is caused to the environment but also take such preventive measures which would ensure that no irretrievable damage to the environment, even in future, is caused. All these principles have to be examined and applied on the touch stone of "reasonable person's test", as afore-stated. Where the principle of proportionality introduces prudent mind's reasonableness in relation to development vis-a-vis environment, there the precautionary principle can be explained to say that it contemplates that an activity which poses danger and threat to the environment is to be prevented since prevention is better than cure.
35. While applying the concept of sustainable development, one has to keep in mind the "principle of proportionality" based on the concept of balance. It is an exercise in which courts or tribunals have to balance the priorities of development on the one hand and environmental protection on the other. So sustainable development should also mean the type or extent of development that can take place and which can be sustained by nature/ecology with or without mitigation. In these matters, the required standard now is that the risk of harm to the environment or to human health is to be decided in public interest, according to a 'reasonable person's

test'. [Refer: *Research Foundation for Science and Technology and Natural Resource Policy v. Union of India* MANU/SC/7894/2007 : (2007) 9 SCR 906; *Narmada Bachao Andolan v. Union of India* *supra*; *Chairman Barton: The Status of the Precautionary Principle in Australia* (Vol. 22) (1998) (Harv. Envtt. Law Review, p. 509 at p. 549-A) as in *A.P. Pollution Control Board v. Prof M.V. Nayudu* *supra*; and *M.C. Mehta v. Union of India*, *supra*.] At this stage, we may usefully refer to a very recent judgment of the Supreme Court in the case of *G. Sundarrjan v. Union of India & Ors.* MANU/SC/0466/2013: (2013) 6 SCC 620 where the Court, while referring to the principles of balance inbuilt in the concept of sustainable development, elaborated the principles as follows:

228. I have referred to the aforesaid pronouncements only to highlight that this Court has emphasized on striking a balance between the ecology and environment on one hand and the projects of public utility on the other. The trend of authorities is that a delicate balance has to be struck between the ecological impact and development. The other principle that has been ingrained is that if a project is beneficial for the larger public, inconvenience to smaller number of people is to be accepted. It has to be respectfully accepted as a proposition of law that individual interest or, for that matter, smaller public interest must yield to the larger public interest. Inconvenience of some should be bypassed for a larger interest or cause of the society. But, a pregnant one, the present case really does not fall within the four corners of that principle. It is not a case of the land oustees. It is not a case of "some inconvenience". It is not comparable to the loss caused to property. I have already emphasized upon the concept of living with the borrowed time of the future generation which essentially means not to ignore the inter-generational interests. Needless to emphasize, the dire need of the present society has to be treated with urgency, but, the said urgency cannot be conferred with absolute supremacy over life. Ouster from land or deprivation of some benefit of different nature relatively would come within the compartment of smaller public interest or certain inconveniences. But when it touches the very atom of life, which is the dearest and noblest possession of every person, it becomes the obligation of the constitutional courts to see how the delicate balance has been struck and can remain in a continuum in a sustained position. To elaborate, unless adequate care, caution and monitoring at every stage is done and there is constant vigil, life of "some" can be in danger.

That will be totally shattering of the constitutional guarantee enshrined under Article 21 of the Constitution.

36. Sustainable Development primarily finds its origin from the Rio Declaration, 1992 on Environment and Development. Certain principles were stated for achieving sustainable development. The element of integration of environmental and developmental aspects was spelt out in the following principles of that Declaration:

Principle 3:

The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.

Principle 4:

In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.

37. In fact, in *Karnataka Industrial Areas Development Board v. C. Kenchappa & Ors.* MANU/SC/8159/2006 : (2006) 6 SCC 383-84, the Apex Court held as follows:

63. The World Conservation Union' and 'the Worldwide Fund for Nature' prepared jointly by UNEP described that 'sustainable development, therefore, depends upon accepting a duty to seek harmony with other people and with nature' according to Caring for the Earth, A Strategy for Sustainable Living. The guiding rules are:

(i) People must share with each other and care for the earth;

(ii) Humanity must take no more from nature than man can replenish; and

(iii) People must adopt lifestyles and development paths that respect and work within nature's limits.

38. The development should be such as can be sustained by ecology. Sustainable development would be the development which can be

maintained indefinitely in proportion to environment and ecology. Thus, there should not be development at the cost of causing irretrievable or irreversible damage to the ecology or the environment. They must find a common path and objectivity in achieving the goal of sustainable development.

39. Precautionary principle is one of the most important concepts of sustainable development. This principle essentially has the element of prevention as well as prohibition. In order to protect the environment, it may become necessary to take some preventive measures as well as to prohibit certain activities. These decisions should be based on best possible scientific information and analysis of risks. Precautionary measures may still have to be taken where there is uncertainty but potential risk exists. Ecological impact should be given paramount consideration, particularly when the end result would be irreversible. The decision making authority should assess the records and conclude whether it was a case of directing precautionary and preventive measures to be taken or that the information on which it has to reach a determination is inadequate. Informed decision is the essence of a preventive or a prohibitory decision. The principle of direction thereunder involves the anticipation of environmental harm and taking measures to avoid it or to choose the least environmentally harmful activity which is based on scientific certainty. Environmental protection should not only aim at protecting health, property and economic interest but also the environment for its own sake. It is said that inadequacies of science is the basis that has led to change from an 'assimilating impact principle' to 'precautionary principle'. Availability of scientific data is one of the

most essential features of environmental adjudication. The precautionary principle was stated in Article 7 of the Bergen Ministerial Declaration on Sustainable Development in the ECE Region, May, 1990, as incorporated in an article of Professor Ben Boer, which reads as follows:

Environmental measures must anticipate, prevent and attack the causes of environment degradation. Where there are threats of serious or irreversible damage, lack of scientific certainty should not be used as reason for postponing measures to prevent environmental degradation.

40. The Supreme Court of India, in the case of *Vellore Citizens' Welfare Forum v. Union of India* (MANU/SC/0686/1996 : AIR 1996 SC 2715) recognised the precautionary principle and explained it as follows:

"11. (i) Environmental measures-by the State Government and the statutory authorities-must anticipate, prevent and attack the causes of environmental degradation.

(ii) Where there are threats of serious and irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

(iii) The 'onus of proof is on the actor or the developer/industrialist to show that his action is environmentally benign.'

41. On the analysis of the above, one could state the essentials of invocation of precautionary principle as under:

- (a) There should be an imminent environmental or ecological threat in regard to carrying out of an activity or development;
- (b) Such threat should be supported by reasonable scientific data; and
- (c) Taking precautionary, preventive or prohibitory steps would serve the larger public and environmental interest.

42. With reference to these ingredients, the decision making authority, upon taking an objective approach, could take recourse to and

pass directives under the precautionary and preventive principles. These are the tools available to the authorities concerned to adopt a balanced and pragmatic approach to ensure environmental protection while permitting sustainable development.

43. It will not only be expected of but shall be an obligation on the decision making authority to identify sources of pollution as well as their impact on public health or environment. It must be understood that every direction under the precautionary principle is not a punitive action in its content and effect. These are two different legal connotations which operate in their own respective fields. Precaution in contradistinction to punitive action is an anticipated action and is futuristic.
44. 'Precaution' is a measure taken in advance to prevent something dangerous, unpleasant or inconvenient from happening. To put it simply, it is a prudent foresight, while a 'punitive' action is one involving or inflicting punishment. It has an element of something that has already occurred.
45. Environmental pollution was controlled rigidly in the ancient times. It was an affair limited to individuals but the society as a whole accepted as its duty to protect environment. It was to sustain and ensure progress of all. Thus, it was acceded as a positive duty with regard to protecting the environment on the one hand and the fear of punishment on the other. Apart from the motivation, efforts were not only to punish the culprits who damage the trees or other environment but also to balance the ecosystem [*T.N. Godavarman Thirumulpad v. Union of India (supra)*].

46. Punitive action, which would include punishment in one form or the other, would normally be for the damage or the wrong done to environment and for its restoration thereto. Therefore, there must be a nexus between befalling of an event, or its likelihood thereof, and its pollution source and the injury apprehended or caused. All these ingredients must be supported by reasonable scientific data, especially in the case of precautionary principle.
47. This brings us to discuss the onus of proof in matters relating to environment. We must, at the very threshold of discussion on this topic refer to the judgment of the Supreme Court in *A.P. Pollution Control Board v. Prof. M.V. Nayudu supra*, where the Hon'ble Court, while discussing the onus in environmental matters, held as under:

“31. The Vellore judgment has referred to these principles briefly but, in our view, it is necessary to explain their meaning in more detail, so that Courts and tribunals or environmental authorities can properly apply the said principles in the matters which come before them.

The precautionary Principle replaces the Assimilative Capacity principle:

32. A basic shift in the approach to environmental protection occurred initially between 1972 and 1982. Earlier the concept was based on the ‘assimilative capacity rule as revealed from Principle 6 of the Stockholm Declaration of the U.N. Conference on Human Environment, 1972. The said principle assumed that science could provide policy-makers with the information and means necessary to avoid encroaching upon the capacity of the environment to assimilate impacts and it presumed that relevant technical expertise would be available when environmental harm was predicted and there would be sufficient time to act in order to avoid such harm. But in the 11th principle of the U.N. General Assembly Resolution on World Charter for Nature, 1982, the emphasis shifted to the ‘precautionary Principle’, and this was reiterated in the Rio Conference of 1992 in its Principle 15 which reads as follows:

Principle 15: In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage; lack of full scientific certainty shall not be used as a reason for proposing cost-effective measures to prevent environmental degradation.

33. In regard to the cause for the emergence of this principle, Chairman Barton, in the article earlier referred to in Vol. 22, *Harv. Envtl. L. Rev.* (1998) P. 509 at (p. 547) says:

There is nothing to prevent decision makers from assessing the record and concluding there is inadequate information on which to reach a determination. If it is not possible to make a decision with "some" confidence, then it makes sense to err on the side of caution and prevent activities that may cause serious or irreversible harm. An informed decision can be made at a later stage when additional data is available or resources permit further research. To ensure that greater caution is taken in environmental management, implementation of the principle through Judicial and legislative means is necessary.

In other words, inadequacies of science is the real basis that has led to the precautionary principle of 1982. It is based on the theory that it is better to err on the side of caution and prevent environmental harm which may indeed become irreversible.

34. The principle of precaution involves the anticipation of environmental harm and taking measures to avoid it or to choose the least environmentally harmful activity. It is based on scientific uncertainty. Environmental protection should not only aim at protecting health, property and economic interest but also protect the environment for its own sake. Precautionary duties must not only be triggered by the suspicion of concrete danger but also by (Justified) concern or risk potential. The precautionary principle was recommended by the UNEP Governing Council (1989). The Bomako Convention also lowered the threshold at which scientific evidence might require action by not referring to "serious" or "irreversible" as adjectives qualifying harm. However, summing up the legal status of the precautionary principle, one commentator characterised the principle as still "evolving" for though it is accepted as part of the international customary law, "the consequences of its application in any potential situation will be influenced by the circumstances of each case". (See First Report of Dr. Sreenivasa Rao Pemmaraju, Special-Rapporteur, International Law Commission dated 3.4.1998 paras 61 to 72).

The Special Burden of Proof in Environmental cases:

35. We shall next elaborate the new concept of burden of proof referred to in the Vellore case AIR 1996 SC 2715. In that case, Kuldip Singh, J. stated as follows:

The 'onus of proof is on the actor or the developer/industrialist to show that his action is environmentally benign.

36. It is to be noticed that while the inadequacies of science have led to the 'precautionary principle', the said 'precautionary principle' in its turn, has led to the special principle of burden of proof in environmental cases where burden as to the absence of injurious effect of the actions proposed, is placed on those who want to change the status quo (Wynne, *Uncertainty and Environmental Learning*, 2 *Global Envtl. Change* 111 (1992) at p. 123). This is often termed as a reversal of the burden of proof, because otherwise in environmental cases, those opposing the changes would be compelled to shoulder the evidentiary burden, a procedure which is not fair. Therefore, it is necessary that the party attempting to preserve the status quo by maintaining a less-polluted state should not carry the burden of proof and the party who wants to alter it, must bear this burden. (See James M. Olson, *Shifting the Burden of Proof*, 20 *Envtl. Law* p. 891 at 898 (1990). (Quoted in Vol. 22 (1998) *Harv. Env. Law Review* p. 509 at 519, 550).

37. The precautionary principle suggests that where there is an identifiable risk of serious or irreversible harm, including, for example, extinction of species, widespread toxic pollution in major threats to essential ecological processes, it may be appropriate to place the burden of proof on the person or entity proposing the activity that is potentially harmful to the environment. (See Report of Dr. Sreenivasa Rao Pemmaraju, *Special Rapporteur, International Law Commission*, dated 3.4.1998, para 61).

38. It is also explained that if the environmental risks being run by regulatory inaction are in some way "ascertain but non-negligible", then regulatory action is justified. This will lead to the question as to what is the non-negligible risk'. In such a situation, the burden of proof is to be placed on those attempting to alter the status quo. They are to discharge this burden by showing the absence of a 'reasonable ecological or medical concern. That is the required standard of proof. The result would be that if insufficient evidence is presented by them to alleviate concern about the level of uncertainty, then the presumption should operate in favour of environmental protection. Such a presumption has been applied in *Ashburton Acclimatisation Society v. Federated Fanners of New Zealand* [1988] 1 NZLR 78. The required standard now is that the risk of harm to the environment or to human health is to be decided in public interest, according to a 'reasonable persons' test. (See *Precautionary Principle in Australia* by Chairman Barton) (Vol. 22) (1988) *Harv. Env. L. Rev.* 509 at 549).

48. The normal rule of evidence is that one who pleads must prove before the Court or the Tribunal i.e. the onus of proving, while claiming relief, is on the person who approaches the

Court/Tribunal. However, this rule may not be applicable to this Tribunal *stricto sensu*.

49. This Tribunal has been established both with original and appellate jurisdiction relating to environmental laws. The NGT Act, 2010 was enacted for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal rights relating to environment. In relation to NGT, the legislature, in its wisdom, has specifically excluded the application of the procedure under the Code of Civil Procedure, 1908 and the Indian Evidence Act, 1872 (for short 'the Evidence Act') in terms of Section 19(1) and 19(3) of the NGT Act. On the contrary, Section 19(2) of the NGT Act empowers the Tribunal to have the power to regulate its own procedure. In terms of its Section 19(5), NGT is a judicial Tribunal.
50. Section 20 of the NGT Act further recognises the application of the principles of sustainable development, precautionary principle and polluter pays principle by the Tribunal while adjudicating upon disputes on environment.
51. Once the applicability of specific rules of evidence, as prescribed under the Evidence Act, is excluded, the Tribunal has to state its own procedure, including recording of evidence, but the same essentially has to be in consonance with the principles of natural justice. It will have to be examined on a case to case basis as to when the onus will shift from the applicant to non-applicant. In environmental cases, normally the damage to environment or public health is evident by itself, *res ipsa loquitur*. The cases of environmental degradation, damage and health hazards are

obvious by themselves as a result of some industrial activity or development. In that event and keeping in view the very object of the NGT Act, it will be unacceptable to require the applicant to discharge his primary onus by strict number of events and their details.

52. In *Ravi Kapur v. State of Rajasthan* MANU/SC/0659/2012 : (2012) 9 SCC 284, it was held that the doctrine of res ipsa loquitur serves two purposes. Firstly, that an accident may by its nature be more consistent with being caused by negligence for which the opposite party is responsible than by any other cause and that in such a case, the mere fact of the accident is prima facie evidence of such negligence. Secondly, it is to avoid hardship in cases where the claimant is able to prove the accident but cannot prove how the accident occurred. Recourse to this principle is also permissible where there is no direct evidence brought on record. These stated principles apply more often than not to motor accident cases and can squarely be applied to cases of environmental pollution resulting from industrial activities or development.
53. Under the provisions of the NGT Act, any aggrieved person can approach the Tribunal for redressal of his grievances in relation to environment within the ambit and scope of Sections 14, 16 and 18 of the NGT Act. The legislative object appears to be to catalyse the access to environmental justice, which need not be circumscribed by strict rule of locus standi in legal prescriptions.
54. Once an applicant approaches the Tribunal with a complaint of environmental injury or environmental degradation or health hazards resulting from negligence, or incidental occurrence of

emission or discharge of gases or effluents in violation of the prescribed standards, then such an applicant discharges the primary onus by instituting a petition in the prescribed form, supported by an affidavit, which then shifts upon the industrial unit, developer or the person carrying out the activity complained of, to establish by cogent and reliable evidence that it has not caused pollution or health hazards by carrying out its activities; all the expected norms of discharge have been strictly adhered to by that unit; and any harm, if caused, was neither the result of any negligence nor violation of prescribed standards. Upon discharge of such onus, which is certainly much heavier, by the developer/industrial unit, it will then again be for the applicant to establish to the contrary. In other words, heavy onus lies upon the industrial unit or the developer to show by cogent and reliable evidence that it is non-polluting and non-hazardous or is not likely to have caused the accident complained of.

55. The view we are taking finds strength from the observations stated by the Supreme Court in its judgment in the case of *Narmada Bachao Andolan v. Union of India (supra)* where the Court, while referring to the case of *Vellore Citizens' Welfare Forum supra* and the report of the International Law Commission, held as under:

119. It is this decision which was the subject-matter of challenge in this Court. After referring to the different concepts in relation to environmental cases like the 'precautionary principle' and the 'polluter-pays principle', this Court relied upon the earlier decision of this Court in Vellore Citizens' Welfare Forum v. Union of India (MANU/SC/0686/1996 : AIR 1996 SC 2715) and observed that there was a new concept which places the burden of proof on the developer or industrialist who is proposing to alter the status quo and has become part of our environmental law. It was noticed that inadequacies of science had led to the precautionary principle and the said 'precautionary principle' in its turn had led to the special principle of burden of proof in environmental cases where burden as to the absence of injurious effect of the

actions proposed is placed on those who want to change the status quo. At page 735, this Court, while relying upon a report of the International Law Commission, observed as follows:

The precautionary principle suggests that where there is an identifiable risk of serious or irreversible harm, including, for example, extinction of species, widespread toxic pollution is major threats to essential ecological processes, it may be appropriate to place the burden of proof on the person or entity proposing the activity that is potentially harmful to the environment.

120. It appears to us that the 'precautionary principle' and the corresponding burden of proof on the person who wants to change the status quo will ordinarily apply in a case of polluting or other project or industry where the extent of damage likely to be inflicted is not known. When there is a state of uncertainty due to lack of data or material about the extent of damage or pollution likely to be caused then, in order to maintain the ecology balance, the burden of proof that the said balance will be maintained must necessarily be on the industry or the unit which is likely to cause pollution. On the other hand where the effect on ecology or environment of setting up of an industry is known, what has to be seen is that if the environment is likely to suffer, then what imitative steps can be taken to offset the same. Merely because there will be a change is no reason to presume that there will be ecological disaster. It is when the effect of the project is known then the principle of sustainable development would come into play which will ensure that imitative steps are and can be taken to preserve the ecological balance. Sustainable development means what type or extent of development can take place which can be sustained by nature/ecology with or without mitigation.

56. Therefore, the stated principle could be a valid dictum for environmental adjudicatory process.
57. Learned counsel appearing for respondent no. 1 had submitted that the decision was taken for public purposes and the administrative decisions which has been taken by the State Government should not be interfered with unless and until it is proved by cogent evidence and report of any Expert Committee that there is any violation of law and/or damage to the environment and relied on following decision:

“19. In 2011 (1) SCC 640 (*Bajaj Hindustan limited vs Sir ShadiLal Enterprises Limited and another*), the Hon’ble Apex Court has held as follows:

39. We should not be understood to have meant that the judiciary should never interfere with administrative decisions. However, such interference should be only within narrow limits e.g., when there is clear violation of the statute or a constitutional provision, or there is arbitrariness in the *Wednesbury* sense. It is the administrators and legislators who are entitled to frame politics and take such administrative decisions as they think necessary in the public interest. The Court should not ordinarily interfere with policy decisions, unless clearly illegal.

24. When there is no violation of the provisions of the statute or of a constitutional provision or in the absence of arbitrariness, the Court should not interfere with the administrative decisions. It is the administrators and legislature, who are entitled to frame policy and entitled to take decisions as they think necessary in the public interest.

25. It is settled position that the Courts should not ordinarily interfere with the policy decisions unless they are clearly illegal or unconstitutional. The Court can invalidate an executive policy only when it is clearly violative of some provisions of the statute or Constitution or is shockingly arbitrary but not otherwise.”

58. In the case of *Km. Shrilekha Vidyarthi (supra)* the Apex Court has held that Article 14 of the Constitution of India applies also to matters of governmental policy and if the policy or any action of the Government, even in contractual matters, fails to satisfy the test of reasonableness it would be unconstitutional.

59. In the case of *Ugar Sugar Works Ltd. v. Delhi Administrative and Ors.* MANU/SC/0189/2001 : (2001) 3 SCC 635 the Apex Court has held as follows:

18. ...It is well settled that the Courts, in exercise of their power of judicial review, do not ordinarily interfere with the

policy decisions of the executive unless the policy can be faulted on grounds of mala fide, unreasonableness, arbitrariness or unfairness etc. Indeed, arbitrariness, irrationality, perversity and mala fide will render the policy unconstitutional. However, if the policy cannot be faulted on any of these grounds, the mere fact that it would hurt business interests of a party, does not justify invalidating the policy....

26. In the aforesaid paragraph the Apex Court has further held that the Courts are not expected to express their opinion as to whether at a particular point of time or in a particular situation any such policy should have been adopted or not. It is best left to the discretion of the State.

60. In the case of *Ms. Aruna Roy and Ors. v. Union of India and Ors.*

(2002) 7 SCC 368, the Apex Court has held as follows:

96. ...It is ultimately for Parliament to take a decision on the National Education Policy one way or the other. It is not the province of the Court to decide on the good or bad points of an education policy. The Court's limited jurisdiction to intervene in implementation of a policy is only if it is found to be against any statute or the Constitution...

It has further held in paragraph 97 of said Report as follows:

It cannot, however, compel that a particular practice or tradition followed in framing and implementing the policy, must be adhered to. The Court has to keep in mind the above limitations on its jurisdiction and power. It is true that if a policy framed in the field of education or other fields runs counter to the constitutional provisions or the philosophy behind those provisions, this Court must, as part of its constitution duty, interdict such policy.

28. In the case of Union of India and Anr. v. International Trading Co. and Anr. MANU/SC/0392/2003 : (2003) 5 SCC 437 the Apex Court has held as follows:

15. While the discretion to change the policy in exercise of the executive power, when not trammled by any statute or rule is wide enough, what is imperative and implicit in terms of Article 14 is that a change in policy must be made fairly and should not give impression that it was so done arbitrarily on by any ulterior criteria. The wide sweep of Article 14 and the requirement of every State action qualifying for its validity on this touchstone irrespective of the field of activity of the State is an accepted tenet. The basic requirement of Article 14 is fairness in action by the state, and non-arbitrariness in essence and substance is the heart beat of fair play. Actions are amenable, in the panorama of judicial review only to the extent that the State must act validly for a discernible

reasons, not whimsically for any ulterior purpose. The meaning and true import and concept of arbitrariness is more easily visualized than precisely defined. A question whether the impugned action is arbitrary or not is to be ultimately answered on the facts and circumstances of a given case. A basic and obvious test to apply in such cases is to see whether there is any discernible principle emerging from the impugned action and if so, does it really satisfy the test of reasonableness.

61. In the case of *Delhi Development Authority and Anr. v. Joint Action Committee, Allottee of SFS Flats and Ors.* MANU/SC/0202/2008 : (2008) 2 SCC 672, the Apex Court has held as follows:

64. An executive order termed as a policy decision is not beyond the pale of judicial review. Whereas the superior courts may not interfere with the nittygritties of the policy, or substitute one by the other but it will not be correct to contend that the court shall like its judicial hands off, when a plea is raised that the impugned decision is a policy decision. Interference therewith on the part of the superior court would not be without jurisdiction as it is subject to judicial review.

65. Broadly, a policy decision is subject to judicial review on the following grounds:

(a) if it is unconstitutional;

(b) if it is dehors the provisions of the Act and the Regulations;

(c) if the delegate has acted beyond its power of delegation;

(d) if the executive policy is contrary to the statutory or a larger policy.

62. In the case of *Villianur Iyarkkai Padukappu Maiyam v. Union of India and Ors.* MANU/SC/0811/2009 : (2009) 7 SCC 561, the Apex Court has held as follows:

168. In a democracy, it is the prerogative of each elected Government to follow its own policy. Often a change in Government may result in the shift in focus or change in economic policies. Any such change may result in adversely affecting some vested interests. Unless any illegality is committed in the execution of the policy or the same is contrary to law or malafide, a decision bringing about change cannot per se be interfered with by the court.

169. *It is neither within the domain of the courts nor the scope of judicial review to embark upon an enquiry as to whether a particular public policy is wise or whether better public policy can be evolved. Nor are the courts inclined to strike down a policy at the behest of a Petitioner merely because it has been urged that a different policy would have been fairer or wiser or more scientific or more logical. Wisdom and advisability of economic policy are ordinarily not amenable to judicial review. In matters relating to economic issues the Government has, while taking a decision, right to "trial and error" as long as both trial and error are bona fide and within the limits of the authority. For testing the correctness of a policy, the appropriate forum is Parliament and not the courts. From the aforesaid decisions of the Apex Court, it is clear that a Court can interfere in a policy decision of the Parliament/State Legislatures/Governments if any of the following conditions exist: (I) If the policy fails to satisfy the test of reasonableness, it would be unconstitutional. (II) The change in policy must be made fairly and should not give impression that it was so done arbitrarily on any ulterior intention. (III) The policy can be faulted on grounds of mala fide, unreasonableness, arbitrariness or unfairness etc. (IV) If the policy is found to be against any statute or the Constitution or runs counter to the philosophy behind these provisions. (V) It is dehors the provisions of the Act or Legislations. (VI) If the delegatee has acted beyond its power of delegation."*

63. The rule can also be challenged if it is beyond its limits permissible under the principal Act and it must be in good faith and in the public interest. In the case of *State of U.P. and others v. Renusagar Power Co. and others*, MANU/SC/0505/1988 : (1988) 4 SCC 59, the Supreme Court has observed as under:

"79. If the exercise of power is in the nature of subordinate legislation the exercise must conform to the provisions of the statute. All the conditions of the statute must be fulfilled...."

48. *A subordinate legislation can be declared ultra vires if it is found that the rule challenged is not within the scope of authority conferred on the rule maker by the parent Act. The Court cannot examine the wisdom or officiousness of the rules. It cannot consider the merit or demerit of a policy of the State. It is well-settled law that delegatee cannot frame a rule which is not authorized by the parent statute. If the rule has not been framed within the powers delegated by the parent Act and if it is beyond the said power, only in those cases the Court can declare it ultra vires.*

49. *De. Smith in his book in 'Principles of Judicial Review',*

1999 Edition, at page 95 has observed as under:

“In essence, the doctrine of ultra vires permits the Courts to strike down decisions made by bodies exercising public functions which they have no power to make. Acting ultra vires and acting without jurisdiction have essentially the same meaning, although in general the term “vires” has been employed when considering administrative decisions and subordinate legislative orders, and “jurisdiction” when considering judicial decisions, or those having a judicial flavour.”

Sir William Wade and Christopher Forsyth in their book on ‘Administrative Law’, Eighth Edition, at page 35, has defined the ultra vires in the following terms:

“The simple proposition that a public authority may not act outside its powers (ultra vires) might fitly be called the central principle of administrative law. The juristic basis of judicial review is the doctrine of ultra vires. To a large extent the Courts have developed the subject by extending the refining this principle, which has many ramifications and which in some of its aspects attains a high degree of artificiality.”

In the case of P. Krishnamurthy (supra) the Supreme Court has culled out the following principles:

“15. There is a presumption in favour of constitutionality or validity of a subordinate legislation and the burden is upon him who attacks it to show that it is invalid. It is also well recognized that a subordinate legislation can be challenged under any of the following grounds:

- (a) Lack of legislative competence to make the subordinate legislation.*
- (b) Violation of fundamental rights guaranteed under the Constitution of India.*
- (c) Violation of any provision of the Constitution of India.*
- (d) Failure to conform to the statute under which it is made or exceeding the limits of authority conferred by the enabling Act.*
- (e) Repugnancy to the laws of the land, that is, any enactment.*
- (f) Manifest arbitrariness/unreasonableness (to an extent where Court might well say that the legislature never intended to give authority to make such Rules).”*

64. It is argued on behalf of the respondent that in exercise of power of judicial review, the Courts do not ordinarily interfere with the

policy decisions of the executive unless the policy can be faulted on the ground of mala fide, unreasonableness, arbitrariness or unfairness etc. Indeed arbitrariness, irrationality, perversity and mala fide, render the policy unconstitutional. Unless a policy decision is demonstrably capricious or arbitrary and not informed by any reason or discriminatory or infringing any Statute or the Constitution, it cannot be a subject of judicial interference. However, if the policy cannot be touched on any of these grounds, the mere fact that it may affect business interests of a party does not justify invalidating the policy. (Vide M/s. Ugar Sugar Works Ltd. Vs. Delhi Administration & Ors., AIR 2001 SC 1447; State of Himachal Pradesh & Anr. Vs. Padam Dev & Ors., (2002) 4 SCC 510; Balco Employees' Union (Regd) Vs. Union of India & Ors., AIR 2002 SC 350; State of Rajasthan & Ors. Vs. Lata Arun AIR 2002 SC 2642; and Federation of Railway Officers Association Vs. Union of India, (2003) 4 SCC 289).

65. In *Union of India & Anr. Vs. International Trading Company & Anr.* (2003) 5 SCC 437, the Supreme Court pointed out that the Policy of the Government, even in contractual matters, must satisfy the test of reasonableness and every State action must be informed by reason. Article 14 of the Constitution applies also to matters of governmental policy and if the policy or any action of the Government, even in contractual matters, fails to satisfy the test of reasonableness, it would be unconstitutional. The Court further held as under:-

“15. While the discretion to change the policy in exercise of the executive power, when not trammelled by any statute or rule is wide enough, what is imperative and implicit in terms of Article 14 is that a change in policy must be made fairly and should not give the impression that it was so done

arbitrarily or by any ulterior criteria. The wide sweep of Article 14 and the requirement of every State action qualifying for its validity on this touchstone irrespective of the field of activity of the State is an accepted tenet. The basic requirement of Article 14 is fairness in action by the State, and non-arbitrariness in essence and substance is the heartbeat of fair play. Actions are amenable, in the panorama of judicial review only to the extent that the State must act validly for a discernible reason, not whimsically for any ulterior purpose. The meaning and true import and concept of arbitrariness is more easily visualized than precisely defined. A question whether the impugned action is arbitrary or not is to be ultimately answered on the facts and circumstances of a given case. A basic and obvious test to apply in such cases is to see whether there is any discernible principle emerging from the impugned action and if so, does it really satisfy the test of reasonableness.

16. Where a particular mode is prescribed for doing an act and there is no impediment in adopting the procedure, the deviation to act in a different manner which does not disclose any discernible principle which is reasonable itself shall be labeled as arbitrary. Every State action must be informed by reason and it follows that an act uninformed by reason is per se arbitrary.” (Emphasis added).

66. In *Union of India Vs. Dinesh Engineering Corpn. & Anr.* (2001) 8 SCC 491 the Supreme Court observed as follows:-

“.....Where the decision of the authority is in regard to a policy matter, this Court will not ordinarily interfere since these policy matters are taken based on expert knowledge of the persons concerned and courts are normally not equipped to question the correctness of a policy decision. But then this does not mean that the courts have to abdicate their right to scrutinise whether the policy in question is formulated keeping in mind all the relevant facts and the said policy can be held to be beyond the pale of discrimination or unreasonableness, bearing in mind the material on record..... . Any decision, be it a simple administrative decision or a policy decision, if taken without considering the relevant facts, can only be termed as an arbitrary decision. If it is so, then be it a policy decision or otherwise, it will be violative of the mandate of Article 14 of the Constitution.”

67. In *Krishnan Kakkanth Vs. Govt. of Kerala*, AIR 1997 SC 128; the Hon’ble Apex Court held that the judicial review of policy decision is permissible in exceptional circumstances only when the Court is

of the view that the order suffers from arbitrariness and unreasonableness. The Court observed as under:-

“To ascertain unreasonableness and arbitrariness in the context of Article 14 of the Constitution, it is not necessary to enter upon any exercise for finding out the wisdom in the policy decision of the State Government. It is immaterial if a better or more comprehensive policy decision could have been taken. It is equally immaterial if it can be demonstrated that the policy decision is unwise and is likely to defeat the purpose for which such decision has been taken. Unless the policy decision is demonstrably capricious or arbitrary and not informed by any reason whatsoever or it suffers from the vice of discrimination or infringes any statute or provisions of the Constitution, the policy decision cannot be struck down. It should be borne in mind that except for the limited purpose of testing a public policy in the context of illegality and unconstitutionality, Court should avoid embarking on uncharted ocean of public policy.”

68. The Supreme Court in *Kailash Chandra Sharma Vs. State of Rajasthan & Ors.*, AIR 2002 SC 2877 upheld the Full Bench judgment of the Rajasthan High Court in *Deepak Kumar Suthar Vs. State & Ors.*, 2000 Lab IC 1 wherein the Court had struck down the policy decision of the Government granting bonus marks on the ground of residence in public employment being ultra vires the provisions of Article 14 and 16 of the Constitution. The Supreme Court held that policy decision giving weightage to the candidates in public employment on the ground of residence was impermissible in view of the Constitutional provisions. The policy decision was, therefore, bad and in such a case judicial review was found to be warranted.
69. The Supreme Court in *Cholan Roadways Ltd. Vs. G. Thirugnanasambandam*, AIR 2005 SC 570, has gone a step further by bringing “errors of facts” within the scope of judicial review. While deciding the said case, reliance was placed upon the judgment in *E. Vs. Secretary of State for the Home Department*,

(2004) 2 Weekly Law Report, 1351, wherein it has been held that a review of the merits of the decision making process is fundamental to the Court's jurisdiction. The power of review may even extend to a decision on a question of fact. The error sought to be corrected must be undeniably a significant factor in the decision making process.

70. In *R.K. Garg Vs. Union of India & Ors.*, AIR 1981 SC 2138, the Supreme Court considered the validity of the provisions of the Special Bearer Bonds (Immunities and Exemptions) Ordinance, 1981 and Special Bearer Bonds (Immunities and Exemptions) Act, 1981, which was provided for exemption and immunity from criminal liability of the persons who invest money in purchasing the Special Bearer Bonds from the income never disclosed earlier.

The Court made the following observations:-

*"It is clear that Article 14 does not forbid reasonable classification of persons, objects and transactions by the legislature for the purpose of attaining specific ends. What is necessary in order to pass the test of permissible classification under Article 14 is that the classification must not be "arbitrary, artificial or evasive" but must be based on some real and substantial distinction bearing a just and reasonable relation to the object sought to be achieved by the legislature.....Another rule of equal importance is that **laws relating to economic activities should be viewed with greater latitude than laws touching civil rights such as freedom of speech, religion etc.** It has been said by no less a person than Holmes, J., that the legislature should be allowed some play in the joints, because it has to deal with complex problems which do not admit of solution through any doctrinaire or straight jacket formula and this is particularly true in case of legislation dealing with economic matters, where, having regard to the nature of the problems required to be dealt with greater play in the joints has to be allowed to the legislature. The Court should feel more inclined to give judicial deference to legislative judgment in the field of economic regulation than in other areas where fundamental human rights are involved. The Court must always remember that "legislation is directed to practical problems, that the economic mechanism is highly sensitive and complex, that many problems are singular and contingent, that laws are not abstract propositions and do not relate to abstract*

units and are not to be measured by abstract symmetry” that exact wisdom and nice adaption of remedy are not always possible and that “judgment is largely a prophecy based on meagre and uninterpreted experience”. Every legislation particularly in economic matters is essentially empiric and it is based on experimentation or what one may call trial and error method and therefore it cannot provide for all possible situations or anticipate all possible abuse. There may be crudities and inequities in complicated experimental economic legislation but on that account alone it cannot be struck down as invalid.....There may even be possibilities of abuse, but that too cannot of itself be a ground for invalidating the legislation, because it is not possible for any legislature to anticipate as if by some divine prescience, distortions and abuses of its legislation which may be made by those subject to its provisions and to provide against such distortions and abuses. Indeed, howsoever great may be the care bestowed on its framing, it is difficult to conceive of a legislation which is not capable of being abused by perverted human ingenuity. The Court must therefore adjudge the constitutionality of such legislation by the generality of its provisions and not by its crudities or inequities or by the possibilities of abuse of any of its provisions. If any crudities, inequities or possibilities of abuse come to light, the legislature can always step in and enact suitable amendatory legislation. That is the essence of pragmatic approach which must guide and inspire the legislature in dealing with complex economic issues. (Emphasis added).

71. In *State of M.P. & Ors. Vs. Nandlal Jaiswal & Ors.*, (1986) 4 SCC 566, the Hon’ble Supreme Court re-examined the scope of Article 14 of the Constitution while having a judicial review of the executive order of the State relating to trade and business and held as under:-

“But, while considering the applicability of Article 14 in such a case, we must bear in mind that, having regard to the nature of the trade or business, the Court would be slow to interfere with the policy laid down by the State Government for grant of licences for manufacture and sale of liquor. The Court would, in view of the inherently pernicious nature of the commodity allow a large measure of latitude to the State Government in determining its policy of regulating, manufacture and trade in liquor. Moreover, the grant of licences for manufacture and sale of liquor would essentially be a matter of economic policy where the court would hesitate to intervene and strike down what the State Government had done, unless it appears to be plainly arbitrary, irrational or mala fide.....in regard to legislation relating to economic matters must apply equally in regard to executive action in the field of economic activities, though the executive decision may not be placed on as high a pedestal as

legislative judgment in so far as judicial deference is concerned. We must not forget that in complex economic matters every decision is necessarily empiric and it is based on experimentation or what one may call 'trial and error method' and, therefore, its validity cannot be tested on any rigid 'a priori' considerations or on the application of any strait jacket formula. The court must while adjudging the constitutional validity of an executive decision relating to economic matters grant a certain measure of freedom or 'play' in the "joints" to the executive.....The Court cannot strike down a policy decision taken by the State Government merely because it feels that another policy decision would have been fairer or wiser or more scientific or logical. The Court can interfere only if the policy decision is patently arbitrary, discriminatory or mala fide."

72. While deciding the said case, the Apex Court relied upon the admonition given by the *Frankfurter, J. in Morey v. Doud, (1957) 354 US 457:-*

"In the utilities, tax and economic regulation cases, there are good reasons for judicial self-restraint if not judicial deference, to legislative judgment. The legislature after all has the affirmative responsibility. The courts have only the power to destroy, not to reconstruct. When these are added to the complexity of economic regulation, the uncertainty, the liability to error, the bewildering conflict of the experts, and the number of times the judges have been overruled by events - self limitation can be seen to be the path to judicial wisdom and institutional prestige and stability."

73. A similar view has been reiterated in *M. P. Oil Extraction & Anr. Vs. State of M.P. & Ors., (1997) 7 SCC 592.*
74. In *Sterling Computers Ltd. Vs. M/s. M & N Publications Ltd., AIR 1996 SC 51*, the Hon'ble Supreme Court held as under:-

"It is not possible for Courts to question and adjudicate every decision taken by an authority, because many of the Government Undertakings which in due course have acquired the monopolist position in matters of sale and purchase of products and with so many ventures in hand, they can come out with a plea that it is not always possible to act like a quasi-judicial authority while awarding contracts. Under some special circumstances a discretion has to be conceded to the authorities who have to enter into contract giving them liberty to assess the overall situation for purpose of taking a decision as to whom the contract be awarded and at what terms. If the

decisions have been taken in bona fide manner although not strictly following the norms laid down by the Courts, such decisions are upheld on the principle laid down by Justice Holmes, that Courts while judging the constitutional validity of executive decisions must grant certain measure of freedom of play in the joints to the executive..... On the basis of those judgments it cannot be urged that this Court has left to the option of the authorities concerned whether to invite tenders or not according to their own discretion and to award contracts ignoring the procedures which are basic in nature, taking into account factors which are not only irrelevant but detrimental to the public interest.”

75. The Government has to rise above the nexus of vested interests and nepotism and eschew window-dressing. The principles of governance has to be tested on the touchstone of justice, equity, fair play and if decision is not based on justice, equity and fair play and has taken into consideration other matters, though on the fact of it, the decision may look legitimate but as a matter of fact, the reasons are not based on values but to achieve popular accolade; that decision cannot be allowed to operate. (Vide *Onkar Lal Bajaj & Ors. Vs. Union of India & Ors.*, AIR 2003 SC 2562).
76. In *State of Karnataka & Anr. Vs. All India Manufacturers Organisation & Ors.*, AIR 2006 SC 1846, the Hon'ble Supreme Court examined the scope of change of policy with the change of the Government. After considering the scope of judicial review in contractual matters, the Court examined as under what circumstances, the Government should revoke the decision taken by the earlier Government. The Court held that an instrumentality of the State cannot have a case to plead from that of the State and the policy in respect of a particular project adopted by the State Government should not be changed with the change of the Government. The Court further held as under:-

“It is trite law that when one of the contracting parties is “State” within the meaning of Article 12 of the Constitution, it does not cease to enjoy the character of “State” and, therefore, it is subjected to all the obligations that “State” has under the Constitution. When the State’s acts of omission or commission are tainted with extreme arbitrariness and with mala fides, it is certainly subject to interference by the Constitutional Courts in this country.....We make it clear that while the State Government and its instrumentalities are entitled to exercise their contractual rights under the FWA, they must do so fairly, reasonably and without mala fides; in the event that they do not do so, the Court will be entitled to interfere with the same.

Taking an overall view of the matter, it appears that there could hardly be a dispute that the Project is a mega project which is in the larger public interest of the State of Karnataka and merely because there was a change in the Government, there was no necessity for reviewing all decisions taken by the previous Government, which is what appears to have happened. That such an action cannot be taken every time there is a change of Government.”

77. While deciding the said case, reliance had been placed by the Court in its earlier judgments in *State of U.P. & Anr. Vs. Johri Mal*, AIR 2004 SC 3800; and *State of Haryana Vs. State of Punjab & Anr.*, AIR 2002 SC 685. In the former, the Apex Court held that the panel of District Government Counsel should not be changed only on the ground that the panel had been prepared by the earlier Government. In the later case, while dealing with the river water-sharing dispute between two States, the Court observed thus:

“.....in the matter of governance of a State or in the matter of execution of a decision taken by a previous Government, on the basis of a consensus arrived at, which does not involve any political philosophy, the succeeding Government must be held duty-bound to continue and carry on the unfinished job rather than putting a stop to the same.”

78. It is argued on behalf of the learned counsel appearing for the MoEF&CC that sand mining contributes to construction of buildings infrastructure development, it helps in extracting minerals and provides both economic and social benefits. Even

though, the Government has implemented step to stop illegal sand mining and produce an alternative by supplying manufacturing of sand yet there is still illegal mining happening. Sand is an important economic resource and also source of Silica for making sodium silicate, a chemical compound used for manufacture for both common and optical glasses. The economic aspect of sand are not confined to its value as raw-material. Besides its economic importance, sand also constitutes an important biotic component in aquatic eco-system like rivers. Depletion of sand in the stream bed and along coastal areas causes the deepening of rivers and in estuaries and the enlargement of the river mouths causing major habitat disruptions that favoured some species or other and caused overall declines in biological diversity and productivity.

79. Learned counsel appearing for the MoEF&CC has also raised the issue that the control of illegal mining is purely within the domain of the State Government. It is necessary to quote the relevant paragraphs with regard to rule making power of the State which is enshrined in the constitution as follows:

“28. Entry-54 of List I-Union List of the Seventh Schedule of the Constitution of India deals with regulation of mines and mineral development under the control of the Union. Entry-54 of List-I reads as under:

“54. Regulation of mines and mineral development to the extent to which such regulation and development under the control of the Union is declared by Parliament by law to be expedient in the public interest.”

29. Entry-23 of List II-State List of the Seventh Schedule of the Constitution provides as under:

“23. Regulation of mines and mineral development subject to the provisions of List-I with respect to regulation and development under the control of the Union.”

30. The Act, 1957 i.e. the Mines and Minerals (Development and Regulation) Act, 1957 is enacted by the Parliament to

provide for the development and regulation of mines and minerals. Section 3(e) of the Act, 1957 defines ‘minor minerals’. It reads thus:

“(e) “minor minerals” means building stones, gravel, ordinary clay, ordinary sand other than sand used for prescribed purposes, and any other mineral which the Central Government may, by notification in the Official Gazette, declare to be a minor mineral;”

31. Sub-section (1-A) of Section 4 of the Act, 1957 prohibits transportation and storage of minerals in the following manner:

“4(1-A) No person shall transport or store or cause to be transported or stored any mineral otherwise than in accordance with the provisions of this Act and the rules made thereunder.”

32. Section 15 of the Act, 1957 gives power to the State Government to make rules in respect of minor minerals. Section 15 is extracted below:

“15. Power of State Governments to make rules in respect of minor minerals.--(1) The State Government may, by notification in the Official Gazette, make rules for regulating the grant of quarry leases, mining leases or other mineral concessions in respect of minor minerals and for purposes connected therewith.

(1A) In particular and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:

(a) the person by whom and the manner in which, applications for quarry leases, mining leases or other mineral concessions may be made and the fees to be paid therefor;

(b) the time within which, and the form in which, acknowledgement of the receipt of any such applications may be sent;

(c) the matters which may be considered where applications in respect of the same land are received within the same day;

(d) the terms on which, and the conditions subject to which and the authority by which quarry leases, mining leases or other mineral concessions may be granted or renewed;

(e) the procedure for obtaining quarry leases, mining leases or other mineral concessions;

(f) the facilities to be afforded by holders of quarry leases, mining leases or other mineral concessions to persons deputed by the Government for the purpose of undertaking research or training in matters relating to mining operations;

(g) the fixing and collection of rent, royalty, fees, dead rent, fines or other charges and the time within which and the manner in which these shall be payable;

(h) the manner in which rights of third parties may be protected (whether by way of payment of compensation or otherwise) in cases where any such party is prejudicially affected by reason of any prospecting or mining operations;

(i) the manner in which rehabilitation of flora and other vegetation, such as trees, shrubs and the like destroyed by reason of any quarrying or mining operations shall be made in the same area or in any other area selected by the State Government (whether by way of reimbursement of the cost of rehabilitation or otherwise) by the person holding the quarrying or mining lease;

(j) the manner in which and the conditions subject to which, a quarry lease, mining lease or other mineral concession may be transferred;

(k) the construction, maintenance and use of roads, power transmission lines, tramways, railways, aerial ropeways, pipelines and the making of passage for water for mining purposes on any land comprised in a quarry or mining lease or other mineral concession;

(l) the form of registers to be maintained under this Act;

(m) the reports and statements to be submitted by holders of quarry or mining leases or other mineral concessions and the authority to which such reports and statements shall be submitted;

(n) the period within which and the manner in which and the authority to which applications for revision of any order passed by any authority under these rules may be made, the fees to be paid therefore, and the powers of the revisional authority; and

(o) any other matter which is to be, or may be prescribed.

2) Until rules are made under sub-section (1), any rules made by a State Government regulating the grant of quarry leases, mining leases or other mineral concessions in respect of minor minerals which are in force immediately before the commencement of this Act shall continue in force.

(3) The holder of a mining lease or any other mineral concession granted under any rule made under sub-section (1) shall pay royalty or dead rent, whichever is more in respect of minor minerals removed or consumed by him or by his agent, manager, employee, contractor or sub-lessee at the rate prescribed for the time being in the rules framed by the State Government in respect of minor minerals:

Provided that the State Government shall not enhance the rate of royalty or dead rent in respect of any minor mineral for more than once during any period of three years.

4) Without prejudice to sub-sections (1), (2) and sub-section (3), the State Government may, by notification, make rules for regulating the provisions of this Act for the following, namely—

(a) the manner in which the District Mineral Foundation shall work for the interest and benefit of persons and areas affected by mining under sub-section (2) of Section 9B;

(b) the composition and functions of the District Mineral Foundation under sub-section (3) of Section 9B; and

(c) the amount of payment to be made to the District Mineral Foundation by concession-holders of minor minerals under Section 15A.

“33. Section 23-C of the Act, 1957 gives power to the State Government to make rules for preventing illegal mining, transportation and storage of minerals. Section 23-C reads thus:

“23-C. Power of State Government to make rules for preventing illegal mining, transportation and storage of minerals.--(1) The State Government may, by notification in the Official Gazette, make rules for preventing illegal mining, transportation and storage of minerals and for the purposes connected therewith.

(2) In particular and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:

(a) establishment of check-posts for checking of minerals under transit;

(b) establishment of weigh-bridges to measure the quantity of mineral being transported;

(c) regulation of mineral being transported from the area granted under a prospecting licence or a mining lease or a quarrying licence or a permit, in whatever name the permission to excavate minerals, has been given;

(d) inspection, checking and search of minerals at the place of excavation or storage or during transit;

(e) maintenance of registers and forms for the purposes of these rules;

(f) the period within which and the authority to which applications for revision of any order passed by any authority be preferred under any rule made under this section and the fees to be paid therefor and powers of such authority for disposing of such applications; and

(g) any other matter which is required to be, or may be, prescribed for the purpose of prevention of illegal mining, transportation and storage of minerals.

(3) Notwithstanding anything contained in Section 30, the Central Government shall have no power to revise any order passed by a State Government or any of its authorised officers or any authority under the rules made under sub-sections (1) and (2)."

80. Learned counsel appearing for the appellant had submitted that the criteria as laid down or followed by the authorities are not in accordance with the provisions of law or neither has been laid down anywhere in the rules. The Sustainable Sand Mining Guidelines are exhausted in respect of sand mining activity. Clause 49 of the Guidelines says that the mining cannot be undertaken in 200-500 infrastructure meter of bridge, 200 meter upstream and downstream water supply/ irrigation scheme, 100 meter from the edge of the national highway and railway line, 50 meter reservoir, canal or building 25 meter from the edge of State Highway and 10 meter from edge of other roads. There is no mention of any distance from a human habitation. The EC granted to the applicant earlier on 21.02.2015 shows that EC was subject to the appellants were following the Guidelines. The Guidelines are being followed by the appellant in letter and spirit. The State Authorities has not produced any document to show stipulation of 500 meter criteria for human habitation.
81. The Guidelines issued in 2020 make it clear that they are supplemental to the 2016 Guidelines. The Guidelines itself says that the document is supplemental to the existing 2016 Guidelines and these two Guidelines via enforcement of monitoring guidelines

for sand mining 2020 and 2016 shall be read and implemented in sync with each other.

82. It is further argued that Rule 18(6) of Gujarat Minor Mineral Concession Rules, 2017 also does not prescribe for 500 meter criteria vis-a-vis human habitation. It stipulates that in the event mining involve blasting then distance to be kept from any public work, roads, highways etc., is 200 meter and if no blasting is involved then distance to be kept is 50 meter. It is further argued that the parameter of distance which has been argued for the learned counsel for the State have different footing with regard to mining in stone quarries and sand mining, which are inherently different kind of mining activity. The CPCB report dated 09.07.2020 refers to a circular dated 31.01.2003 issued by the Director General of Mines Safety which has been relied erroneously and has been wrongly interpreted by the respondents. This circular deals with the blasting project tiles and in that context for the safety of all concerned in open cast times and it is not the case of the appellants with regard to the blasting and thus criteria as aforesaid as applied by the respondent are not applicable too in the case of appellants. The parameter with regard to the distance as narrated are as follows:

“RULES AND REGULATIONS APPLICABLE TO THE APPELLANT

<i>Clause 49 of Sustainable Sand Mining Guidelines</i>	<i>“Protection of Infrastructure” Mining shall not be undertaken in a mining lease located in 200-500 Infrastructure meter of bridge, 200 meter upstream and downstream of water supply / irrigation scheme, 100 meters from the edge of National Highway and railway line, 50 meters from a reservoir, canal or building, 25 meter from the edge of State Highway and 10 meters from the</i>

	<i>edge of other roads except on special exemption by the Sub-Divisional level Joint Inspection Committee.</i>
<i>Rule 18(6) of Gujarat Minor Mineral Concessions Rules 2017</i>	<i>Duties and Obligations of Lessee:</i> <i>“The lessee shall, subject to the provisions of rule 19, have the following duties and obligations:</i> <i>(6) No mining operations in certain areas- Except with the written permission of the concern authority the lessee shall not carry on, or allow to be carried on, any mining operation at any point within a distance of:</i> <i>a. Fifty meters from any road (excluding a village road or other district road), notified reservoirs, canal, national highway, state highway, boundary of any railway line, public works, cities, towns, villages and other approved continuous habitations, if no blasting is involve; or</i> <i>b. two hundred meters from any road, notified reservoirs, canal, national highway, state highway, boundary of any railway line, public works, cities, towns, villages and other approved continuous habitation, if blasting is involved.</i>
<i>Enforcement and monitoring guidelines for sand mining issued by MoEF in January 2020</i>	<i>8. General Approach to Sustainable Sand Mining</i> <i>8.1 Pre-requisite for starting sand mining operation</i> <i>vi) The LoI holder shall seek Environmental Clearance as per the provision of EIA notification and the regulatory authority shall ensure that the provision suggested in “Sustainable Sand Mining and Management 2016” and in this document as applicable are part of the clearance conditions.</i>

”

83. The report prepared by the CPCB in compliance of the order of this Tribunal passed in O.A. No. 304/2019 in the case of *M. Haridasan & Ors. Vs. State of Kerala* is as follows:

“2.0 Stone Quarrying:

Stone is classified as minor minerals under Section 3(e) of the Mines and Minerals (Development and Regulations) Act, 1957. As per provisions of MMDR Act, the administrative and legal control over minor minerals vests with State Governments and empowered to make rules to govern minor minerals.

Stone Quarrying / Mining is an activity where extraction of stone is done from hillocks or mountain or ground surface having geological mineral deposits. The stone extracted from stone quarry are used either as construction materials or in stone crushers to produce rori/bajri and dust.

Systematic Mining (formation of benches) is done by blasting and drilling, to loosen up the rock materials followed by fragmentation of large size into smaller size. The reduced size material is then loaded and transferred to stone crushers for further processing in order to obtain necessary sizes required for final use. The blasting and drilling during mining operation have environmental impacts and requires mitigation measures to minimise the impacts on environment and nearby habitations.

3.0 Minor Mineral Concession Rules

As per sub-section (1) of section 15 of the Mines and Minerals (Development and Regulation) Act, 1957 (Central Act 67 of 1957), State Government has to make Rules for regulating the grant of quarry lease, mining lease/permit, mineral concessions and purposes connected in respect of minor minerals.

Accordingly, State Governments have framed rules and defined the criteria of minimum distance of minor mineral mining from different locations based on the type of mining used.

Minimum distance prescribed by various states is vary with respect to mining operation of minor mineral involved. In general, minimum distance prescribed by states such as Rajasthan, Madhya Pradesh, Punjab, Tamil Nadu, Orissa, Bihar, Uttar Pradesh, Himachal Pradesh, West Bengal, Sikkim, Meghalaya and Manipur are:

- *In the range of 45 - 200 m from any reservoir, canal, public works such as public roads and buildings*
- *In the range of 45 -100 m from any railway line / area*
- *In the range of 60 - 100 m from National Highway, State Highway and other roads and 10 m from village roads*

Various states have further prescribed minimum distance based on the use of blasting in mining operation of minor mineral, as follow:

Kerala:

When blasting is involved, no mining within a range of 50 — 100 m from the boundary line of any railway line, bridges, reservoirs, tanks, residential buildings, Government protected monuments, canals, rivers, public roads having vehicular traffic, any other public works or the boundary walls of places of worship whereas, when no blasting is involved, range of 50-75 m is prescribed as minimum distance.

Karnataka, Maharashtra, Goa, Gujarat:

When blasting is involved, no mining within a distance of 200 m from the boundary line of any railway line reservoir, tank bund, canal, or other public works and public structures or any public road or building whereas, when no blasting is involved, minimum distance of 50 m is defined.

Jammu & Kashmir:

When blasting is involved, no mining within a distance of 500 m from the outer periphery of the defined limits of a National Highway, Railway line, State Highway, Major District Roads (MDR) and Other District Road (ODRs) whereas, when no blasting is involved, minimum distance of 150 m is defined.

Assam:

When blasting is involved, no mining within a distance of 250 m from the outer periphery of the defined limits of any village habitation, National Highway, State Highway and other roads whereas, when no blasting is involved, minimum distance of 50 m is defined.

Note: *Distance criteria defined by various states, has been defined from the outer edge of the cutting or outer edge of the bank, as the case may be and in the case of a building horizontally from the plinth thereof.*

4.0 Criteria of Danger Zone: Directorate General of Mines Safety

As per Directorate General of Mines Safety circular no. - DGMS (SOMA)/ (Tech) Cir No. 2 of 2003 Dt. 31/01/2003, on subject of Dangers due to blasting projectiles, all places within the radius of 500 m from the place of firing to be treated as danger zone and accordingly, all person in danger zone to take protection in substantially built shelter at the time of blasting.

Further, mine manager to control the throw and to prevent ejection of flying fragments within a safe distance with the use of refined blasting practices as well as developed explosives and accessories such as controlled blasting Technique with milli-second delay detonators/ electric shock tubes/ cord relays or use of sequential blasting machines or by adequately muffling of holes etc.

5.0 Criteria of no blasting distance around blast sites: Indiana Department of Natural Resource, USA

(Source: Citizen Guide to Coal Mine Blasting in Indiana)

Indiana Department of Natural Resource, USA has stated that the blasting not to be conducted within 300 feet (~91 m) of an occupied dwelling or school, church or hospital, public building, community or institutional building.

6.0 Conclusion:

In view of available information, following minimum distance criteria may be considered for permitting stone quarrying by SPCBs:

In view of available information, following minimum distance criteria may be considered for permitting stone quarrying by SPCBs:

Mining Type		Minimum Distance	Locations
A.	When Blasting is not involved	100 m	Residential/Public buildings, Inhabited sites, Protected monuments, Heritage sites, National / State Highway, District roads, Public roads, Railway line/area, Ropeway or Ropeway trestle or station, Bridges, Dams, Reservoirs, River, Canals, or Lakes or Tanks, or any other locations to be considered by States.
B.	When Blasting is involved	200 m **	

****Note:** The regulations for danger zone (500 m) prescribed by Directorate General of Mines Safety also have to be complied compulsorily and necessary measures should be taken to minimise the impact on environment.

However, if any states is already having stringent criteria than the above for minor mineral mining (i.e. more prescribed distances than the above), the same shall be applicable.”

84. Learned counsel appearing for the State/SEIAA has argued that the similar matter was raised before the Hon’ble High Court and direction has been issued with regard to the parameter of distance of sand mining. Be as it may be, the policy as laid down by the Principal Bench of this Tribunal was based on an expert’s report submitted by CPCB and it was discussed with the States and opinion has been obtained from all the States in a particular for and it was collected, discussed and decided by the Expert Committee and CPCB has directed and intimated to the States to follow the guidelines with regard to the minimum distance while issuing the mining lease near human habitation. It is for the State to adopt the policy which has been formulated on the basis of the Expert Report and circulated by the CPCB and had been approved by the Principal Bench of this Tribunal having jurisdiction to pass an order and order has been issued that the *per se* must be complied with throughout India. Accordingly, we leave it to SEIAA to decide and dispose of the application in accordance with the parameter laid down with the Tribunal, CPCB and the other competent authority in this regard.

85. Accordingly, we dispose of all the appeals with following directions:

1. Appeals are allowed and the orders impugned are set aside.

The matter is remanded back to the SEIAA to consider the matter afresh and after giving opportunity of hearing to the aggrieved, dispose of the application in accordance with law.

The policy as laid down by the CPCB and approved by this

Tribunal referred above are taken to be account and be adopted.

2. The Environmental Clearance issued for mining of sand should contain the following mandatory conditions:-

- (i) The Licensee must use minimum number of poclains and it should not be more than two in the project site.
- (ii) The District Administration should assess the site for Environmental impact at the end of first year to permit the continuation of the operation.
- (iii) The Annual replenishment report certified by the authorised agency must be submitted to the prescribed authority. In case, the replenishment is low, the mining activity/production levels shall accordingly be decreased/stopped.
- (iv) The ultimate working depth shall be 1 m from the present natural river bed level and the thickness of the sand available shall be more than 3 m in the proposed quarry site.
- (v) The sand quarrying shall not be carried out below the ground water table under any circumstances. In case, the ground water table occurs within the permitted depth at 1 meter, quarrying operation shall be stopped immediately.
- (vi) The sand mining should not disturb in any way the turbidity, velocity and flow pattern of the river water.

(vii) The mining activity shall be monitored by the Taluk level Force once in a month by conducting physical verification.

(viii) After closure of the mining, the licensee shall immediately remove all the sheds put up in the quarry and all the equipments used for operation of sand quarry. The roads/pathways shall be levelled to let the river resume its normal course without any artificial obstruction to the extent possible.

(ix) The mined out pits to be backfilled where warranted and area should be suitably landscaped to prevent environmental degradation.

3. There must be an institutional framework and enforcement mechanism to prevent illegal and excess quarrying.

4. The mining should be undertaken by the State without any adverse impact on the environment.

5. The State must ensure that the sand quarries would adhere to the norms regarding extent and depth. The boundary of the quarry shall be demarcated by following the procedure set-out under Clause 2 (ii) of the conditions imposed by the environmental authority.

86. All the appeals are decided accordingly as no order to cost. A copy of the order be sent to the Chief Secretary Gujarat and Member Secretary, Gujarat State Pollution Control Board by e-mail for compliance.

87. Appeal No. 03/2020 (WZ), Appeal No. 04/2020 (WZ), Appeal No. 05/2020 (WZ,) Appeal No. 06/2020 (WZ) and Appeal No. 07/2020 (WZ) and all pending I.A.s are disposed of accordingly.

Sheo Kumar Singh, JM

Dr. Satyawan Singh Garbyal, EM

September 30, 2020
Appeal No. 03/2020 (WZ)
& connected matters
R

ANNEXURE-12

**Details of EC, mine approval letter and
range report /proposed leases**

ENVIRONMENTAL
CLEARANCE

PARIVESH

(Pro-Active and Responsive Facilitation by Interactive,
and Virtuous Environmental Single-Window Hub)



Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment
Authority(SEIAA), ASSAM)

To,

The -I
DIVISIONAL FOREST OFFICER
MD ROAD, NAGAON -782001

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity
under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC)
in respect of project submitted to the SEIAA vide proposal number
SIA/AS/MIN/427295/2023 dated 26 Apr 2023. The particulars of the environmental
clearance granted to the project are as below.

1. EC Identification No.	EC23B001AS167777
2. File No.	SEIAA. 3447/2023
3. Project Type	New
4. Category	B
5. Project/Activity Including Schedule No.	1(a) Mining of minerals
6. Name of Project	NISARI SAND PERMIT AREA NO. 1 (A) (REV. PORTION)
7. Name of Company/Organization	DIVISIONAL FOREST OFFICER
8. Location of Project	ASSAM
9. TOR Date	N/A

The project details along with terms and conditions are appended herewith from page
no 2 onwards.

Date: 17/06/2023

(e-signed)
Indreswar Kalita
Member Secretary
SEIAA - (ASSAM)

*Note: A valid environmental clearance shall be one that has EC identification
number & E-Sign generated from PARIVESH. Please quote identification
number in all future correspondence.*

This is a computer generated cover page.



This has reference to your application for Prior Environmental Clearance proposal no. SIA/AS/MIN/427295/2023 dated 26/04/2023 along with Form-1, Mining Plan, D.F.O. letter, Google map with G.P.S. Co-ordinates and other relevant documents for Collection of Sand from "Nisari Sand Permit Area No. 1 (A) (Rev. Portion)" under Nagaon Forest Division, Dist. Nagaon, Assam.

The quantity of Sand to be collected is:

Sand: 28,000cu.m. (Twenty Eight Thousand) river bed sand within a period of 2 (two) years from the four mining blocks comprising 2.84 hect. area barring the 1st mining block comprising 1.4 hect. (under GPS coordinates SL. No. 1-4) @ 14000 cu.m.(Fourteen Thousand) only for per year.

Allotted Area: 4.03 Ha.

The Sand shall be extracted from the area of the GPS Co-ordinates mentioned below as per mining plan:

<u>Longitude (East)</u>	<u>Latitude (North)</u>
1. E- 92°46'02.28"	N- 26°08'10.55"
2. E- 92°45'49.15"	N- 26°08'11.90"
3. E- 92°45'49.13"	N- 26°08'11.12"
4. E- 92°46'02.01"	N- 26°08'30.60"
5. E- 92°47'05.51"	N- 26°08'37.30"
6. E- 92°47'04.25"	N- 26°08'40.07"
7. E- 92°47'03.09"	N- 26°08'40.26"
8. E- 92°47'05.96"	N- 26°08'36.55"
9. E- 92°47'51.05"	N- 26°08'36.87"
10. E- 92°47'36.56"	N- 26°08'34.90"
11. E- 92°47'37.23"	N- 26°08'34.42"
12. E- 92°47'51.59"	N- 26°08'36.32"
13. E- 92°48'12.29"	N- 26°08'26.61"
14. E- 92°48'05.06"	N- 26°08'26.22"
15. E- 92°48'05.06"	N- 26°08'25.37"
16. E- 92°48'12.90"	N- 26°08'26.00"
17. E- 92°48'25.80"	N- 26°08'32.74"
18. E- 92°48'20.74"	N- 26°08'26.15"
19. E- 92°48'20.20"	N- 26°08'31.05"
20. E- 92°48'26.46"	N- 26°08'32.23"

The Sand shall be extracted manual (as per Mining Plan) from "Nisari Sand Permit Area No. 1 (A) (Rev. Portion)" under Nagaon Forest Division, Dist. Nagaon, Assam.

The proposal was examined and processed in accordance with EIA Notification 2006 and its amendment thereof. The State Level Expert Appraisal Committee (SEAC), Assam examined the documents of the


Member Secretary
SEIAA, Assam

proposal for Collection of Sand at its meeting held on 20/05/2023. Accordingly the application was discussed and thoroughly scrutinized by the SEAC and found that the project falls under I(a) and considered as B₂ Category of EIA Notification 2006 and subsequent amendments. The Committee recommended the project to the SEIAA, Assam for issuance of Environmental Clearance.

Based on the recommendation of the SEAC, the State Environment Impact Assessment Authority, Assam (SEIAA) considered the proposal in its meeting held on 06/06/2023 and accords Prior Environmental Clearance to the project as mentioned above under the provision of EIA notification 2006 and its subsequent amendments issued under Environment Protection Act 1986 subject to compliance of following specific and general conditions.

The operational area must be confined to the given 4.03 Ha proposed area bound by the coordinates mentioned above and there shall not be any other area of extraction contiguous to this. The project proponent is to submit a declaration in writing to this effect before commencement of the work.

1. Specific Conditions

1. The legal status of the mining area remains unchanged.
2. The lease holder shall undertake adequate safeguard during extraction of Sand and ensure that due to this activity, the hydro geological and ecological regime of the surrounding area shall not be affected. Regular monitoring of ground water level and quality shall be carried out around the mine lease area during the mining operation. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity; necessary corrective measures shall be carried out.
3. Manual (as per Mining Plan) low impact extraction of Sand shall be undertaken.
4. Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter as at loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard. The status of implementation of measures taken shall be reported to SEIAA and work shall be completed before the start of mining.
5. Quarrying shall be restricted within the area as per GPS Co-ordinates mentioned above.
6. There shall be stockyard to stock mining material outside the quarry site. Parking shall not be made on public road.


Member Secretary
SEIAA, Assam

7. The following measures are to be further implemented to reduce air pollution during transportation of mineral:
 - i. Roads shall be graded to mitigate the dust emission.
 - ii. Over filling of tippers and consequent spillage on the roads shall be avoided.
8. Measures should be taken to comply with the provisions laid under Noise Pollution (Regulation and Control) (Amendment) Rules, 2010 issued by the MoEF, Govt. of India.
9. Mining shall be limited to day time only.
10. No mining shall be carried out in the safety zone of any bridge and / or embankment.
11. No mining shall be carried out in the vicinity of natural / manmade archaeological sites.
12. No wildlife habitat will be disturbed and also aquatic Flora & Fauna of the river.
13. Green belt development shall be carried out in 20% of total mine area either on river bank or along road side considering CPCB guidelines with native tree species in the mining area.
14. User agency shall not make any fresh approach road over any part of the forest land but may use existing forest road only.
15. Transport of materials shall be done by covering the trucks/tractors with tarpaulin or other suitable mechanism so that no spillage of mineral/dust takes place.
16. Appropriate mitigation measures shall be taken to prevent any kind of pollution. It shall be ensured that there is no leakage of oil and grease from the vehicles used for transportation.
17. Special Measures shall be adopted to prevent the nearby settlement from the impacts of mining activities.
18. Dispensary facilities for first-aid shall be provided at site.
19. Occupational health surveillance program of the workers should be undertaken periodically.
20. Conservation measures shall be taken for protection of Flora & Fauna in the core and buffer zone.
21. It shall be ensured that collection of mining materials does not disturb or change the underlying soil characteristic of river bed/basin, where mining is carried out.
22. It shall be ensured that mining does not in any way disturb the turbidity, velocity and flow pattern of the river water.
23. Conservation measures shall be taken for protection of flora & fauna in the core and buffer zone.
24. The fauna nesting area shall not be used for mining.


Member Secretary
SEIAA, Assam

25. This Environmental Clearance is applicable only subject to receipt of mining permit by the project proponent from the Competent Authority as per AMMC Rule, 2013 and subsequent amendment.
26. Measures for prevention & control of Soil erosion & management of site shall be undertaken.
27. No river/Stream should be diverted for the purpose of Sand mining. No natural water course and/or water resources are obstructed due to mining operation.
28. No extraction of Sand in landside prone area.
29. **The proponent shall have to strictly follow all other terms and condition laid down in the approved mining plan during the mining period.**
30. Controlled clearance of riparian vegetation to be undertaken.
31. Vehicles used for transportation of Sand are to be permitted only with of fitness & PUC certificates.
32. Health & safety of workers should be taken care of spring sources should not be affected due to mining activities necessary protection measures are to be submitted.
33. The critical parameters such as PM₁₀, NO₂, SO₄ in ambient air within the impact Zone shall be monitors periodically and analysis report shall be submitted to SEIAA, Assam.

II. General Conditions

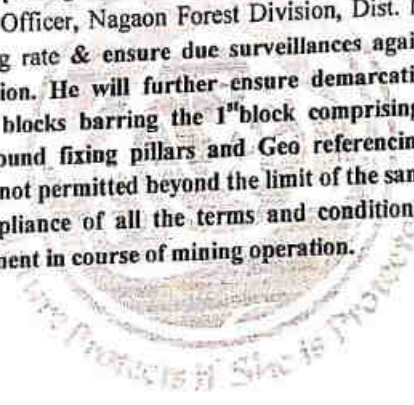
1. All necessary statutory clearance shall be obtained from competent authority in connection with mining operation and copies of the same shall be submitted to SEIAA, Assam.
2. Special measures shall be adopted to prevent nearby settlements from the impacts of mining activities, maintenance of roads through which transportation of minor mineral is to be undertaken shall be carried out regularly.
3. User agency shall comply with the provisions framed under Assam Minor Mineral concession Rule 2013 and subsequent amendment.
4. The SEIAA Assam may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
5. Concealing the factual data or failure to comply with any of the conditions mentioned above may result in withdrawals of this clearance and attract action under the provisions of Environment Protection Act. 1986.
6. The SEIAA, Assam may revoke or suspend the order, if implementation of any of the above conditions is not found satisfactory. SEIAA, Assam will monitor the operation area from time to time and the project proponent shall extend full cooperation for the same.
7. The above conditions will be enforced inter-alia under the provision of water (Prevention & Control of Pollution) Act 1974, the air (Prevention & Control of Pollution) Act 1981, the


Member Secretary
SEIAA, Assam

Environment Protection Act 1986 and the public liability Insurance Act 1991 along with their amendments & rules.

8. The Environmental Clearance is valid for a period of 2 (Two) years from the date of issue of this order.
9. Under Corporate Environment responsibility (CER), appropriate budgetary provision shall be made as per MoEFCC OM F. No. 22-65/2017-IA.III dated 01/05/2018 and 19/06/2018 commensurate with the total value of the work and to be spent for health improvement, education, drinking water facilities, and other socio-economic upliftment in and around the project area (radius of 10 KM from the project site) in consultation with a Committee having representatives from all sections of the population in the nearby villages and with information to the SEIAA on biannual basis.
10. The project proponent shall submit half yearly compliance reports in respect of the terms & conditions stipulated in this order to the SEIAA, Assam in PARIVESH PORTAL through individual User Id to the SEIAA. The Compliance Report should also include the work done under CER as in 9 above and also under Green Belt development in the project area (to be supported with photographs and other documentary evidences in both cases).
11. The Divisional Forest Officer, Nagaon Forest Division, Dist. Nagaon, Assam shall realize the Royalty as per existing rate & ensure due surveillances against occurrence of irregularities during mining operation. He will further ensure demarcation of mining area (2.84 Hect. comprising 4 mining blocks barring the 1st block comprising 1.4 hect. as discussed in the foregone para) on ground fixing pillars and Geo referencing prior to start actual mining operation as mining is not permitted beyond the limit of the same. The DFO is also requested to ensure necessary compliance of all the terms and condition laid down in the EC be duly complied by the proponent in course of mining operation.


Member Secretary
SEIAA, Assam


Ramunimaidam, Guwahati-21.

Copy to:

1. The Joint Secretary, Ministry of Environment, Forest and Climate Change, Government of India, MoEF, Indira Paryavaran Bhawan, Jorbagh Rd, New Delhi-110003.
2. The Secretary to the Govt. of Assam, Environment & Forest Department, Dispur, Guwahati-6 Cum Member Secretary, SEIAA, Assam for favour of kind information.
3. The P.C.C.F, HoFF, Govt. of Assam, Panjabari, Guwahati-37 for favour of kind information.
4. The Divisional Forest Officer, Nagaon Forest Division, Dist. Nagaon, Assam for information & necessary action to ensure that all **Specific Conditions & General Condition** are complied with.
5. The Chief Engineer, Water Resource Department, Guwahati, Assam for favour of kind information.
6. The Integrated Regional Office, Ministry of Environment, Forest & Climate Change, 4th Floor, Housefed Building, G.S. Road, Rukminigaon, Guwahati-22 for information.
7. Office Copy.

Handwritten signature
13.06.2023
Member Secretary
SEIAA, Assam

Bamunimaidam, Guwahati-21.

Signature Not Verified

Digitally signed by Shri Indreswar Kalita
Member Secretary

Date: 6/17/2023 10:11:36 PM
Page 7 of 7

ENVIRONMENTAL
CLEARANCE

PARIVESH

(Pro-Active and Responsive Facilitation by Interactive,
and Virtuous Environmental Single-Window Hub)



Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment
Authority(SEIAA), Assam)

To,

The Owner
BISHNU BORDOLOI
BISHNU RAM BORDOLOI
S/O: LATE MANU RAM BORDOLOI
VILL: KATHKATIAGAON
P.O. & P.S.: JAMUNAMUKH
DIST: HOJAI (ASSAM) -782428

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity
under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC)
in respect of project submitted to the SEIAA vide proposal number
SIA/AS/MIN/81221/2021 dated 30 Jul 2022. The particulars of the environmental
clearance granted to the project are as below.

1. EC Identification No.	EC22B001AS159441
2. File No.	SEIAA. 3081/2022
3. Project Type	New
4. Category	B1
5. Project/Activity including Schedule No.	1(a) Mining of minerals
6. Name of Project	
7. Name of Company/Organization	BISHNU BORDOLOI
8. Location of Project	Assam
9. TOR Date	20 Aug 2021

The project details along with terms and conditions are appended herewith from page
no 2 onwards.

Date: 11/11/2022

(e-signed)
Indreswar Kalita
Member Secretary
SEIAA - (Assam)

Note: A valid environmental clearance shall be one that has EC identification
number & E-Sign generated from PARIVESH. Please quote identification
number in all future correspondence.

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This has reference to your application for Prior Environmental Clearance **Proposal No. SIA/AS/MIN/81221/2021** dated. **30/07/2022** along with Form-2, Mining Plan, EIA Report, Public hearing report, D.F.O. letter, Google map with G.P.S. Co-ordinates and other relevant documents for collection of Sand from "Jamunamukh Kopili Nodi Sand Permit Area No.1 (A) (Revenue Portion) 2019-2026" Near Kathkatia Gaon PO & PS Jamunamukh District Nagaon, Assam under Nagaon Forest Division, Dist. Nagaon, Assam.

The quantity of Sand to be collected is:

Sand: *1,50,000 (One Lakh Fifty Thousand) cu m. Sand from the proposed mine site for 5 (five) years. 30,000 cu.m. Sand from the approved mining area annually and ensure to implement the activities as proposed under CSR activities.*

Total Allotted area: 23.5 Ha.

The Sand shall be extracted from the area of the GPS Co-ordinates mentioned below as per mining plan:

<u>Longitude (East)</u>	<u>Latitude (North)</u>
1. E- 92°43.061'	N- 26°06.329'
2. E- 92°43.151'	N- 26°06.289'
3. E- 92°43.089'	N- 26°06.218'
4. E- 92°43.060'	N- 26°06.174'
5. E- 92°43.051'	N- 26°06.115'
6. E- 92°43.053'	N- 26°06.055'
7. E- 92°43.074'	N- 26°06.016'
8. E- 92°43.106'	N- 26°05.977'
9. E- 92°43.141'	N- 26°05.960'
10. E- 92°43.197'	N- 26°05.934'
11. E- 92°43.245'	N- 26°05.929'
12. E- 92°43.313'	N- 26°05.943'
13. E- 92°43.359'	N- 26°05.947'
14. E- 92°43.407'	N- 26°05.968'
15. E- 92°43.452'	N- 26°05.990'
16. E- 92°43.517'	N- 26°06.029'
17. E- 92°43.572'	N- 26°06.062'
18. E- 92°43.595'	N- 26°06.078'
19. E- 92°43.608'	N- 26°06.052'
20. E- 92°43.605'	N- 26°06.032'
21. E- 92°43.576'	N- 26°06.008'
22. E- 92°43.522'	N- 26°05.961'
23. E- 92°43.448'	N- 26°05.917'
24. E- 92°43.389'	N- 26°05.888'
25. E- 92°43.330'	N- 26°05.863'
26. E- 92°43.217'	N- 26°05.839'

Signature

27.	E- 92°43.094'	N- 26°05.890'
28.	E- 92°43.054'	N- 26°05.928'
29.	E- 92°43.026'	N- 26°05.960'
30.	E- 92°42.979'	N- 26°06.015'
31.	E- 92°42.952'	N- 26°06.101'
32.	E- 92°42.954'	N- 26°06.135'
33.	E- 92°42.967'	N- 26°06.184'
34.	E- 92°42.983'	N- 26°06.213'
35.	E- 92°43.006'	N- 26°06.262'
36.	E- 92°43.043'	N- 26°06.297'
37.	E- 92°43.061'	N- 26°06.329'

The Sand shall be extracted manual/Semi mechanized (as per Mining Plan) from "Jamunamukh Kopili Nodi Sand Permit Area No.1 (A) (Revenue Portion) 2019-2026" Near Kathkatia Gaon PO & PS Jamunamukh District Nagaon, Assam under Nagaon Forest Division, Dist. Nagaon, Assam.

The proposal was examined and processed in accordance with EIA Notification 2006 and its amendment thereof. The State Level Expert Appraisal Committee (SEAC), Assam examined the documents of the proposal for Collection of Sand at its meeting held on 21/10/2022. Accordingly the application was discussed and thoroughly scrutinized by the SEAC and found that the project falls under 1(a) and considered as B₁ Category of EIA Notification 2006 and subsequent amendments. The Committee recommended the project to the SEIAA, Assam for issuance of Environmental Clearance.

Based on the recommendation of the SEAC, the State Environment Impact Assessment Authority, Assam (SEIAA) considered the proposal in its meeting held on 3/11/2022 and accords Prior Environmental Clearance to the project as mentioned above under the provision of EIA notification 2006 and its subsequent amendments issued under Environment Protection Act 1986 subject to compliance of following specific and general conditions.

The operational area must be confined to the given 23.5 Ha area bound by the coordinates mentioned above and there shall not be any other area of extraction contiguous to this. The project proponent is to submit a declaration in writing to this effect before commencement of the work.

1. Specific Conditions

1. The legal status of the mining area remains unchanged.
2. The lease holder shall undertake adequate safeguard during extraction of Sand & ensure that due to this activity, the hydro geological and ecological regime of the surrounding area shall not be affected. Regular monitoring of ground water level and quality shall be carried out around the mine lease area during the mining operation. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity; necessary corrective measures shall be carried out.

CC

3. Manual/Semi mechanize (as per Mining Plan) low impact extraction of Sand shall be undertaken.
4. Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter as at loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard. The status of implementation of measures taken shall be reported to SEIAA and work shall be completed before the start of mining.
5. Quarrying shall be restricted within the area as per GPS Co-ordinates mentioned above.
6. There shall be stockyard to stock mining material outside the quarry site. Parking shall not be made on public road.
7. The following measures are to be further implemented to reduce air pollution during transportation of mineral:
 - i. Roads shall be graded to mitigate the dust emission.
 - ii. Over filling of tippers and consequent spillage on the roads shall be avoided.
8. Measures should be taken to comply with the provisions laid under Noise Pollution (Regulation and Control) (Amendment) Rules, 2010 issued by the MoEF, Govt. of India.
9. Mining shall be limited to day time only.
10. No mining shall be carried out in the safety zone of any bridge and / or embankment.
11. No mining shall be carried out in the vicinity of natural / manmade archaeological sites.
12. No wildlife habitat will be disturbed and also aquatic Flora & Fauna of the river.
13. **Green belt development shall be carried out in 20% of total mine area either on river bank or along road side considering CPCB guidelines with native tree species in the mining area.**
14. User agency shall not make any fresh approach road over any part of the forest land but may use existing forest road only.
15. Transport of materials shall be done by covering the trucks/tractors with tarpaulin or other suitable mechanism so that no spillage of mineral/dust takes place.
16. Appropriate mitigation measures shall be taken to prevent any kind of pollution. It shall be ensured that there is no leakage of oil and grease from the vehicles used for transportation.
17. Special Measures shall be adopted to prevent the nearby settlement from the impacts of mining activities.
18. Dispensary facilities for first-aid shall be provided at site.
19. Occupational health surveillance program of the workers should be undertaken periodically.
20. Conservation measures shall be taken for protection of Flora & Fauna in the core and buffer zone.
21. It shall be ensured that collection of mining materials does not disturb or change the underlying soil characteristic of river bed/basin, where mining is carried out.
22. It shall be ensured that mining does not in any way disturb the turbidity, velocity and flow pattern of the river water.
23. Conservation measures shall be taken for protection of flora & fauna in the core and buffer zone.
24. The fauna nesting area shall not be used for mining.



SEIAA

25. This Environmental Clearance is applicable only subject to receipt of mining permit by the project proponent from the Competent Authority as per AMMC Rule, 2013 and subsequent amendment.
26. Measures for prevention & control of Soil erosion & management of site shall be undertaken.
27. No river/Stream should be diverted for the purpose of Sand mining. No natural water course and/or water resources are obstructed due to mining operation.
28. No extraction of Sand in landside prone area.
29. *The mining depth is approved 1.5 meter from the unmine surface.*
30. Controlled clearance of riparian vegetation to be undertaken.
31. Vehicles used for transportation of Sand are to be permitted only with of fitness & PUC certificates.
32. Health & safety of workers should be taken care of spring sources should not be affected due to mining activities necessary protection measures are to be submitted.
33. The critical parameters such as PM_{10} , NO_2 , SO_2 in ambient air within the impact Zone shall be monitors periodically and analysis report shall be submitted to SEIAA, Assam.
34. **The Divisional Forest Officer, Nagaon Forest Division is requested to ensure necessary surveillance to guard occurrences of irregularities during the mining operation. The DFO will also arrange to mark the approved mining site on the ground fixing pillars before actual mining operation as mining is allowed within the approved mining site and not beyond the limit of the same. The DFO is also requested to ensure compliance by the proponent of all the terms and condition laid down in the EC as well as to physically inspect the activities that are to be implemented as proposed under CSR in due course of time.**

II. General Conditions

1. All necessary statutory clearance shall be obtained from competent authority in connection with mining operation and copies of the same shall be submitted to SEIAA, Assam.
2. Special measures shall be adopted to prevent nearby settlements from the impacts of mining activities, maintenance of roads through which transportation of minor mineral is to be undertaken shall be carried out regularly.
3. User agency shall comply with the provisions framed under Assam Minor Mineral concession Rule 2013 and subsequent amendment.
4. The SEIAA Assam may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
5. Concealing the factual data or failure to comply with any of the conditions mentioned above may result in withdrawals of this clearance and attract action under the provisions of Environment Protection Act. 1986.
6. The SEIAA, Assam may revoke or suspend the order, if implementation of any of the above conditions is not found satisfactory. SEIAA, Assam will monitor the operation area from time to time and the project proponent shall extend full cooperation for the same.
7. The above conditions will be enforced inter-alia under the provision of water (Prevention & Control of Pollution) Act 1974, the air (Prevention & Control of Pollution) Act 1981, the Environment Protection Act 1986 and the public liability Insurance Act 1991 along with their amendments & rules.

SEIAA, Assam
2022

8. The Environmental Clearance is valid for a period of 5 (Five) years from the date of issue of this order.
9. Under Corporate Environment responsibility (CER), appropriate budgetary provision shall be made as per MoEFCC OM F. No. 22-65/2017-IA.III dated 01/05/2018 and 19/06/2018 commensurate with the total value of the work and to be spent for health improvement, education, drinking water facilities, and other socio-economic upliftment in and around the project area (radius of 10 KM from the project site) in consultation with a Committee having representatives from all sections of the population in the nearby villages and with information to the SEIAA on biannual basis.
10. The project proponent shall submit half yearly compliance reports in respect of the terms & conditions stipulated in this order to the SEIAA, Assam in soft copy (CD) & hard copy on 1st June and 1st Dec each year. The Compliance Report should also include the work done under CER as in 9 above and also under Green Belt development in the project area (to be supported with photographs and other documentary evidences in both cases).
11. The Divisional Forest Officer, Nagaon Forest Division, Dist. Nagaon, Assam shall realize the Royalty as per existing rate & requested to ensure due surveillance to guard against occurrences of irregularities during the mining period. He will also ensure that the mining be permitted only within the proposed site and not beyond the limit of the same. Compliance of the terms and condition by the proponent has to be ensured by the concerned Divisional Forest Officer.



Member Secretary
SEIAA, Assam
Bamunimaidam, Guwahati-21.
CC/ka

Memo No. SEIAA.1785/2021/EC/ 1848 - A

Dated: 10 / 11 / 2022

Copy to:

1. The Joint Secretary, Ministry of Environment, Forest and Climate Change, Government of India, MoEF, Indira Paryavaran Bhawan, Jorbagh Rd, New Delhi-110003.
2. The Secretary to the Govt. of Assam, Environment & Forest Department, Dispur, Guwahati-6 Cum Member Secretary, SEIAA, Assam for favour of kind information.
3. The P.C.C.F, HoFF, Govt. of Assam, Panjabari, Guwahati-37 for favour of kind information.
4. The Divisional Forest Officer, Nagaon Forest Division, Dist. Nagaon, Assam for information & necessary action to ensure that all **Specific Conditions & General Condition** are complied with.
5. The Integrated Regional Office, Ministry of Environment, Forest & Climate Change, 4th Floor, Housefed Building, G.S. Road, Rukminigaon, Guwahati-22 for information.
6. Office Copy.



Member Secretary
SEIAA, Assam

Bamuninidam, Guwahati-21.
SCA

Signature Not Verified

Digitally signed by Shri Indreswar Kalita

Member Secretary

Date: 11/11/2022 1:29:37 PM

Page 7 of 7

ENVIRONMENTAL
CLEARANCE

PARIVESH

(Pro-Active and Responsive Facilitation by Interactive,
and Virtuous Environmental Single-Window Hub)



Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment
Authority(SEIAA), Assam)

To,

The Proprietor
SHRI IMDAD ALI

H.No 11, Purbanchal Path Mathura Nagar, Dispur, Guwahati-06, Assam -
781001

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity
under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC)
in respect of project submitted to the SEIAA vide proposal number
SIA/AS/MIN/248729/2021 dated 04 Apr 2022. The particulars of the environmental
clearance granted to the project are as below.

1. EC Identification No.	EC22B001AS149627
2. File No.	SEIAA. 2024/2022
3. Project Type	New
4. Category	B2
5. Project/Activity including Schedule No.	1(a) Mining of minerals
6. Name of Project	Langkaijuri Stone Mahal
7. Name of Company/Organization	SHRI IMDAD ALI
8. Location of Project	Assam
9. TOR Date	N/A

The project details along with terms and conditions are appended herewith from page
no 2 onwards.

Date: 26/12/2022

(e-signed)
Indreswar Kalita
Member Secretary
SEIAA - (Assam)

*Note: A valid environmental clearance shall be one that has EC identification
number & E-Sign generated from PARIVESH. Please quote identification
number in all future correspondence.*

This is a computer generated cover page.



This has reference to your application for Prior Environmental Clearance proposal no. SIA/AS/MIN/248729/2021 dated 04/03/2022 along with Form-1M, Mining Plan, D.F.O. letter, Google map with G.P.S. Co-ordinates and other relevant documents for Collection of Stone from "Langkaijuri Stone Mahal" under Nagaon Forest Division, Dist. Nagaon, Assam.

The quantity of Stone to be collected is:

Stone: 1,50,000cu.m. (One Lakh Fifty Thousand) only for 5 (Five) years @
30,000cu.m. (Thirty Thousand) only for per year.

Total Allotted Area: 5.0 Ha (Approach Road: 0.04 Ha)

The Stone shall be extracted only from the area of the GPS Co-ordinates as per Mining plan, mentioned below:

	<u>Longitude (East)</u>	<u>Latitude (North)</u>
<u>Mahal Area: (Area: 5.0 Ha.)</u>		
1.	E- 92°49'33.89"	N- 26°09'2.73"
2.	E- 92°49'30.04"	N- 26°08'58.75"
3.	E- 92°49'35.10"	N- 26°08'51.99"
4.	E- 92°49'39.67"	N- 26°08'56.19"
5.	E- 92°49'38.07"	N- 26°09'0.65"
<u>Approach Road: (Area: 0.04 Ha.)</u>		
1.	E- 92°49'38.30"	N- 26°08'52.20"
2.	E- 92°49'36.61"	N- 26°08'53.28"
3.	E- 92°49'36.40"	N- 26°08'53.10"
4.	E- 92°49'38.31"	N- 26°08'52.40"

The Stone shall be extracted Opencast Semi mechanized way from "Langkaijuri Stone Mahal" under Nagaon Forest Division, Dist. Nagaon, Assam.

The proposal was examined and processed in accordance with EIA Notification 2006 and its amendment thereof. The State Level Expert Appraisal Committee (SEAC), Assam examined the documents of the proposal for Extraction of Stone at its meeting held on 03/12/2022. Accordingly the application was discussed and thoroughly scrutinized by the SEAC and found that the project falls under I(a) and considered as B2Category of EIA Notification 2006 and subsequent amendments. The Committee recommended the project to the SEIAA, Assam for issuance of Environmental Clearance.

Based on the recommendation of the SEAC, the State Environment Impact Assessment Authority, Assam (SEIAA) considered the proposal in its meeting held on 13/12/2022 and accords Prior Environmental Clearance to the project as mentioned above under the provision of EIA notification 2006 and its subsequent amendments issued under Environment Protection Act 1986 subject to compliance of the following specific and general conditions.

The operational area of mining must not exceed the given Mining Area 5.0 Ha and there should not be any other area of mining contiguous to this. The project proponent is required to submit a declaration in writing to this effect before commencement of the work.

I. Specific Conditions

1. The legal status of the mining area remains unchanged.
2. The lease holder shall undertake adequate safeguard during collection of Stone and ensure that due to this activity, the hydro geological and ecological regime of the surrounding area shall not be affected. Regular monitoring of ground water level and quality shall be carried out around the mine lease area during the mining operation. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity; necessary corrective measures shall be carried out.
3. Manually/semi-mechanized way and low impact Excavation of Stone shall be undertaken *(as per mining plan)*.
4. Top soil shall be kept separately and use for refilling the excavated area.
5. Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter as at loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard. The status of implementation of measures taken shall be reported to SEIAA and work shall be completed before the start of mining.
6. Parking of vehicles shall not be made on public road.
7. The following measures are to be further implemented to reduce air pollution during transportation of mineral:
 - i. Roads shall be graded to mitigate the dust emission.
 - ii. Over filling of tippers and consequent spillage on the roads shall be avoided.
8. Measures should be taken to comply with the provisions laid under Noise Pollution (Regulation and Control) (Amendment) Rules, 2010 issued by the MoEF, Govt. of India.
9. Extraction shall be limited to day time only.
10. No Stone extraction shall be carried out in the safety zone of any bridge and / or embankment.
11. No Stone extraction shall be carried out in the vicinity of natural / manmade archaeological sites.
12. No wildlife habitat will be disturbed along with aquatic Flora & Fauna of the water bodies in the area.
13. **Green belt development shall be carried out in 20% of total extraction area either along road side considering CPCB guidelines with native tree species in the mining area.**
14. User agency shall not make any fresh approach road.
15. Appropriate mitigation measures shall be taken to prevent any kind of pollution. It shall be ensured that there is no leakage of oil and grease from the vehicles used for transportation.
16. Special Measures shall be adopted to prevent the nearby settlement from the impacts of extraction activities.
17. Dispensary facilities for first-aid shall be provided at site.

18. Occupational health surveillance program of the workers should be undertaken periodically.
19. Conservation measures shall be taken for protection of Flora & Fauna in the core and buffer zone.
20. It shall be ensured that collection of mining materials does not disturb or change the underlying soil characteristic of river bed/basin, where mining is carried out.
21. It shall be ensured that mining does not in any way disturb the water quality and flow pattern of nearby water bodies/Streams/ Rivers.
22. Conservation measures shall be taken for protection of flora & fauna in the core and buffer zone.
23. The fauna nesting area shall not be disturbed.
24. A maximum depth of 2 m has been allowed for Stone extraction & nonexistence of mining area within a radius of 500 mts from the proposed location is also discussed.
25. This Environmental Clearance is applicable only subject to receipt of necessary permit by the project proponent from the Competent Authority as per AMMC Rule, 2013 and subsequent amendment.
26. Any solid waste generated shall be disposed of as per Solid Waste Management Rules 2016. Segregation of bio degradable and non-biodegradable wastes shall be done at site and disposed of as per Solid Waste Management Rules 2016.
27. Drills shall either be operated with dust extractors or equipped with water injection system (wet drilling) to suppress air borne dust during drilling.
28. Only controlled blasting shall be practiced with necessary protective measures. Blasting operation shall be carried out only during the day time. The blasting shall be performed with all necessary care for protection of public, workers and property from fly rock & vibration risks.
29. Delay detonator shall be used and reduce the weight explosive per delay by decreasing hole size along with depth with proper spacing of holes shall be maintained. Random blasting is not allowed.
30. Blasting shall be done by license holder only.
31. Blasting pattern stemming, charging per hole should be designed on the basis field trial to control flying rocks. Delay detonators & shock tube initiation system blasting shall be used so as to reduce vibration & dust.
32. Safety and security of all members of public shall be sole responsibility of permit holder. Necessary musk, helmet, safety shoes etc. shall be provided to all workers working in the mining.
33. Blasting materials are to be collected from the authorized dealer with permission from District-Authority. Necessary precautionary measures must be taken so that no leakage of explosive occurs during storage & transportation.
34. Blasting shall be done in such a manner to prevent formation of big size boulders and thereby to minimize need for secondary blasting.
35. Adequate sirens, signals, posting of guards at strategic point blasting.

[Handwritten signature]

[Handwritten initials]

36. Anti-vibration devices shall be provided to vibrating tools/equipment to be used by workers during mining vibration shall be maintained within safe limit.
37. The project proponent shall strive to adopt zero waste mining concepts by reducing the quantum of reject through technological innovation or finding the use of fines through perspective buyers.
38. Top soil from the mining area shall be scrapped. Stacked separately, preserved and utilized for the plantation work.
39. Over burden, waste rock and non-saleable materials generated during prospecting or mining operations shall be stored separately in properly formed dumps on grounds earmarked. Slope & height of such dumps shall be restricted adequately to prevent any slippage of material. Such dumps should be properly terraced, stabilized and secured at toe to prevent the escape material that may cause degradation of the surrounding land or silting of water courses.
40. Overburden or other rejects shall be backfilled into the worked out quarry so far as possible with a view to restore the land to its original use or desired alternative use.
41. Used oil/ waste oil if any, generated shall be sold to the registered recyclers.
42. Mining operation shall be restricted to above ground water table and it shall be ensured that it does not intersect ground water table.
43. The project proponent shall ensure that no natural water course gets obstructed due to mining operation.
44. This Environmental Clearance is applicable only subject to receipt of mining permit by the project proponent from the Competent Authority as per AMMC Rule, 2013.
45. The blasting operation shall not be permitted below the ground level.
46. The blasting schedule for mining shall be prepared with the consultation concerned DFO. There should be a time gap between each blasting. The project proponents are responsible for any damage cause due to blasting operation during mining and bear the expenditure for loss of life & property. The blasting operation shall be performed in presence of Forest official.
47. Considerable quantity of overburden in the form soil and waste rock will yield which should be dumped systematically for backfilling as mentioned in the mining closure plan.

II. General Conditions:

1. All necessary statutory clearance shall be obtained from competent authority in connection with mining operation and copies of the same shall be submitted to SEIAA, Assam.
2. Special measures shall be adopted to prevent nearby settlements from the impacts of mining activities, maintenance of roads through which transportation of minor mineral is to be undertaken shall be carried out regularly.
3. User agency shall comply with the provisions framed under Assam Minor Mineral concession Rule 2013.
4. The SEIAA Assam may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.



FR

5. Concealing the factual date or failure to comply with any of the conditions mentioned above may result in withdrawals of this clearance and attract action under the provisions of Environment Protection Act. 1986.
6. The SEIAA, Assam may revoke or suspend the order, if implementation of any of the above condition is not found satisfactory. SEIAA, Assam will monitor the operation area time to time and project component shall be extended full support for the same.
7. The above conditions will be enforced inter-alia under the provision of water (Prevention & Control of Pollution) Act 1974, the air (Prevention & Control of Pollution) Act 1981, the Environment Protection Act 1986 and the public liability Insurance Act 1991 along with their amendments & rules.
8. The Environmental Clearance is valid for a period of 5 (Five) years only from the date of issue of this order.
9. Under Corporate Environment Responsibility (CER), appropriate budgetary provision shall be made as per MOEF&CC OM F. No. 22-65/2017-IA.III dated 01/05/2018 and 19/06/2018 commensurate with the total value of the work and to be spent for health improvement, education, drinking water facilities, and other socio-economic upliftment in and around the project area (radius of 10 KM from the project site) in consultation with a Committee having representatives from all sections of the population in the nearby villages and with information to the SEIAA on biannual basis.
10. The project proponent shall submit half yearly compliance reports in respect of the terms & conditions stipulated in this order to the SEIAA, Assam in soft copy (CD) & hard copy on 1st June and 1st Dec each year. The Compliance Report should also include the work done under CER as in 9 above and also under Green Belt development in the project area (to be supported with photographs and other documentary evidences in both cases).
11. The Divisional Forest Officer, Nagaon Forest Division, Dist. Nagaon, Assam shall realize the Royalty as per existing rate and requested to mount necessary surveillance to avoid occurrences of irregularities during the mining operation. The DFO is also requested to ensure that mining be allowed strictly within the approved mining site and not beyond the limit of the same. Approved boundary of the mining site shall have to be marked on the ground fixing permanent pillars. The DFO is also requested to ensure compliance by the proponent of all the terms and condition laid down in the EC.

26/12/2022
Member Secretary
SEIAA, Assam
Bamunimaidam, Guwahati-21.



GOVERNMENT OF ASSAM
DEPARTMENT OF ENVIRONMENT & FORESTS, ASSAM
OFFICE OF THE DIVISIONAL FOREST OFFICER, NAGAOON DIVISION NAGAON
Phone & Fax No. 03672-233610 Email ID: divo@assam.gov.in
Letter No. ENGL/FC/2020-21/Stone Mahal/2021

Date: 7/09/2021

To: Sri Imdad Ali,
S/o- Abdul Haque,
House No. 11, Purbanchal Path,
Mathura Nagar, Dispur,
Guwahati- 781005.

Subject: Provisional letter of Intent (LoI) Granting Mining Permit relating to Minor Mineral in respect of the Mining Area- Langkajuri Stone Mahal of 2020-21 under Doboka R. F. of Kathiatoli Range, Kathiatoli.

Reference: The CCF & Nodal Officer (FC Act), Assam O/o the Principal Chief Conservator of Forests & Head of Forest Force, Assam vide letter No. FG. 27/FCA/Proposal/Langkajuri Stone Mahal/Nagaon Divn. Dtd. 13/09/2020.

Subject to the appeal provision and other provisions of the Assam Minor Mineral concession Rules, 2013 and other applicable laws, and on approval received from the CCF & Nodal Officer (FC Act), Assam O/o the Principal Chief Conservator of Forests & Head of Forest Force, Assam, of your bid amount of Rs. 4,60,05,000/- (Rupees Four crores fifty six lakhs five thousand only) for Mining of 1,50,000 m³ of Stone for a period of 5 (Five) years from "Langkajuri Stone Mahal of 2020-21 under Doboka R. F. of Kathiatoli Range, Kathiatoli of the Nagaon Forest Division" is hereby accepted and you are requested to deposit the security amount within 15 (Fifteen) days from the date of issue of this provisional letter of Intent (LoI) and signing of Permit Agreement in FORM- MC- 4, as per provisions of AMMC Rule's 2013. An additional amount 10% on bid value has to be deposited towards "Mines-Minerals, Rehabilitation Dev. & Restoration Fund" & 10% District Mineral Foundation Trust (DMF), Nagaon on the actual royalty at the time of depositing the first money. Failing to comply with the above directions within the stipulated period, the provisional letter of Intent (LoI) will be cancelled without assigning any reason.

Details of Deposit:-

(a) 25% of annual dead rent as security deposit on bid value	= Rs.	23,00,250/-
(b) An additional amount equal 1 month's dead rent on bid value	= Rs.	7,66,750/-
Total	= Rs.	30,67,000/-

(Rupees Thirty lakhs sixty seven thousand) only and others relevant taxes.

Provisional Letter of Intent (LoI) issued to you being the selected highest bidder and you are asked to prepare/submit the following documents.

1. Prepare Mining Plan by the Director Geology & Mining Department.
2. Apply online through MoEF & CC web portal parivahan.mca.gov.in for Forest land diversion proposal under the Forest (Conservation) Act, 1980.
3. Apply for Environmental Clearance.
4. Prepare Environmental Management Plan.

Contd...2

Further, on received of the above mentioned information, the operation of Langkajuri Stone Mahal will be started.

So, you are asked to submit as stated above within 05 days of the receipt of this letter.

2.5.21

(B. Lachin, AFS)
Divisional Forest Officer,
Nagaon Division, Nagaon

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Copy to:-

The Director, Directorate of Geology & Mining Assam, Karolipara, Guwahati- 781 001 for favour of kind information and necessary action

(B. Lachin, AFS)
Divisional Forest Officer,
Nagaon Division, Nagaon

Memo No. FNGT/A/Langkajuri Stone Mahal/2021

Dated- 7/09/2021

Copy forwarded for favour of kind information and necessary action:-

1. The Principal Chief Conservator of Forests & Head of Forest Force, Assam, Panjabari, Guwahati- 37.
2. The Chief Conservator of Forests & Sectional Officer (P. C. Sec), Assam O/o the Principal Chief Conservator of Forests & Head of Forest Force, Assam, Panjabari, Guwahati- 37.
3. The Addl. Principal Chief Conservator of Forests (T. C. Sec), Assam, Jorhat.
5. The Conservator of Forests, North-east Assam Circle, Tezpur, Assam

(B. Lachin, AFS)
Divisional Forest Officer,
Nagaon Division, Nagaon



অসম চৰকাৰ
ভূ-বিজ্ঞান ভৱন
দাখিংগাওন

GOVERNMENT OF ASSAM
DIRECTORATE OF GEOLOGY AND MINING
BHUI-BIGYAN BHAWAN
DAKHINGAON,KAHILIPARA,GUWAHATI-19
Email: dgmaassam@gmail.com
dgma.assam.gov.in

No. GM/MM/86-B (40)/ Pt. VII/ 1004-05

Dtd. Guwahati, the 16th July, 2024.

From :- Shri N. Anand, IFS,
Director,
Directorate of Geology & Mining, Assam,
Kahilipara, Guwahati-19.

To :- The Divisional Forest Officer,
Nagaon Division, Nagaon.

Sub :- Approval of Mining Plan along with progressive Mine Closure Plan in respect of **Shiv Sankar Brick Earth Mining Permit Area** (Area- 0.37 hec.) under the Divisional Forest Officer, Nagaon Division submitted under Rule 51 & 52 of Assam Minor Mineral Concession Rules, 2013. **GPS Locations are:**

Latitude	Longitude
26° 12' 9.09" N	92° 31' 36.08" E
26° 12' 10.01" N	92° 31' 38.02" E
26° 12' 7.04" N	92° 31' 37.03" E
26° 12' 7.54" N	92° 31' 34.95" E

Ref :- Your letter No. FNGT/ B/ 58/ S. S. Brick Brick/ 2024/ 3747-49, dtd. 15.05.2024
The Mining Plan No. 5083

Sir/ Madam,

In exercise of the power conferred under Rule 51 & 52 of Assam Minor Mineral Concession Rules, 2013, the aforesaid Mining Plan (including Progressive Mine Closure Plan) prepared by RQP Dr. Abhijit Bora in favour of the project proponent/consenting applicant Oriental Engineers is approved subject to the conditions below:

- 1) The Map of the proposed Brick Earth Permit Area is based on the lease map/sketch submitted by the lessee and is applicable from the date of approval.
- 2) It is to clarify that the approval of aforesaid Mining Plan along with Progressive Mine Closure Plan is in accordance with the powers conferred by sub-section (1) of section 15 and section 23C of the Mines & Minerals (Development & Regulation) Act, 1957 (67 of 1957).
- 3) The GPS coordinates of the said Mining Plan are provided from the O/o the Divisional Forest Officer, Nagaon Division and the RQP prepared the mining plan keeping in view of the given coordinates. Any extraction outside the geo-coordinates will entail cancellation of this mining plan approval.
- 4) At any stage, if it is observed that the information furnished data incorporated in the documents are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.
- 5) This approval is restricted in respect of the proposals contained within the mining lease area and the maximum quantity of brick earth recommended for extraction is 3610 CuM. for 2 years (up to 1.5m depth) from the date of approval of EC to be used for construction purposes.

subject to all statutory compliance and clearances for the mining activities to be carried out within the mining leasehold area.)

- 6) The royalty is to be realised at 1.5 times the royalty as per Govt. Notification No. PEM.47/2018/16 dtd. 26th Oct., 2018 as it is applied for P.P. land when it is used for commercial purposes. The royalty is to be deposited at O/o Divisional Forest Office, Nagaon Division, Nagaon.
- 7) The Safety Berm of adequate dimension shall be kept at all the places in the vicinity of bench/escarpment. It shall be ensured that no excavation is to be made in the vicinity of the side wall/escarpment. Stability of benches/escarpments shall be closely monitored by the lessee. The DFO, Nagaon Division shall supervise the same, so that land subsidence or erosion does not happen.
- 8) Violations of any kind regarding the provisions of the Mining Plan including Progressive Mine Closure Plan will lead to the cancellation of the Mining Plan.
- 9) Environmental clearance must be obtained from the competent authority before execution except certain cases mentioned in Appendix IX of MOEF & CC Notification S.O. 1224(E) dated 28th March, 2020.
- 10) The Divisional Forest Officer, Nagaon Division, Nagaon should see to that the lease area does not fall under any RF, PRF, USF/ Un-classed Revenue Area, National Park, Wild Life Sanctuary, Bird Sanctuary etc. including Eco-sensitive zones and, in such cases, appropriate clearance shall be obtained from the competent authority.
- 11) Cutting of trees and blasting is not allowed under this Mining Plan.
- 12) The Divisional Forest Officer, Nagaon Division, Nagaon should ensure that no additional quantity is to be extracted.
- 13) Semi mechanized extraction shall be done.

Encl: Approved Mining Plan along with Progressive Mine Closure Plan.


16.7.24

Director,
Directorate of Geology & Mining, Assam.

No. GM/MM/86-B (40)/ Pt. VI/

Dtd. Guwahati, the

July, 2024

Copy to :- 1) The District Commissioner, Morigaon for information and necessary action.

2) Sri Prasanta Saikia, Chakialgaon, P.O. Chaparmukh, Dist. Nagaon, Assam

3) Office copy.


Director,
Directorate of Geology & Mining, Assam

MINING PLAN

5083

SHIV SANKAR BRICK EARTH
MINING PERMIT AREA
DISTRICT: NAGAON, ASSAM

(AREA: 0.37 HECTARES
MINING AREA: 0.37 HECTARES)

SUBMITTED
UNDER RULE - 52 (H) OF THE
ASSAM MINOR MINERAL
CONCESSION RULES 2010

APPROVAL FROM
DIRECTORATE OF
GEOLOGY & MINING
ASSAM

BY:

PRASANTA SAIKIA

FOR M/S. SHIV SANKAR BRICK FIELD

(PROP. RITUPARNA MEDHI)

VILL. CHAKIALGAON,

P.O. CHAPARMUKH

DIST. NAGAON, ASSAM

Abhijit Bora
Abhijit Bora, Ph.D.
Regd. No. DGM/RQP/02/2014

Prasanta Saikia
Sr. Geologist
Directorate of Geology & Mining,
Kahilipara, Guwahati-781004

26/6/2024

580

MINING PLAN

CHAPARMUKH- KOPII NODI

SAND PERMIT AREA PART-I (B)

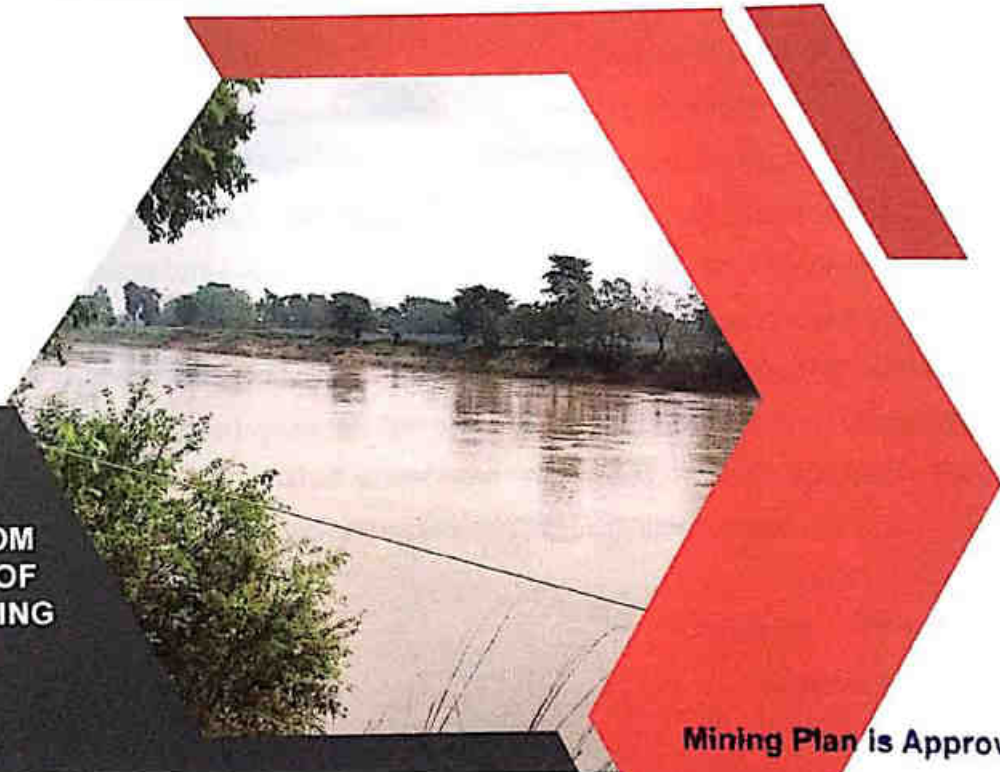
OF 2021-23 (REVENUE PORTION)

DISTRICT: NAGAON, ASSAM

(AREA ALLOTTED: 4.74 HECTARES

MINING AREA: 3.56 HECTARES)

APPROVAL FROM
DIRECTORATE OF
GEOLOGY & MINING
ASSAM



Mining Plan is Approved

SUBMITTED
UNDER RULE – 52 (1) OF THE
ASSAM MINOR MINERAL CONCESSION RULES 2013

Senior Geologist
Directorate of Geology & Mining
Govt. of Assam
Kahilipara, Ghy-19

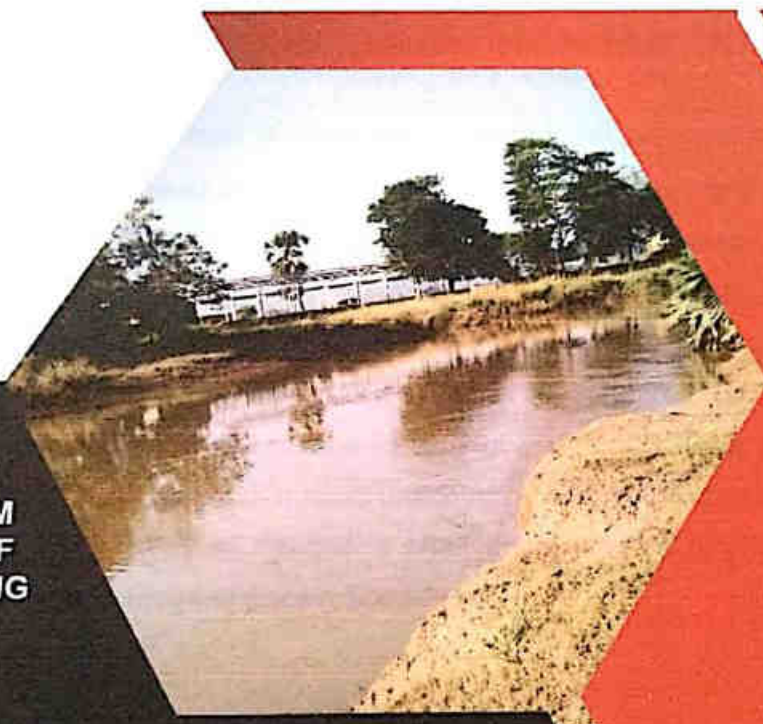
(Moon ch. Deke)

BY:
IMAMUL HAQUE
PADUMONIGAON,
P.O. KAKATIGAON,
DIST. NAGAON, ASSAM

Abhijit Bora, Ph.D.
Regd. No. DGM/RQP/02/2014

MINING PLAN
BARPANI SAND PERMIT
AREA NO. 1 (B) OF 2019-26 (REV. PORTION)
DISTRICT: NAGAON, ASSAM
(AREA ALLOTTED: 4.5 HECTARES
MINING AREA: 3.75 HECTARES)

**APPROVAL FROM
DIRECTORATE OF
GEOLOGY & MINING
ASSAM**

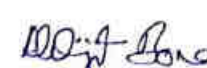


**SUBMITTED
UNDER RULE – 52 (1) OF THE
ASSAM MINOR MINERAL CONCESSION RULES 2013**

Mining Plan is Approved

Director
Directorate of Geology &
Mining Assam, Guwahati

BY:
IMAN ALI
PADUMANI GAON,
P.O. KAKATI GAON,
DIST. NAGAON, ASSAM


Abhijit Bora, Ph.D.
Regd. No. DGM/ROP/02/2014

MINING PLAN

**Chaparmukh- Kopili Nodi Sand Permit
Area- 1(C) (Rev. Portion) of 2018-20**

District: Nagaon, Assam

(Area allotted: 2.55 Hectares

Mining Area: 2.12 Hectares)

**Submitted
Under Rule – 52 (1) of the
Assam Minor Mineral Concession Rules 2013**

Abhijit Bora
Abhijit Bora, Ph.D.
Regd. No. DGM/RQP/02/2014

Mining Plan is Approved

11-5-18
Director,
Directorate of Geology &
Mining Assam, Guwahati-19

**By:
Iman Ali
Padumonigaon
P.O. Kakatigaon
P.S. Kampur
District: Nagaon (Assam)**

MINING PLAN

CHAPARMUKH-KOPILO NODI SAND PERMIT AREA PART-
1(C) IN (REV. PORTION) ON KOPILO RIVER BED
District : Nagaon, Assam

Allotted area: 2.50 Ha
Mineable area: 1.5 Ha
(Mineable Area within the given GPS)

Approval from
THE DIRECTORATE OF GEOLOGY &
MINING, ASSAM.


Prabai Kumar Goswami (M. Tech)
Regd. No. DGM/RQP/37/2018

Mining Plan is Approved


Sr. Geologist
Directorate of Geology & Mining, Assam
Kahilipara, Guwahati-19

SUBMITTED
UNDER RULE -52(1) OF THE
ASSAM MINOR MINERAL CONCESSION RULES, 2013.

SUBMITTED BY

*The Divisional Forest Officer
Nagaon Forest Division
Nagaon (Assam)*

15/5/2023

MINING PLAN

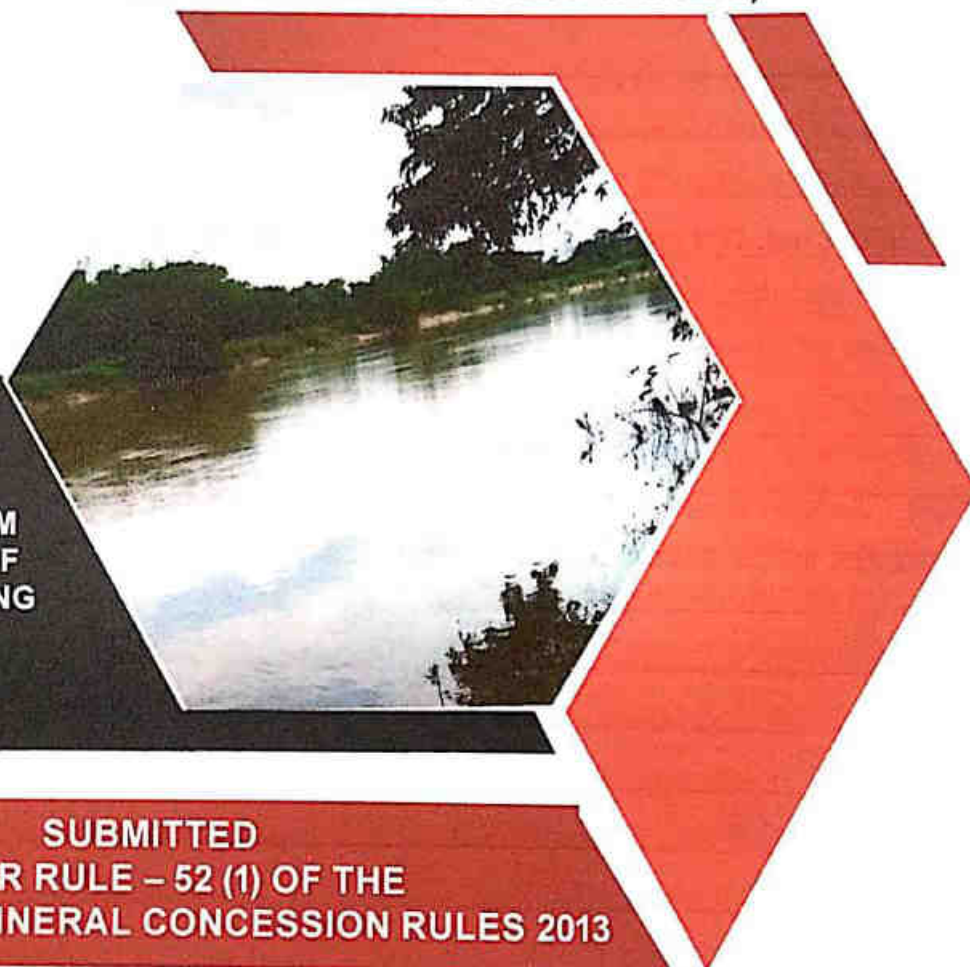
CHAPARMUKH- KOPI LI NODI SAND

PERMIT AREA- 1(B) (REV. PORTION)

OF 2016-18- 2018-20

DISTRICT: NAGAON, ASSAM
(AREA ALLOTTED: 4.60 HECTARES
MINING AREA: 3.84 HECTARES)

**APPROVAL FROM
DIRECTORATE OF
GEOLOGY & MINING
ASSAM**



**SUBMITTED
UNDER RULE – 52 (1) OF THE
ASSAM MINOR MINERAL CONCESSION RULES 2013**

Abinaya Bora
Abinaya Bora, Ph.D.
Regd. No. DGM/ROP/07/2014

BY:
IMAMUL HAQUE
PADUMONI GAON
P.O. KAKATIGAON
DISTRICT: NAGAON (ASSAM)

Mining Plan is Approved
7-18
Director,
Directorate of Geology &
Mining Assam, Guwahati-11

MINING PLAN

CHAPARMUKH-KOPI LI NODI BAMUNIJAN SILBHETA SAND
PERMIT AREA IN (REVENUE PORTION) ON KOPI LI RIVER
BED

District : Nagaon, Assam

Allotted area: 2.00 Ha
(Mineable Area within the given GPS)

Approval from
THE DIRECTORATE OF GEOLOGY &
MINING, ASSAM.


Prabal Kumar Goswami (M. Tech)
Regd. No. DGM/RQP/37/2018

Mining Plan is Approved


Senior Geologist
Directorate of Geology & Minin
Govt. of Assam
Kamrupa, Ghy-19

SUBMITTED
UNDER RULE -52(1) OF THE
ASSAM MINOR MINERAL CONCESSION RULES, 2013.

Project Proponent/Applicant:

The Divisional Forest Officer
Nagaon Forest Division
Nagaon (Assam)



অনিজ সম্পদ
অনুসন্ধান

GOVERNMENT OF ASSAM
DIRECTORATE OF GEOLOGY AND MINING
BHU-BIGYAN BHAWAN
DAKHINGAON, KAHILIPARA, GUWAHATI-19
Email: dgmassam@gmail.com
dgm.assam@gov.in

Dtd Guwahati, the 7th Feb., 2023.

No. GM/MM/86-B (40)/ PLX/ 8284-87

From

- Sri Ananda Kumar Das, ACS,
Director,
Directorate of Geology & Mining, Assam,
Kahilipara, Guwahati-19.

To

Sub

- The Divisional Forest Officer,
Nagaon Division, Nagaon.
- Approval of Mining Plan alongwith progressive Mine Closure Plan
In respect of **Dhansila Pahar Stone Contract Area No.1 (Reserve
Forest) (area 13.41 hec.) in Nagaon Dist** of Assam State submitted
under Rule 51 & 52 of Assam Minor Mineral Concession Rules, 2013

GPS Locations are attached herewith

Ref

- Your letter No FNGT/B/74(Genl.)/2023/611-14
The Mining Plan No. 4222

dtd. 20/1/2023

Sir,

In exercise of the power conferred under Rule 51 & 52 of Assam Minor Mineral Concession Rules, 2013, I hereby approved the aforesaid Mining Plan (including Progressive Mine Closure Plan) prepared by **R.Q.P. Prabal Goswami**. This approval is subjected to the following conditions :

- 1) The Mining Plan alongwith Progressive Mine Closure Plan is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
- 2) The proposals shown on the plates and/or given in the document is based on the lease map/sketch submitted by the lessee and is applicable from the date of approval.
- 3) It is clarified that the approval of aforesaid Mining Plan along with Progressive Mine Closure Plan does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Act, 1957 or the Minerals (Other than Atomic & Hydro Carbon Energy Minerals) Concession Rules, 2016 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under Mines Act, 1952 and Rule & Regulation made there under.
- 4) Directorate of Geology & Mining, Assam has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the precise area as furnished by the lessee.
- 5) At any stage, if it is observed that the information furnished data incorporated in the documents are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.
- 6) This approval is restricted in respect of the proposals contained therein within mining lease area and is applicable from the date of approval and maximum



- quantity for Boulder Rock recommended for extraction is 45,25,875 cubic metre for Mining Contract and 15,08,625 cubic metre for Govt. Permit for five years from the date of approval of EC to be used as construction materials subject to all statutory compliance and clearances for the mining activities to be carried out within the mining leasehold.
- 7) Adequate number of check dams and retaining walls shall be made & maintained in good conditions to prevent any anticipated detrimental impact on water regime.
 - 8) "Safety Berm" of adequate dimension shall be kept at all the places in the vicinity of statutory barrier, high bench/escarpment. It shall also be ensured that no excavation is to be made in the vicinity of any high side wall/escarpment. Stability of benches, escarpments shall be closely monitored. It is the responsibility of the lessee to ensure the stability of all the escarpments/side/benches, Lessee shall take all necessary steps time to time so as to ensure the stability of ground, which includes but not limited to reduction of the high side wall to safe and stable condition within first year itself.
 - 9) Sufficient safety Berm shall be maintained with respect to public road/village road.
 - 10) In case of patta land, a certificate from Revenue Authority should be obtained that the mining area is a non agricultural land.
 - 11) Violation of the provision of the Mining Plan including Progressive Mine Closure Plan shall liable to cancel the Mining Plan.
 - 12) Environmental clearance must be obtained from the competent authority before execution except certain cases mentioned in Appendix IX of MOEF & CC Notification S.O. 1224(E) dtd. 28th March, 2020.
 - 13) Divisional Forest Officer should confirm that the lease area does not fall in the National Park, Wild Life Sanctuary, Game Sanctuary, Bird Sanctuary etc including ecosensitive zone and does not affect the animals, birds and biodiversity in anyway.
 - 14) There is no provision of mechanized or semi mechanized mode of extraction in case of river sand mining.
 - 15) If necessary the permit/contract/lease holder may approach the competent authority for blasting permission.
 - 16) The Divisional Forest Officer should ensure that no additional quantity is to be extracted.
 - 17) NOC from DC is needed to obtain in case of earth cutting

Encl: Approved Mining Plan alongwith Progressive Mine Closure Plan.

Yours faithfully,

Director,
Directorate of Geology & Mining, Assam.

No. GM/MM/86-B (40)/Pt.X/

Copy to :- 1) The Deputy Commissioner, Nagaon

2) The Superintendent of Police, Nagaon

3) Office copy.

Dtd. Guwahati, the Feb., 2023.

- for kind information and
necessary action.
- for kind information
and necessary action.

Director,
Directorate of Geology & Mining, Assam

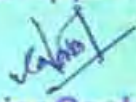
MINING PLAN
DHANSILA PAHAR STONE CONTRACT AREA No.1
(Proposed Reserve Forest Area)

District : Nagaon, Assam
Allotted Area : 13.41 Hectare
Approach road: 0.39 Hectares

Approval from
**THE DIRECTORATE OF GEOLOGY &
MINING, ASSAM.**


Prabal Kumar Goswami (M. Tech)
Regd. No. DGM/RQP/37/2018

Mining Plan is Approved


Senior Geologist
Directorate of Geology & Mining,
Kahilpara, Guwahati-19

SUBMITTED
UNDER RULE -52(1) OF THE
ASSAM MINOR MINERAL CONCESSION RULES, 2013.

SUBMITTED BY:

The Divisional Forest Officer,
Nagaon Forest Division
Nagaon, Assam



খনিজ সম্পদ
অন্বেষণ

GOVERNMENT OF ASSAM
DIRECTORATE OF GEOLOGY AND MINING
BHU-BIGYAN BHAWAN
DAKHINGAON, KAHILIPARA, GUWAHATI-19
Email: dgmassam@gmail.com
dgm.assam@gov.in

No. GM/MM/86-B (40)/ Pt.V/ 8435-38

Dtd. Guwahati, the 15th Feb., 2023.

From

- Sri Ananda Kumar Das, ACS,
Director,
Directorate of Geology & Mining, Assam,
Kahilipara, Guwahati-19.

To

- The Divisional Forest Officer,
Nagaon Division, Nagaon.

Sub

- Approval of Mining Plan alongwith progressive Mine Closure Plan No. 1397...
In respect of **Dhansila Pahar Stone Contract Area No.2 (Reserve Forest)** (area 12.74 hec.) in Nagaon Dist. of Assam State submitted under Rule 51 & 52 of Assam Minor Mineral Concession Rules, 2013.

GPS Locations are

1) 26°01'52.66"N -92°37'07.48"E	1) 26°01'46.51"N -92°37'09.58"E
2) 26°01'51.71"N -92°37'21.02"E	2) 26°01'47.03"N -92°01'47.03"E
3) 26°01'50.54"N -92°37'37.36"E	3) 26°01'42.67"N -92°37'01.11"E
4) 26°01'45.63"N -92°37'35.21"E	4) 26°01'42.95"N -92°37'00.89"E
5) 26°01'46.13"N -92°37'21.62"E	5) 26°01'45.63"N -92°36'52.75"E
6) 26°01'46.51"N -92°37'07.58"E	6) 26°01'53.29"N -92°36'48.85"E
	7) 26°01'53.39"N -92°36'49.18"E

Ref

- Your letter No ENG/B/74(Genl.)/2023/611-14
The Mining Plan No. 4251

dtd. 20/1/2023

Sir,

In exercise of the power conferred under Rule 51 & 52 of Assam Minor Mineral Concession Rules 2013, I hereby approved the aforesaid Mining Plan (including Progressive Mine Closure Plan) prepared by R.Q.P. Prabal Goswami. This approval is subjected to the following conditions:

- 1) The Mining Plan alongwith Progressive Mine Closure Plan is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
- 2) The proposals shown on the plates and/or given in the document is based on the lease map/sketch submitted by the lessee and is applicable from the date of approval.
- 3) It is clarified that the approval of aforesaid Mining Plan along with Progressive Mine Closure Plan does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Act, 1957 or the Minerals (Other than Atomic & Hydro Carbon Energy Minerals) Concession Rules, 2016 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under Mines Act, 1952 and Rule & Regulation made there under.
- 4) Directorate of Geology & Mining, Assam has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the precise area as furnished by the lessee.

- 5) At any stage, if it is observed that the information furnished data incorporated in the documents are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.
- 6) This approval is restricted in respect of the proposals contained therein within mining lease area and is applicable from the date of approval and maximum quantity for **Boulder Rock** recommended for extraction is **47,77,500 cubic metre for Mining Contract and 15,92,500 cubic metre for Govt. Permit for five years to be used as construction materials** subject to all statutory compliance and clearances for the mining activities to be carried out within the mining leasehold.
- 7) Adequate number of check dams and retaining walls shall to made & maintained in good conditions to prevent any anticipated detrimental impact on water regime.
- 8) "Safety Berm" of adequate dimension shall be kept at all the places in the vicinity of statutory barrier, high bench/escarpment. It shall also be ensured that no excavation is to be made in the vicinity of any high side wall/ escarpment. Stability of benches, escarpments shall be closely monitored. It is the responsibility of the lessee to ensure the stability of all the escarpments/side/benches, Lessee shall take all necessary steps time to time so as to ensure the stability of ground, which includes but not limited to reduction of the high side wall to safe and stable condition within first year itself.
- 9) Sufficient safety Berm shall be maintained with respect to public road/village road.
- 10) In case of patta land, a certificate from Revenue Authority should be obtained that the mining area is a non agricultural land.
- 11) Violation of the provision of the Mining Plan including Progressive Mine Closure Plan shall liable to cancel the Mining Plan.
- 12) Environmental clearance must be obtained from the competent authority before execution except certain cases mentioned in Appendix IX of MOEF & CC Notification S.O.1224(E) dtd. 28th March,2020.
- 13) Divisional Forest Officer should confirm that the lease area does not fall in the National Park, Wild Life Sanctuary, Game Sanctuary, Bird Sanctuary etc including ecosensitive zone and does not affect the animals, birds and biodiversity in anyway.
- 14) There is no provision of mechanized or semi mechanized mode of extraction in case of river sand mining.
- 15) If necessary the permit/contract/lease holder may approach the competent authority for blasting permission.
- 16) The Divisional Forest Officer should ensure that no additional quantity is to be extracted.
- 17) NOC from DC is needed to obtain in case of earth cutting

Encl: Approved Mining Plan alongwith Progressive Mine Closure Plan.

Yours faithfully,

Director,
Directorate of Geology & Mining, Assam.

Dtd. Guwahati, the Feb, 2023.

-for kind information and necessary action.
- for kind information and necessary action.

No. GM/MM/86-B (40)/Pt.VI/

Copy to :- 1) The Deputy Commissioner, Nagaon

2) The Superintendent of Police, Nagaon

3) Office copy.

Director,
Directorate of Geology & Mining, Assam.

MINING PLAN

DHANSILA PAHAR STONE CONTRACT AREA No.2
(Proposed Reserve Forest Area)

District : Nagaon, Assam
Allotted Area : 12.74 Hectare
Approach road: 0.67 Hectares

Approval from
THE DIRECTORATE OF GEOLOGY &
MINING, ASSAM.


Prabal Kumar Gogoi (M. Tech)
Regd. No. DGM/RQP/37/2018

Mining Plan is Approved


Joint Director
Directorate of Geology & Mining, Assam
Kahilpara, Guwahati-78

SUBMITTED
UNDER RULE -52(1) OF THE
ASSAM MINOR MINERAL CONCESSION RULES, 2013.

SUBMITTED BY:

The Divisional Forest Officer,
Nagaon Forest Division
Nagaon, Assam



যনিজ সঞ্চালন
জায়েগত

GOVERNMENT OF ASSAM
DIRECTORATE OF GEOLOGY AND MINING
BHU-BIGYAN BHAWAN
DAKHINGAON,KAHILIPARA,GUWAHATI-19
Email: dgmassam@gmail.com
dgmr.assam.gov.in

No. GM/MM/86-B (40)/PL. VII/ 967-71

Dtd. Guwahati, the 20th May 2022.

From - Sri Ananda Kumar Das, ACS,
Director,
Directorate of Geology & Mining, Assam,
Kahilipara, Guwahati-19.

To - The Divisional Forest Officer,
Nagaon Division, Nagaon.

Sub - Approval of Mining Plan alongwith progressive Mine Closure Plan
in respect of **Dholpahar Stone Mahal No. 1 (1.0 hec.)** in Nagaon, Dist. of
Assam State submitted under Rule 51 & 52 of Assam Minor Mineral
Concession Rules, 2013.

GPS Location: 1) N - 26°22'44.116" -E - 92°52'58.684"
2) N - 26°22'46.993" -E - 92°52'58.096"
3) N - 26°22'47.362" -E - 92°53'02.085"
4) N - 26°22'44.485" -E - 92°53'02.673"

Ref - No. FNGT/B/74 (Part-I)/Dhulpahar Stone Mahal No.1/2022/2486-88
dtd. 28/03/2022.

Sir,

In exercise of the power conferred under Rule 51 & 52 of Assam Minor Mineral
Concession Rules,2013, I hereby approved the aforesaid Mining Plan (including Progressive
Mine Closure Plan) prepared by **R.Q.P. Abhijit Bora**. This approval is subjected to the
following conditions:

- 1) The Mining Plan alongwith Progressive Mine Closure Plan is approved without
prejudice to any other law applicable to the mine area from time to time whether
made by the Central Government, State Government or any other authority and
without prejudice to any order or direction from any court of competent
jurisdiction.
- 2) The proposals shown on the plates and/or given in the document is based on
the lease map/sketch submitted by the lessee and is applicable from the date
of approval.
- 3) It is clarified that the approval of aforesaid Mining Plan along with Progressive
Mine Closure Plan does not in any way imply the approval of the Government
in terms of any other provision of Mines & Minerals (Development & Regulation)
Act,1957 or the Minerals (Other than Atomic & Hydro Carbon Energy Minerals)
Concession Rules,2016 and any other laws including Forest (Conservation)
Act,1980, Environment (Protection) Act,1986 or the rules made there under
Mines Act,1952 and Rule & Regulation made there under.
- 4) Directorate of Geology & Mining, Assam has not undertaken verification of the
mining lease boundary on the ground and does not undertake any
responsibility regarding correctness of the boundaries of the precise area as
furnished by the lessee.
- 5) At any stage, if it is observed that the information furnished data incorporated
in the documents are incorrect or misrepresent facts, the approval of the
document shall be revoked with immediate effect.

- 242
- 6) This approval is restricted in respect of the proposals contained therein within mining lease area and is applicable from the date of approval and maximum quantity of Stone recommended for extraction is 19030 cubic meter for one year to be used as construction material as well as road metals, subject to all statutory compliance and clearances for the mining activities to be carried out within the mining leasehold.
 - 7) Adequate number of check dams and retaining walls shall to made & maintained in good conditions to prevent any anticipated detrimental impact on water regime.
 - 8) "Safety Berm" of adequate dimension shall be kept at all the places in the vicinity of statutory barrier, high bench/escarpment. It shall also be ensured that no excavation is to be made in the vicinity of any high side wall/ escarpment. Stability of benches, escarpments shall be closely monitored. It is the responsibility of the lessee to ensure the stability of all the escarpments/side/benches, Lessee shall take all necessary steps time to time so as to ensure the stability of ground, which includes but not limited to reduction of the high side wall to safe and stable condition within first year itself.
 - 9) Sufficient safety Berm shall be maintained with respect to public road/village road.
 - 10) In case of patta land, a certificate from Revenue Authority should be obtained that the mining area is a nonagricultural land.
 - 11) Violation of the provision of the Mining Plan including Progressive Mine Closure Plan shall liable to cancel the Mining Plan.
 - 12) Environmental clearance must be obtained from the competent authority before execution.
 - 13) Divisional Forest Officer should confirm that the lease area does not fall in the National Park, Wild Life Sanctuary, Game Sanctuary, Bird Sanctuary etc including eco sensitive zone and does not affect the animals, birds and biodiversity in anyway.
 - 14) There is no provision of mechanized or semi mechanized mode of extraction in case of river sand mining.
 - 15) If necessary, the permit/contract/lease holder may approach the competent authority for blasting permission.
 - 16) The Divisional Forest Officer should ensure that no additional quantity is to be extracted.

Encl: Approved Mining Plan alongwith Progressive Mine Closure Plan.

Yours faithfully,


Director,
Directorate of Geology & Mining, Assam.

To. GM/MM/86-B (40)/Pt. VIII/

Dtd. Guwahati, the

May, 2022

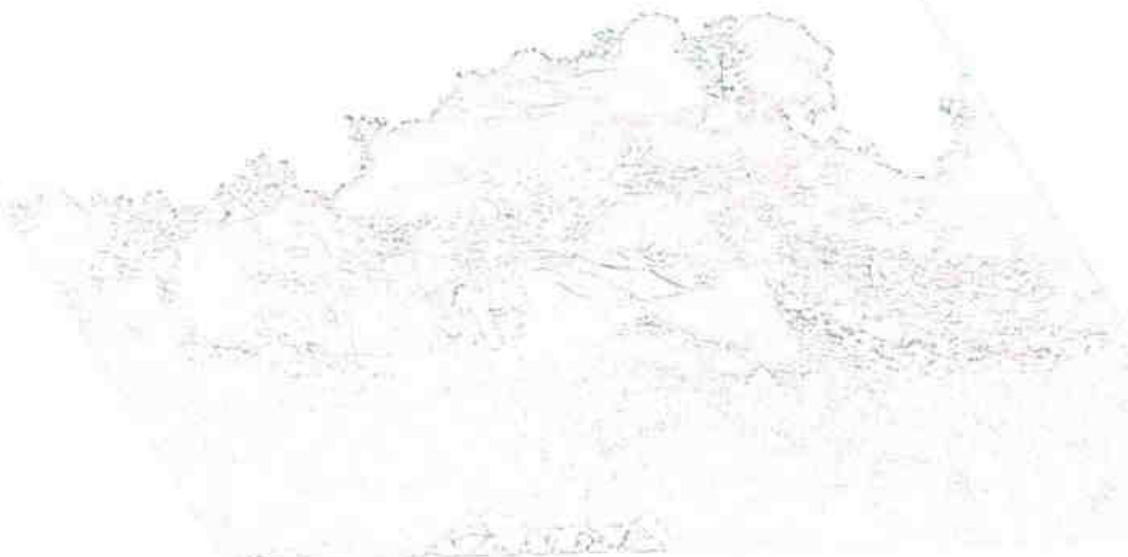
- Copy to :-
- 1) The Deputy Commissioner, Nagaon. -for kind information and necessary action.
 - 2) The Superintendent of Police, Nagaon -for kind information and necessary action.
 - 3) Biswajit Banik, ADP Road, Christanpatty, P.O. Nagaon, Dist. Nagaon, Assam.
 - 4) Office copy.

MINING PLAN

DHOLPAHAR STONE MAHAL NO.1

DISTRICT: NAGAON, ASSAM

**(AREA ALLOTTED: 1.0 HECTARES
SAFETY ZONE: 1.0 HECTARES)**



**SUBMITTED
UNDER RULE - 52 (1) OF THE
ASSAM MINOR MINERAL CONCESSION RULES 2013**

**APPROVAL FROM
DISTRICT OFFICE OF
GEOLOGY & MINING
ASSAM**

Mining Plan is Approved

(Signature)

**Senior Geologist
Directorate of Geology & Mining
Govt. of Assam
Kohilpara, Ghy-19**

BY:

(Moon Ch. Deka)

**BISWAJIT BANIK
ADP ROAD,
CHRISTANPATTY,
P.O. NAGAON**

DISTRICT: NAGAON (ASSAM)

(Signature)

Abhijit Bora, Ph.D.

Recd. No. DGM/RQP/02/2014



খনিজ সম্পদ
অন্বেষণ

GOVERNMENT OF ASSAM
DIRECTORATE OF GEOLOGY AND MINING
BHU-BIGYAN BHAWAN
DAKHINGAON, KAHILIPARA, GUWAHATI-19
Email: dgmassam@gmail.com
dgm.assam@gov.in

No. GM/MM/86-B (40)/ Pt.V/ 8439-42
From

Dtd Guwahati, the 15th March, 2023.

To ✓
Sub

- Sri Ananda Kumar Das, ACS,
Director,
Directorate of Geology & Mining, Assam,
Kahilipara, Guwahati-19.
- The Divisional Forest Officer,
Nagaon Division, Nagaon.
- Approval of Mining Plan alongwith progressive Mine Closure Plan
In respect of **Dhul Pahar Stone Contract Area (Reserve Forest) (area 5.22 hec.)** in **Nagaon Dist.** of Assam State submitted under Rule 51 & 52 of Assam Minor Mineral Concession Rules, 2013.

GPS Locations are attached.

Ref

- Your letter No FNGT/B/74(Genl.)/2023/611-14
The Mining Plan No. 4259

dtd. 20/1/2023

Sir,

In exercise of the power conferred under Rule 51 & 52 of Assam Minor Mineral Concession Rules, 2013, I hereby approved the aforesaid Mining Plan (including Progressive Mine Closure Plan) prepared by **R.Q.P. Prabal Goswami**. This approval is subjected to the following conditions :

- 1) The Mining Plan alongwith Progressive Mine Closure Plan is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
- 2) The proposals shown on the plates and/or given in the document is based on the lease map/sketch submitted by the lessee and is applicable from the date of approval.
- 3) It is clarified that the approval of aforesaid Mining Plan along with Progressive Mine Closure Plan does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Act, 1957 or the Minerals (Other than Atomic & Hydro Carbon Energy Minerals) Concession Rules, 2016 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under Mines Act, 1952 and Rule & Regulation made there under.
- 4) Directorate of Geology & Mining, Assam has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the precise area as furnished by the lessee.
- 5) At any stage, if it is observed that the information furnished data incorporated in the documents are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.

- 6) This approval is restricted in respect of the proposals contained therein within mining lease area and is applicable from the date of approval and maximum quantity for **Boulder Rock** recommended for extraction is **17,61,750 cubic metre for Mining Contract and 5,87,250 cubic metre for Govt. Permit for five years to be used as construction materials** subject to all statutory compliance and clearances for the mining activities to be carried out within the mining leasehold.
- 7) Adequate number of check dams and retaining walls shall be made & maintained in good conditions to prevent any anticipated detrimental impact on water regime.
- 8) "Safety Berm" of adequate dimension shall be kept at all the places in the vicinity of statutory barrier, high bench/escarpment. It shall also be ensured that no excavation is to be made in the vicinity of any high side wall/ escarpment. Stability of benches, escarpments shall be closely monitored. It is the responsibility of the lessee to ensure the stability of all the escarpments/side/benches, Lessee shall take all necessary steps time to time so as to ensure the stability of ground, which includes but not limited to reduction of the high side wall to safe and stable condition within first year itself.
- 9) Sufficient safety Berm shall be maintained with respect to public road/village road.
- 10) In case of patta land, a certificate from Revenue Authority should be obtained that the mining area is a non agricultural land.
- 11) Violation of the provision of the Mining Plan including Progressive Mine Closure Plan shall liable to cancel the Mining Plan.
- 12) Environmental clearance must be obtained from the competent authority before execution except certain cases mentioned in Appendix IX of MOEF & CC Notification S.O.1224(E) dtd. 28th March,2020.
- 13) Divisional Forest Officer should confirm that the lease area does not fall in the National Park, Wild Life Sanctuary, Game Sanctuary, Bird Sanctuary etc including ecosensitive zone and does not affect the animals, birds and biodiversity in anyway.
- 14) There is no provision of mechanized or semi mechanized mode of extraction in case of river sand mining.
- 15) If necessary the permit/contract/lease holder may approach the competent authority for blasting permission.
- 16) The Divisional Forest Officer should ensure that no additional quantity is to be extracted.
- 17) NOC from DC is needed to obtain in case of earth cutting

Encl: Approved Mining Plan alongwith Progressive Mine Closure Plan.

Yours faithfully,

Director,
Directorate of Geology & Mining, Assam.
Dtd. Guwahati, the March, 2023.

No. GM/MM/86-B (40)/Pt.V/

Copy to :- 1) The Deputy Commissioner, Nagaon

2) The Superintendent of Police, Nagaon

3) Office copy.

-for kind information and necessary action.
- for kind information and necessary action.

Director,
Directorate of Geology & Mining, Assam.

MINING PLAN

DHULPAHAR STONE CONTRACT AREA

(Propose Reserve Forest Area)

District : Nagaon, Assam
Allotted Area : 5.22 Hectare
Approach road: 0.19 Hectares

Approval from
**THE DIRECTORATE OF GEOLOGY &
MINING, ASSAM.**


Prabal Kumar Goswami (M. Tech)
Regd. No. DGM/RQP/37/2018

Mining Plan is Approved

SUBMITTED
UNDER RULE -52(1) OF THE
ASSAM MINOR MINERAL CONCESSION RULES, 2013.


Joint Director
Directorate of Geology & Mining, Assam
Kamtiara, Guwahati-781019

SUBMITTED BY:

**The Divisional Forest Officer,
Nagaon Forest Division
Nagaon, Assam**

MINING PLAN

**Jamunamukh Kopili Nodi Sand Permit
Area Part-1 (C) of 2018-20 (Rev. Portion)**

District: Nagaon, Assam

(Area allotted: 4.50 Hectares

Mining Area: 3.87 Hectares)

**Submitted
Under Rule – 52 (1) of the
Assam Minor Mineral Concession Rules 2013**

Abhijit Bora

Abhijit Bora. Ph.D.

Regd. No. DGM/RQP/02/2014

Mining Plan is Approved

12-3-18
Director

Directorate of Geology &
Mining Assam, Guwahati-19

By:

Pramud Kr. Patar

Vill: Borghat Lalung Gaon

P.O. Kampur (Teteliapara)

District: Nagaon (Assam)

MINING PLAN

JAMUNAMUKH KOPI LI NODI SAND

PERMIT AREA PART-1 (B) (REV. PORTION)

DISTRICT: NAGAON, ASSAM
(AREA ALLOTTED: 4.20 HECTARES
MINING AREA: 3.84 HECTARES)

**APPROVAL FROM
DIRECTORATE OF
GEOLOGY & MINING
ASSAM**

**SUBMITTED
UNDER RULE – 52 (1) OF THE
ASSAM MINOR MINERAL CONCESSION RULES 2013**

Mining Plan is Approved

**Director
Directorate of Geology &
Mining, Assam, Guwahati-1.**

BY:
BISHNU RAM BORDOLOI
JAMUNAMUKH KATHKATIAGAON,
P.O. JAMUNAMUK,
DIST. NAGAON, ASSAM

M. J. Boro
M. J. Boro, Ph.D.
Regd. No. DGM/RO/02/2014

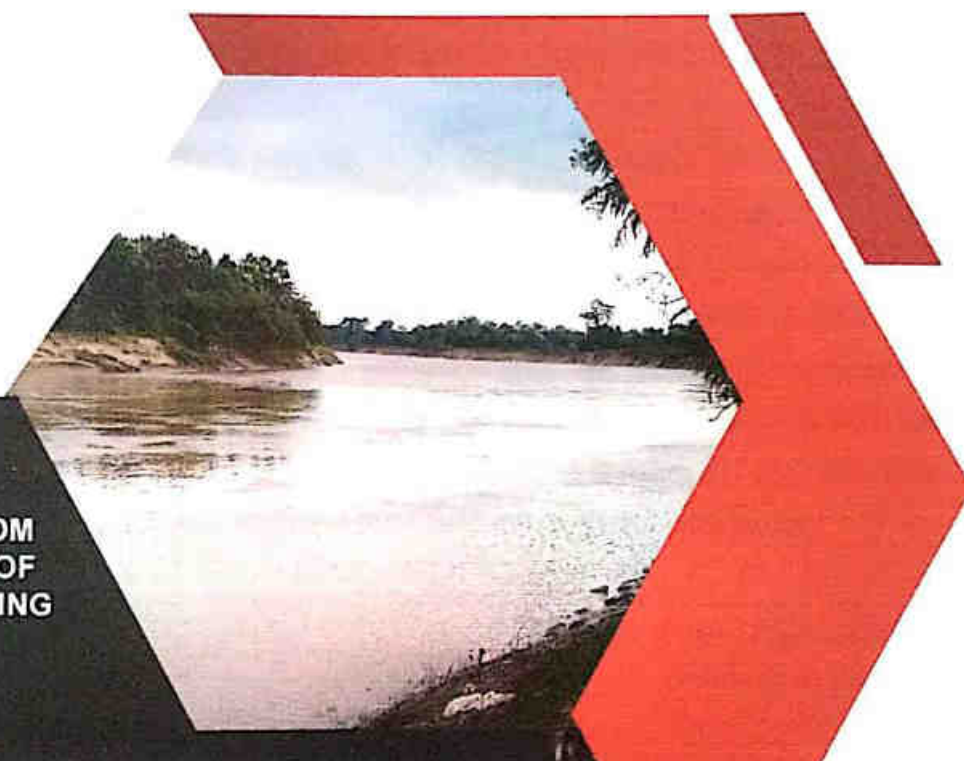
1865

MINING PLAN

JAMUNAMUKH KOPII NODII SAND PERMIT
AREA NO. 1 (A) (REVENUE PORTION) (2019-26)

DISTRICT: NAGAON, ASSAM

(AREA ALLOTTED: 23.5 HECTARES
MINING AREA: 22.6 HECTARES)



APPROVAL FROM
DIRECTORATE OF
GEOLOGY & MINING
ASSAM

SUBMITTED
UNDER RULE – 52 (1) OF THE
ASSAM MINOR MINERAL CONCESSION RULES 2013

Mining Plan is Approved

Am
Chief Geologist
Directorate of Geology & Mining, Assam
Kamrupa, Guwahati-78

BY:
BISHNU RAM BORDOLOI
JAMUNAMUKH KATHKATIAGAON VILLAGE,
P.O. JAMUNAMUK,
DIST. NAGAON, ASSAM

Abhijit Bora
Abhijit Bora, Ph.D.
Regd. No. DGM/RQP/02/2014

28/9/2020

601



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অনিজ সম্পদ
অন্বেষণত

GOVERNMENT OF ASSAM
DIRECTORATE OF GEOLOGY AND MINING
BHU-BIGYAN BHAWAN
DAKHINGAON, KAHILIPARA, GUWAHATI-19
Email: dgmassam@gmail.com
dgm.assam@gov.in

24/02/2023

No. GM/MM/86-B (40)/ PL.VI 7085-88

Dtd. Guwahati, the 22nd Feb., 2023.

From : - Sri Ananda Kumar Das, ACS,
Director,
Directorate of Geology & Mining, Assam,
Kahilipara, Guwahati-19.

To : - The Divisional Forest Officer,
Nagaon Division, Nagaon.

Sub : - Approval of Mining Plan alongwith progressive Mine Closure Plan
In respect of **Kafitoli Stone Mahal No.1 under Kothiatoli Range (area 1.0 hec.) in Nagaon Dist.** of Assam State submitted under Rule 51 & 52 of Assam Minor Mineral Concession Rules, 2013.

GPS Location:

- 1) 26°13'34.065"N -92°48'13.345" E
- 2) 26°13'34.237"N -92°48'17.665" E
- 3) 26°13'31.539"N -92°48'17.939" E
- 4) 26°13'31.368"N -92°48'13.618" E

Ref : -Your letter No FNGT/B/74(Part-II)/Kafitoli Stone Mahal No.1/2022/41
dtd. 4/1/2023 **The Mining Plan No. 4206**

Sir,
In exercise of the power conferred under Rule 51 & 52 of Assam Minor Mineral Concession Rules, 2013, I hereby approved the aforesaid Mining Plan (including Progressive Mine Closure Plan) prepared by **R.Q.P. Prabal Goswami**. This approval is subjected to the following conditions :

- 1) The Mining Plan alongwith Progressive Mine Closure Plan is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
- 2) The proposals shown on the plates and/or given in the document is based on the lease map/sketch submitted by the lessee and is applicable from the date of approval.
- 3) It is clarified that the approval of aforesaid Mining Plan along with Progressive Mine Closure Plan does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Act, 1957 or the Minerals (Other than Atomic & Hydro Carbon Energy Minerals) Concession Rules, 2016 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under Mines Act, 1952 and Rule & Regulation made there under.
- 4) Directorate of Geology & Mining, Assam has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the precise area as furnished by the lessee.
- 5) At any stage, if it is observed that the information furnished data incorporated in the documents are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.

- 6) This approval is restricted in respect of the proposals contained therein within mining lease area and is applicable from the date of approval and maximum quantity for **River Bed Stone** recommended for extraction is **42,500 cubic metre for eighteen months from the date of approval of EC to be used as construction materials** subject to all statutory compliance and clearances for the mining activities to be carried out within the mining leasehold.
- 7) Adequate number of check dams and retaining walls shall to made & maintained in good conditions to prevent any anticipated detrimental impact on water regime.
- 8) "Safety Berm" of adequate dimension shall be kept at all the places in the vicinity of statutory barrier, high bench/escarpment. It shall also be ensured that no excavation is to be made in the vicinity of any high side wall/escarpment. Stability of benches, escarpments shall be closely monitored .It is the responsibility of the lessee to ensure the stability of all the escarpments/side/benches, Lessee shall take all necessary steps time to time so as to ensure the stability of ground, which includes but not limited to reduction of the high side wall to safe and stable condition within first year itself.
- 9) Sufficient safety Berm shall be maintained with respect to public road/village road.
- 10) In case of patta land, a certificate from Revenue Authority should be obtained that the mining area is a non agricultural land.
- 11) Violation of the provision of the Mining Plan including Progressive Mine Closure Plan shall liable to cancel the Mining Plan.
- 12) Environmental clearance must be obtained from the competent authority before execution except certain cases mentioned in Appendix IX of MOEF & CC Notification S.O.1224(E) dtd. 28th March,2020.
- 13) Divisional Forest Officer should confirm that the lease area does not fall in the National Park, Wild Life Sanctuary, Game Sanctuary, Bird Sanctuary etc including ecosensitive zone and does not affect the animals, birds and biodiversity in anyway.
- 14) There is no provision of mechanized or semi mechanized mode of extraction in case of river sand mining.
- 15) Blasting is not allowed.
- 16) The Divisional Forest Officer should ensure that no additional quantity is to be extracted.
- 17) NOC from DC is needed to obtain in case of earth cutting

Encl: Approved Mining Plan alongwith Progressive Mine Closure Plan.

Yours faithfully,

Director,
Directorate of Geology & Mining, Assam.

No. GM/MM/86-B (40)/Pt.V/

Dtd.Guwahati,the

Feb.,2023.

Copy to :- 1) The Deputy Commissioner, Nagaon

-for kind information and necessary action.

2) The Superintendent of Police, Nagaon

- for kind information and necessary action.

3) Office copy.

1
Director,

Directorate of Geology & Mining, Assam.

4206

MINING PLAN

KAFITOLI STONE MAHAL No. 1 UNDER KOTHIATOLI RANGE

District : Nagaon, Assam
Allotted area: 1.0 Hectares

Approval from
THE DIRECTORATE OF GEOLOGY &
MINING, ASSAM.


Prabal Kumar Goswami (M. Tech)
Regd. No. DGM/RQP/37/2018

Mining Plan is Approved



Joint Director
Directorate of Geology & Mining, Assam
Kahilipara, Guwahati-19

**SUBMITTED
UNDER RULE -52(1) OF THE
ASSAM MINOR MINERAL CONCESSION RULES, 2013.**

SUBMITTED BY

*The Divisional Forest Officer
Nagaon Forest Division
Nagaon*

20/2/2023



অমিত সন্দিকট
অতিরিক্ত সচিব

GOVERNMENT OF ASSAM
DIRECTORATE OF GEOLOGY AND MINING
BHU-BIGYAN BHAWAN
DAKHINGAON, KAHILIPARA, GUWAHATI-19
Email: dymassam@gmail.com
dgm.assam.gov.in

No GM/MM/86-B (40)/ Pt VIII/
Dtd Guwahati, the Feb., 2023.
From - Sri Ananda Kumar Das, ACS,
Director,
Directorate of Geology & Mining, Assam,
Kahilipara, Guwahati-19.
To - The Divisional Forest Officer,
Nagaon Division, Nagaon.
Sub - Approval of Mining Plan alongwith progressive Mine Closure Plan
In respect of **Kathalguri Stone Contract Area No.1 (Reserve Forest)**
(area 10.00 hec.) in Nagaon Dist. of Assam State submitted under Rule
51 & 52 of Assam Minor Mineral Concession Rules, 2013.
GPS Locations are attached herewith:
Ref - Your letter No FNGT/B/74(Genl.)/2023/611-14 dtd. 20/1/2023
The Mining Plan No. 4224

Sir,

In exercise of the power conferred under Rule 51 & 52 of Assam Minor Mineral Concession Rules, 2013, I hereby approved the aforesaid Mining Plan (including Progressive Mine Closure Plan) prepared by **R.Q.P. Prabal Goswami**. This approval is subjected to the following conditions :

- 1) The Mining Plan alongwith Progressive Mine Closure Plan is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
- 2) The proposals shown on the plates and/or given in the document is based on the lease map/sketch submitted by the lessee and is applicable from the date of approval.
- 3) It is clarified that the approval of aforesaid Mining Plan along with Progressive Mine Closure Plan does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Act, 1957 or the Minerals (Other than Atomic & Hydro Carbon Energy Minerals) Concession Rules, 2016 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under Mines Act, 1952 and Rule & Regulation made there under.
- 4) Directorate of Geology & Mining, Assam has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the precise area as furnished by the lessee.
- 5) At any stage, if it is observed that the information furnished data incorporated in the documents are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.
- 6) This approval is restricted in respect of the proposals contained therein within mining lease area and is applicable from the date of approval and maximum

quantity for Boulder Rock recommended for extraction is 41,25,000 cubic metre for Mining Contract and 13,75,000 cubic metre for Govt. Permit for five years from the date of approval of EC to be used as construction materials subject to all statutory compliance and clearances for the mining activities to be carried out within the mining leasehold.

- 7) Adequate number of check dams and retaining walls shall to made & maintained in good conditions to prevent any anticipated detrimental impact on water regime
- 8) "Safety Berm" of adequate dimension shall be kept at all the places in the vicinity of statutory barrier, high bench/escarpment. It shall also be ensured that no excavation is to be made in the vicinity of any high side wall/escarpment. Stability of benches, escarpments shall be closely monitored. It is the responsibility of the lessee to ensure the stability of all the escarpments/side/benches, Lessee shall take all necessary steps time to time so as to ensure the stability of ground, which includes but not limited to reduction of the high side wall to safe and stable condition within first year itself.
- 9) Sufficient safety Berm shall be maintained with respect to public road/village road.
- 10) In case of patta land, a certificate from Revenue Authority should be obtained that the mining area is a non agricultural land.
- 11) Violation of the provision of the Mining Plan including Progressive Mine Closure Plan shall liable to cancel the Mining Plan.
- 12) Environmental clearance must be obtained from the competent authority before execution except certain cases mentioned in Appendix IX of MOEF & CC Notification S.O.1224(E) dtd. 28th March,2020.
- 13) Divisional Forest Officer should confirm that the lease area does not fall in the National Park, Wild Life Sanctuary, Game Sanctuary, Bird Sanctuary etc including ecosensitive zone and does not affect the animals, birds and biodiversity in anyway.
- 14) There is no provision of mechanized or semi mechanized mode of extraction in case of river sand mining.
- 15) If necessary the permit/contract/lease holder may approach the competent authority for blasting permission.
- 16) The Divisional Forest Officer should ensure that no additional quantity is to be extracted.
- 17) NOC from DC is needed to obtain in case of earth cutting

Encl: Approved Mining Plan alongwith Progressive Mine Closure Plan.

Yours faithfully,

Director,
Directorate of Geology & Mining, Assam.

No. GM/MM/86-B (40)/Pl.VIII/ 805/-54
Copy to :- 1) The Deputy Commissioner, Nagaon

2) The Superintendent of Police, Nagaon

3) Office copy.

Dtd. Guwahati, the 23rd Feb., 2023.
-for kind information and necessary action.
- for kind information and necessary action.

Director,
Directorate of Geology & Mining, Assam.

MINING PLAN
KATHALGURI STONE CONTRACT AREA No.1
(Reserve Forest Area)

District : Nagaon, Assam
Allotted Area : 10.00 Hectare
Approach road: 0.21 Hectare

Approval from
**THE DIRECTORATE OF GEOLOGY &
MINING, ASSAM.**


Prabal Kumar Goswami (M. Tech)
Regd. No. DGMROP/137/2011

Mining Plan is Approved


SUBMITTED
UNDER RULE -52(1) OF THE
ASSAM MINOR MINERAL CONCESSION RULES, 2013.

SUBMITTED BY:

Titika Dhaneswarin (Proprietor) Ojha,
Nkhangkakhon (Proprietor) Dhaneswarin,
Nkhangkakhon, Assam



অফিস স্পষ্ট
১৫-১৭৫৬

GOVERNMENT OF ASSAM
DIRECTORATE OF GEOLOGY AND MINING
BHU-DIGYAN BHAWAN
DARKHUNGAON, KAHILIPARA, GUWAHATI-19
Email: dgm.assam@govtmail.com
dgm.assam@govtmail.com

Dtd Guwahati, the Feb., 2023.

No. GM/MM/86-B (40Y PL VIII)

From - Sri Ananda Kumar Das, ACS,
Director,
Directorate of Geology & Mining, Assam,
Kahilipara, Guwahati-19.

To - The Divisional Forest Officer,
Nagaon Division, Nagaon.

Sub - Approval of Mining Plan alongwith progressive Mine Closure Plan
In respect of **Kathalguri Stone Contract Area No.2 (Reserve Forest)**
(area 10.00 hec.) in Nagaon Dist. of Assam State submitted under Rule
51 & 52 of Assam Minor Mineral Concession Rules, 2013.

GPS Locations are attached herewith:

Ref - Your letter No FNGT/B/74(Genl.)/2023/611-14 dtd. 20/1/2023
The Mining Plan No. 4223

Sir,

In exercise of the power conferred under Rule 51 & 52 of Assam Minor Mineral Concession Rules, 2013, I hereby approved the aforesaid Mining Plan (including Progressive Mine Closure Plan) prepared by **R.Q.P. Prabal Goswami**. This approval is subjected to the following conditions:

- 1) The Mining Plan alongwith Progressive Mine Closure Plan is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
- 2) The proposals shown on the plates and/or given in the document is based on the lease map/sketch submitted by the lessee and is applicable from the date of approval.
- 3) It is clarified that the approval of aforesaid Mining Plan along with Progressive Mine Closure Plan does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Act, 1957 or the Minerals (Other than Atomic & Hydro Carbon Energy Minerals) Concession Rules, 2016 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under Mines Act, 1952 and Rule & Regulation made there under.
- 4) Directorate of Geology & Mining, Assam has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the precise area as furnished by the lessee.
- 5) At any stage, if it is observed that the information furnished data incorporated in the documents are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.
- 6) This approval is restricted in respect of the proposals contained therein within mining lease area and is applicable from the date of approval and maximum

quantity for Boulder Rock recommended for extraction is 41,25,000 cubic metre for Mining Contract and 13,75,000 cubic metre for Govt. Permit for five years from the date of approval of EC to be used as construction materials subject to all statutory compliance and clearances for the mining activities to be carried out within the mining leasehold.

- 7) Adequate number of check dams and retaining walls shall to made & maintained in good conditions to prevent any anticipated detrimental impact on water regime.
- 8) "Safety Berm" of adequate dimension shall be kept at all the places in the vicinity of statutory barrier, high bench/escarpment. It shall also be ensured that no excavation is to be made in the vicinity of any high side wall/escarpment. Stability of benches, escarpments shall be closely monitored. It is the responsibility of the lessee to ensure the stability of all the escarpments/side/benches, Lessee shall take all necessary steps time to time so as to ensure the stability of ground, which includes but not limited to reduction of the high side wall to safe and stable condition within first year itself.
- 9) Sufficient safety Berm shall be maintained with respect to public road/village road.
- 10) In case of patta land, a certificate from Revenue Authority should be obtained that the mining area is a non agricultural land.
- 11) Violation of the provision of the Mining Plan including Progressive Mine Closure Plan shall liable to cancel the Mining Plan.
- 12) Environmental clearance must be obtained from the competent authority before execution except certain cases mentioned in Appendix IX of MOEF & CC Notification S.O. 1224(E) dtd. 28th March, 2020.
- 13) Divisional Forest Officer should confirm that the lease area does not fall in the National Park, Wild Life Sanctuary, Game Sanctuary, Bird Sanctuary etc including ecosensitive zone and does not affect the animals, birds and biodiversity in anyway.
- 14) There is no provision of mechanized or semi mechanized mode of extraction in case of river sand mining.
- 15) If necessary the permit/contract/lease holder may approach the competent authority for blasting permission.
- 16) The Divisional Forest Officer should ensure that no additional quantity is to be extracted.
- 17) NOC from DC is needed to obtain in case of earth cutting

Encl: Approved Mining Plan alongwith Progressive Mine Closure Plan.

Yours faithfully,


Director,

Directorate of Geology & Mining, Assam.

No. GM/MM/86-B (40)/Pt.VIII/ 8047-50
Copy to :- 1) The Deputy Commissioner, Nagaon

2) The Superintendent of Police, Nagaon

3) Office copy.

Dtd. Guwahati, the 23rd Feb., 2023.

-for kind information and necessary action.

- for kind information and necessary action.


Director,

Directorate of Geology & Mining, Assam.

MINING PLAN
KATHALGURI STONE CONTRACT AREA No.2
(Reserve Forest Area)

District : Nagaon, Assam
Allotted Area : 10.00 Hectare
Approach road: 0.35 Hectares

Approval from
THE DIRECTORATE OF GEOLOGY &
MINING, ASSAM.


Prabal Kumar Goswami (M. Tech)
Regd. No. DGMIRQP/37/2018

Mining Plan is Approved


Senior Geologist
Directorate of Geology & Mining
Govt. of Assam
Ghy-19

SUBMITTED
UNDER RULE -52(1) OF THE
ASSAM MINOR MINERAL CONCESSION RULES, 2013.

SUBMITTED BY:

The Divisional Forest Officer,
Nagaon Forest Division
Nagaon, Assam



অফিস স্পেশাল
৯৫-১৭৫৬

GOVERNMENT OF ASSAM
DIRECTORATE OF GEOLOGY AND MINING
BHU-DIGYAN BHAWAN
DARKHUNGAON, KAHILIPARA, GUWAHATI-19
Email: dgm.assam@govtmail.com
dgm.assam@govtmail.in

Dtd Guwahati, the Feb., 2023.

No. GM/MM/86-B (40)/ Pt.VIII/

From - Sri Ananda Kumar Das, ACS,
Director,
Directorate of Geology & Mining, Assam,
Kahilipara, Guwahati-19.

To - The Divisional Forest Officer,
Nagaon Division, Nagaon.

Sub - Approval of Mining Plan alongwith progressive Mine Closure Plan
In respect of **Kathalguri Stone Contract Area No.2 (Reserve Forest)**
(area 10.00 hec.) in Nagaon Dist. of Assam State submitted under Rule
51 & 52 of Assam Minor Mineral Concession Rules, 2013.

GPS Locations are attached herewith:

Ref - Your letter No FNGT/B/74(Genl.)/2023/611-14 dtd. 20/1/2023
The Mining Plan No. 4223

Sir,

In exercise of the power conferred under Rule 51 & 52 of Assam Minor Mineral Concession Rules, 2013, I hereby approved the aforesaid Mining Plan (including Progressive Mine Closure Plan) prepared by **R.Q.P. Prabal Goswami**. This approval is subjected to the following conditions:

- 1) The Mining Plan alongwith Progressive Mine Closure Plan is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
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- 3) It is clarified that the approval of aforesaid Mining Plan along with Progressive Mine Closure Plan does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Act, 1957 or the Minerals (Other than Atomic & Hydro Carbon Energy Minerals) Concession Rules, 2016 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under Mines Act, 1952 and Rule & Regulation made there under.
- 4) Directorate of Geology & Mining, Assam has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the precise area as furnished by the lessee.
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quantity for Boulder Rock recommended for extraction is 41,25,000 cubic metre for Mining Contract and 13,75,000 cubic metre for Govt. Permit for five years from the date of approval of EC to be used as construction materials subject to all statutory compliance and clearances for the mining activities to be carried out within the mining leasehold.

- 7) Adequate number of check dams and retaining walls shall to made & maintained in good conditions to prevent any anticipated detrimental impact on water regime.
- 8) "Safety Berm" of adequate dimension shall be kept at all the places in the vicinity of statutory barrier, high bench/escarpment. It shall also be ensured that no excavation is to be made in the vicinity of any high side wall/escarpment. Stability of benches, escarpments shall be closely monitored. It is the responsibility of the lessee to ensure the stability of all the escarpments/side/benches, Lessee shall take all necessary steps time to time so as to ensure the stability of ground, which includes but not limited to reduction of the high side wall to safe and stable condition within first year itself.
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- 11) Violation of the provision of the Mining Plan including Progressive Mine Closure Plan shall liable to cancel the Mining Plan.
- 12) Environmental clearance must be obtained from the competent authority before execution except certain cases mentioned in Appendix IX of MOEF & CC Notification S.O. 1224(E) dtd. 28th March, 2020.
- 13) Divisional Forest Officer should confirm that the lease area does not fall in the National Park, Wild Life Sanctuary, Game Sanctuary, Bird Sanctuary etc including ecosensitive zone and does not affect the animals, birds and biodiversity in anyway.
- 14) There is no provision of mechanized or semi mechanized mode of extraction in case of river sand mining.
- 15) If necessary the permit/contract/lease holder may approach the competent authority for blasting permission.
- 16) The Divisional Forest Officer should ensure that no additional quantity is to be extracted.
- 17) NOC from DC is needed to obtain in case of earth cutting

Encl: Approved Mining Plan alongwith Progressive Mine Closure Plan.

Yours faithfully,


Director,

Directorate of Geology & Mining, Assam.

No. GM/MM/86-B (40)/Pt.VIII/ 8047-50
Copy to :- 1) The Deputy Commissioner, Nagaon

2) The Superintendent of Police, Nagaon

3) Office copy.

Dtd. Guwahati, the 23rd Feb., 2023.

-for kind information and necessary action.

- for kind information and necessary action.


Director,

Directorate of Geology & Mining, Assam.

MINING PLAN
KATHALGURI STONE CONTRACT AREA No.2
(Reserve Forest Area)

District : Nagaon, Assam
Allotted Area : 10.00 Hectare
Approach road: 0.35 Hectares

Approval from
THE DIRECTORATE OF GEOLOGY &
MINING, ASSAM.


Prabal Kumar Goswami (M. Tech)
Regd. No. DGMIRQP/37/2018

Mining Plan is Approved


Senior Geologist
Directorate of Geology & Mining
Govt. of Assam
Ghy-19

SUBMITTED
UNDER RULE -52(1) OF THE
ASSAM MINOR MINERAL CONCESSION RULES, 2013.

SUBMITTED BY:

The Divisional Forest Officer,
Nagaon Forest Division
Nagaon, Assam

1796

MINING PLAN

BORPANI SAND PERMIT AREA NO.1 (A)

OF 2020-22 (REV. PORTION)

DISTRICT: NAGAON, ASSAM

(AREA ALLOTTED: 4.95 HECTARES
MINING AREA: 3.75 HECTARES)

APPROVAL FROM
DIRECTORATE OF
GEOLOGY & MINING
ASSAM

SUBMITTED
UNDER RULE – 52 (1) OF THE
ASSAM MINOR MINERAL CONCESSION RULES 2013

Mining Plan is Approved

B. K. NATH

Directorate of Geology & Mining, Assam

BY:
BIJU PHUKAN
AHOM GAON (WARD NO.1),
P.O. KAMPUR,
DIST. NAGAON, ASSAM

Abhijit Bora
Abhijit Bora, Ph.D.
Regd. No. DGM/RQP/02/2014

23/9/2020

614



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ANNEXURE-13

**Draft notification declaring Eco
sensitive Zone around the Laokhowa
Burhachapori Wildlife Sanctuary dated
27.11.2015**



भारत का राजपत्र The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)

PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं. 2555]

नई दिल्ली, मंगलवार, दिसम्बर 1, 2015/अग्रहायण 10, 1937

No. 2555]

NEW DELHI, TUESDAY, DECEMBER 1, 2015/AGRAHAYANA 10, 1937

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 27 नवम्बर, 2015

का.आ. 3236(अ).—निम्नलिखित प्रारूप अधिसूचना, जिसे केन्द्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उपधारा (2) के खंड (v) और खंड (xiv) तथा उपधारा (3) के साथ पठित उपधारा (1) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, जारी करने का प्रस्ताव करती है, पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) की अपेक्षानुसार, जनसाधारण की जानकारी के लिए प्रकाशित की जाती है, जिनके उससे प्रभावित होने की संभावना है ; और यह सूचना दी जाती है कि उक्त प्रारूप अधिसूचना पर, उस तारीख से, जिसको इस अधिसूचना वाले भारत के राजपत्र की प्रतियां जनसाधारण को उपलब्ध करा दी जाती हैं, साठ दिन की अवधि की समाप्ति पर या उसके पश्चात् विचार किया जाएगा ;

ऐसा कोई व्यक्ति, जो प्रारूप अधिसूचना में अंतर्विष्ट प्रस्तावों के संबंध में कोई आक्षेप या सुझाव देने में हितबद्ध है, इस प्रकार विनिर्दिष्ट अवधि के भीतर, केन्द्रीय सरकार द्वारा विचार किए जाने के लिए, आक्षेप या सुझाव सचिव, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, इंदिरा पर्यावरण भवन, जोर बाग रोड, अलीगंज, नई दिल्ली-110003 या ई-मेल पते: esz-mef@nic.in पर लिखित रूप में भेज सकेगा ।

प्रारूप अधिसूचना

लाखोवा और बुरहाचापोरी वन्यजीव अभयारण्य असम के क्रमशः नागांव और सोनितपुर जिलों में अक्षांश 26°28' उ. से 26°33' उ. के बीच तथा देशान्तर 92°35' पू. से 92°47' पू. के बीच क्रमशः 70.10 वर्ग किलोमीटर और 44.06 वर्ग किलोमीटर क्षेत्र में फैला हुआ है और काजीरंगा टाइगर रिजर्व के सुरक्षित क्षेत्रों को इसमें इसके पश्चात् अभयारण्य के रूप में अधिसूचित किया गया है ।

और लाखोवा और बुरहाचापोरी वन्यजीव अभयारण्य के सुरक्षित क्षेत्रों को दक्षिणी सीमा (सुतीरपर-गराजन-लाखोवा कस्ब) पर 26° 29' 54" उ. और 92°33'17" पूर्व से 26° 33'13" उ. और 92°47'45" पू. तक 1.86 कि.मी. और उत्तरी सीमा (ब्रह्मापुत्र नदी) पर 26°33'13" उत्तर और 92°47'45" पूर्व से 26° 29' 54" उ. और 92°33'17" पू. तक 7.14 किलोमीटर तक क्षेत्र को सुरक्षित और संरक्षित किया जाना आवश्यक है ।

और, पारिस्थितिकीय और पर्यावरणीय दृष्टि से पारिस्थितिकीय संवेदी जोन के रूप में लाखोवा और बुरहाचापोरी वन्यजीव अभयारण्य के संरक्षित क्षेत्र, जिसका विस्तार और सीमाएं इस अधिसूचना के पैरा 1 में विनिर्दिष्ट हैं, को संरक्षित और सुरक्षित करना आवश्यक है तथा उक्त पारिस्थितिकीय संवेदी जोन में उद्योगों के प्रचालन या प्रसंस्करण या उद्योगों के वर्गों का प्रचालन और प्रसंस्करण करने को प्रतिषिद्ध करना आवश्यक है ;

अतः, अब, केन्द्रीय सरकार, पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उपधारा (1), उपधारा (2) के खंड (v) और खंड (xiv) और उप धारा (3) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, असम राज्य में लाखोवा और बुरहाचापोरी वन्यजीव अभयारण्य की सीमा के चारों ओर 1.86 किलोमीटर से 7.14 किलोमीटर तक के विस्तारित क्षेत्र को लाखोवा और बुरहाचापोरी वन्यजीव अभयारण्य पारिस्थितिकीय संवेदी जोन (जिसे इसमें इसके पश्चात् पारिस्थितिकीय संवेदी जोन कहा गया है) के रूप में अधिसूचित करती है, जिसका विवरण निम्नानुसार है, अर्थात् :-

1. पारिस्थितिक संवेदी जोन का विस्तार और उसकी सीमाएं- (1) पारिस्थितिक संवेदी जोन लाखोवा और बुरहाचापोरी वन्यजीव अभयारण्य की सीमा के चारों ओर 1.86 किलोमीटर से 7.14 किलोमीटर तक विस्तारित 263.33 वर्ग किलोमीटर का उपांत क्षेत्र होगा ।

(2) लाखोवा और बुरहाचापोरी वन्यजीव अभयारण्य और उसके पारिस्थितिक संवेदी जोन का सीमा विवरण **उपाबंध I** पर उपाबद्ध है ।

(3) लाखोवा और बुरहाचापोरी वन्यजीव अभयारण्य भौगोलिक पोजिशनिंग प्रणाली के निदेशांक और उसके पारिस्थितिक संवेदी जोन अक्षांश व देशान्तर के साथ **उपाबंध 1क** पर है ।

(4) पारिस्थितिक संवेदी जोन का मानचित्र निर्देशांकों के साथ **उपाबंध II** पर है ।

(5) पारिस्थितिक संवेदी जोन में आने वाले ग्रामों की सूची **उपाबंध III** पर उपाबद्ध है ।

2. पारिस्थितिक संवेदी जोन के लिए आंचलिक महायोजना – (1) राज्य सरकार, पारिस्थितिक संवेदी जोन के प्रयोजनों के लिए राजपत्र में इस अधिसूचना के अंतिम प्रकाशन की तारीख से दो वर्ष की अवधि के भीतर, स्थानीय व्यक्तियों के परामर्श से, और इस अधिसूचना में दिए गए अनुबंधों का पालन करते हुए आंचलिक महायोजना तैयार करेगी ।

(2) आंचलिक महायोजना का अनुमोदन राज्य सरकार में सक्षम प्राधिकारी द्वारा किया जाएगा ।

(3) पारिस्थितिकीय संवेदी जोन के लिए आंचलिक महायोजना राज्य सरकार द्वारा ऐसी रीति जैसा इस अधिसूचना में विनिर्दिष्ट है और सुसंगत केन्द्रीय और राज्य विधियों तथा केन्द्रीय सरकार द्वारा जारी मार्गदर्शक सिद्धांतों, यदि कोई हो, के अनुरूप भी तैयार की जाएगी ।

(4) आंचलिक महायोजना सभी संबद्ध राज्य विभागों के साथ परामर्श से पर्यावरणीय और पारिस्थितिकीय विचारणों को उसमें एकीकृत करने के लिए तैयार की जाएगी, अर्थात्:-

- (i) पर्यावरण ;
- (ii) वन ;
- (iii) नगर विकास ;
- (iv) पर्यटन ;

- (v) नगरपालिक ;
- (vi) राजस्व ;
- (vii) कृषि ;
- (viii) असम राज्य राज्य प्रदूषण नियंत्रण बोर्ड,
- (ix) सिंचाई
- (x) लोक निर्माण विभाग

(5) आंचलिक महायोजना अनुमोदित विद्यमान भू-उपयोग, अवसंरचनात्मक और क्रियाकलापों पर कोई निर्बंधन अधिरोपित नहीं करेगी जब तक कि इस अधिसूचना में इस प्रकार विनिर्दिष्ट न हो और आंचलिक महायोजना सभी अवसंरचना और कार्यकलापों में दक्षता और पारिस्थितिकीय अनुकूलता का संवर्द्धन करेगी ।

(6) आंचलिक महायोजना में अनाच्छादित क्षेत्रों के जीर्णोद्धार, विद्यमान जल निकायों के संरक्षण, आवाह क्षेत्रों के प्रबंधन, जल-संभरण के प्रबंधन, भूतल जल के प्रबंधन, मृदा और नदी संरक्षण, स्थानीय समुदायों की आवश्यकताओं तथा पारिस्थितिकी और पर्यावरण से संबंधित ऐसे अन्य पहलूओं, जिन पर ध्यान देना आवश्यक है, के लिए उपबंध होंगे ।

(7) आंचलिक महायोजना सभी विद्यमान पूजा स्थलों, ग्रामों और नगरीय बंदोबस्तों, वनों के प्रकार और किस्मों, कृषि क्षेत्रों, ऊपजाऊ भूमि, हरित क्षेत्र जैसे उद्यान और उसी प्रकार के स्थान, उद्यान कृषि क्षेत्र, आर्किडों, झीलों और अन्य जल निकायों का अभ्यंकन करेगी ।

(8) आंचलिक महायोजना पारिस्थितिक संवेदी जोन में विकास को विनियमित करेगी जिससे कि स्थानीय समुदायों के पारिस्थितिक जन्य विकास और जीविका को सुनिश्चित किया जा सके ।

3. राज्य सरकार द्वारा किए जाने वाले उपाय-- राज्य सरकार इस अधिसूचना के उपबंधों को प्रभावी करने के लिए निम्नलिखित उपाय करेगी, अर्थात् :-

(1) **भू-उपयोग -** पारिस्थितिक संवेदी जोन में वनों, उद्यान-कृषि क्षेत्रों, कृषि क्षेत्रों, आमोद-प्रमोद के प्रयोजन के लिए चिन्हित किए गए पार्कों और खुले स्थानों का वाणिज्यिक और औद्योगिक संबद्ध विकास क्रियाकलापों के लिए उपयोग या संपरिवर्तन नहीं होगा :

परंतु पारिस्थितिक संवेदी जोन के भीतर कृषि भूमि का संपरिवर्तन के अधीन मानीटरी समिति की सिफारिश पर और राज्य सरकार के पूर्व अनुमोदन से, स्थानीय निवासियों की आवासीय जरूरतों को पूरा करने के लिए और पैरा 4 की सारणी के स्तंभ (2) के अधीन सूचीबद्ध क्रम संख्या 11,21,30,31 और 32 के क्रियाकलापों को पूरा करने के लिए अनुज्ञात होंगे, अर्थात्:-

- (i) पर्यटकों के अस्थायी अधिभोग हेतु पारिस्थितिक अनुकूल पर्यटन क्रियाकलापों के लिए तम्बू, काष्ठ गृह आदि जैसे पारिस्थितिक अनुकूल कुटीर ;
- (ii) विद्यमान सड़कों को चौड़ा और सुदृढ़ करना और नई सड़कों का सन्निर्माण
- (iii) प्रदूषण उत्पन्न न करने वाले लघु उद्योग;
- (iv) वर्षा जल संचय, और
- (v) कुटीर उद्योग, जिसके अंतर्गत ग्रामीण उद्योग, सुविधा भंडार और स्थानीय सुविधाएं सम्मिलित हैं ।

परंतु यह और कि राज्य सरकार के पूर्व अनुमोदन और संविधान के अनुच्छेद 244 तथा तत्समय प्रवृत्त विधि के उपबंधों के अनुपालन के बिना, जिसके अंतर्गत अनुसूचित जनजाति और अन्य परंपरागत वन निवासी (वन अधिकारों की मान्यता) अधिनियम, 2006 (2007 का 2) भी है, वाणिज्यिक या उद्योग विकास क्रियाकलापों के लिए जनजातीय भूमि का उपयोग अनुज्ञात नहीं होगा :

परंतु यह और भी कि पारिस्थितिक संवेदी जोन के भीतर भू-अभिलेखों में उपसंजात कोई त्रुटि मानीटरी समिति के विचार प्राप्त करने के पश्चात् राज्य सरकार द्वारा प्रत्येक मामले में एक बार संशोधित होगी और उक्त त्रुटि के संशोधन की भारत सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय को सूचना देनी होगी।

परंतु यह और भी कि उपर्युक्त त्रुटि का संशोधन में इस उप पैरा के अधीन यथा उपबंधित के सिवाय किसी भी दशा में भू-उपयोग का परिवर्तन सम्मिलित नहीं होगा।

परंतु यह और भी कि जिससे हरित क्षेत्र में जैसे वन क्षेत्र, कृषि क्षेत्र आदि में कोई पारिणामिक कटौती नहीं होगी और अनप्रयुक्त या अनुत्पादक कृषि क्षेत्रों में पुनः वनीकरण करने के प्रयास किए जाएंगे।

(2) **प्राकृतिक स्रोत** – सभी प्राकृतिक स्रोतों के आवाह क्षेत्र की पहचान की जाएगी और उनके संरक्षण और पुनर्नवीकरण के लिए योजनाओं को आंचलिक महायोजना में सम्मिलित किया जाएगा तथा राज्य सरकार द्वारा ऐसी रीति में मार्गदर्शक सिद्धांत तैयार किए जाएंगे जिससे कि इन क्षेत्रों में या इनके समीप विकास क्रियाकलापों को रोका जा सके जो ऐसे क्षेत्रों के लिए हानिकारक हैं।

(3) **पर्यटन** – (क) पारिस्थितिक संवेदी जोन के भीतर पर्यटन संबंधी क्रियाकलाप, जो आंचलिक महायोजना का भाग रूप में निम्नलिखित रूप में होंगे।

(ख) पर्यटन महायोजना, पर्यटन विभाग द्वारा वन और पर्यावरण विभाग, राज्य सरकार के परामर्श से तैयार होगी।

(ग) पर्यटन संबंधी क्रियाकलाप निम्नलिखित के अधीन विनियमित होंगे, अर्थात् :-

(i) पारिस्थितिक संवेदी जोन के भीतर सभी नए पर्यटन क्रियाकलापों या विद्यमान पर्यटन क्रियाकलापों का विस्तार केन्द्र सरकार के, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय द्वारा जारी मार्गनिर्देशों तथा राष्ट्रीय व्याघ्र संरक्षण प्राधिकरण द्वारा जारी पारि-पर्यटन (समय-समय पर यथा संशोधित) मार्गनिर्देशों के अनुसार होगा जिसमें पारिस्थितिक पर्यटन, पारिस्थितिक शिक्षा और पारिस्थितिक विकास को महत्व दिया जाएगा ;

(ii) लाखोवा और बुरहाचापोरी वन्यजीव अभयारण्य की सीमा से एक किलोमीटर के भीतर नए होटलों और विश्रामस्थलों के नए सन्निर्माण की अनुज्ञा पारिस्थितिक अनुकूल पर्यटन क्रियाकलापों से संबंधित पर्यटकों के अस्थायी अधिभोग के लिए आवास के सिवाए नहीं दी जाएगी ;

परंतु यह कि संरक्षित क्षेत्र की सीमा से 1 किलोमीटर की दूरी के आगे पारिस्थितिक संवेदी जोन तक नए होटलों और रिसार्टों को स्थापित करने के लिए अनुज्ञा पूर्व परिभाषित और पदाभिहित क्षेत्रों में केवल पर्यटन महायोजना के अनुसार पारिस्थितिक पर्यटन सुविधाओं के लिए दी जाएगी।

(iii) आंचलिक महायोजना का अनुमोदन किए जाने तक, पर्यटन के लिए विकास और विद्यमान पर्यटन क्रियाकलापों के विस्तार को वास्तविक स्थल विनिर्दिष्ट संवीक्षा तथा मानीटरी समिति की सिफारिश पर आधारित संबंधित विनियामक प्राधिकारियों द्वारा अनुज्ञात किया होगा।

(4) **नैसर्गिक विरासत** -- पारिस्थितिक संवेदी जोन में महत्वपूर्ण नैसर्गिक विरासत के सभी स्थलों जैसे सभी जीन कोश आरक्षित क्षेत्र, शैल विरचनाएं, जल प्रपातों, झरनों, घाटी मार्गों, उपवनों, गुफाएं, स्थलों, भ्रमण, अश्वरोहण, प्रपातों आदि की पहचान की जाएगी और उन्हें संरक्षित किया जाएगा तथा उनकी सुरक्षा और संरक्षा के लिए इस अधिसूचना के प्रकाशन की तारीख से छह मास के भीतर, उपयुक्त योजना बनाएगी और ऐसी योजना जोनल मास्टर प्लान का भाग होगा।

(5) **मानव निर्मित विरासत स्थल** - पारिस्थितिक संवेदी जोन में भवनों, संरचनाओं, शिल्प-तथ्य, ऐतिहासिक, कलात्मक और सांस्कृतिक महत्व के क्षेत्रों की पहचान करनी होगी और इस अधिसूचना के प्रकाशन की तारीख से छह माह के भीतर उनके संरक्षण की योजनाएं तैयार करनी होगी तथा आंचलिक महायोजना में सम्मिलित की जाएगी।

(6) **ध्वनि प्रदूषण** -- पारिस्थितिक संवेदी जोन में ध्वनि प्रदूषण के नियंत्रण के लिए राज्य सरकार का पर्यावरण विभाग वायु (प्रदूषण निवारण और नियंत्रण) अधिनियम, 1981 (1981 का 14) और उसके अधीन बनाए गए नियमों के उपबंधों के अनुसरण में मार्गदर्शक सिद्धांत और विनियम तैयार करेगा ।

(7) **वायु प्रदूषण** -- पारिस्थितिक संवेदी जोन में, वायु प्रदूषण के नियंत्रण के लिए राज्य सरकार या असम राज्य राज्य प्रदूषण नियंत्रण बोर्ड का पर्यावरण विभाग वायु (प्रदूषण निवारण और नियंत्रण) अधिनियम, 1981 (1981 का 14) और उसके अधीन बनाए गए नियमों के उपबंधों के अनुसरण में मार्गदर्शक सिद्धांत और विनियम तैयार करेगा ।

(8) **बहिस्त्राव का निस्सारण** -- पारिस्थितिक संवेदी जोन में उपचारित बहिस्त्राव का निस्सारण जल (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1974 (1974 का 6) और उसके अधीन बनाए गए नियमों के उपबंधों के अनुसार होगा ।

(9) **ठोस अपशिष्ट** -- ठोस अपशिष्टों का निपटान निम्नलिखित रूप में होगा -

- (i) पारिस्थितिक संवेदी जोन में ठोस अपशिष्टों का निपटान भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की समय-समय पर यथा संशोधित अधिसूचना सं. का.आ. 908(अ), तारीख 25 सितंबर, 2000 नगरपालिक ठोस अपशिष्ट (प्रबंध और हथालन) नियम, 2000 के उपबंधों के अनुसार किया जाएगा ;
- (ii) स्थानीय प्राधिकरण जैव निम्नीकरणीय और अजैव निम्नीकरणीय संघटकों में ठोस अपशिष्टों के संपृथक्करण के लिए योजनाएं तैयार करेंगे ;
- (iii) जैव निम्नीकरणीय सामग्री को अधिमानतः खाद बनाकर या कृमि खेती के माध्यम से पुनःचक्रित किया जाएगा ;
- (iv) अकार्बनिक सामग्री का निपटान पारिस्थितिक संवेदी जोन के बाहर पहचान किए गए स्थल पर किसी पर्यावरणीय स्वीकृत रीति में होगा और पारिस्थितिक संवेदी जोन में ठोस अपशिष्टों को जलाना या भष्मीकरण अनुज्ञात नहीं होगा ।

(10) **जैव चिकित्सीय अपशिष्ट**- पारिस्थितिक संवेदी जोन में जैव चिकित्सीय अपशिष्टों का निपटान भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की समय-समय पर यथासंशोधित अधिसूचना सं.का.आ.630 (अ) तारीख 20 जुलाई, 1998 द्वारा प्रकाशित जैव चिकित्सीय अपशिष्ट (प्रबंध और हथालन) नियम, 1998 के उपबंधों के अनुसार किया जाएगा ।

(11) **यानीय परिवहन** - परिवहन की यानीय गतिविधि प्राणियों के अनुकूल रीति से विनियमित की जाएगी और इस संबंध में आंचलिक महायोजना में विशेष उपबंध सम्मिलित किए जाएंगे और जब तक ऐसी आंचलिक महायोजना राज्य सरकार के सक्षम प्राधिकारी द्वारा तैयार और अनुमोदित नहीं किया जाता है । मानीटरी समिति सुसंगत अधिनियमों और उसके अधीन बनाए गए नियमों और विनियमों के अधीन यानीय गतिविधियों के अनुपालन को मानीटर करेगी ।

(12) **औद्योगिक इकाईयां** --

(क) प्रस्तावित पारिस्थितिक संवेदी जोन के भीतर नए काष्ठ आधारित उद्योगों के किसी स्थापन की अनुज्ञा विधि के अनुसार स्थापित विद्यमान काष्ठ आधारित उद्योगों के सिवाए नहीं दी जाएगी ।

(ख) प्रस्तावित पारिस्थितिक संवेदी जोन के भीतर जल, वायु, मृदा, ध्वनि प्रदूषण कारित करने वाले किसी नए उद्योग के किसी प्रस्थापन की अनुज्ञा नहीं दी जाएगी ।

4. पारिस्थितिक संवेदी जोन में प्रतिषिद्ध और विनियमित क्रियाकलापों की सूची – पारिस्थितिक संवेदी जोन में सभी क्रियाकलाप पर्यावरण (संरक्षण) अधिनियम, 1986 और उसके तहत बनाये गये नियमों के उपबंधों द्वारा शासित होंगे और नीचे दी गई तालिका में विनिर्दिष्ट रीति में विनियमित होंगे, अर्थात् :-

सारणी		
क्रम सं.	क्रियाकलाप	टीका-टिप्पणी
(1)	(2)	(3)
प्रतिषिद्ध क्रियाकलाप :		
1.	वाणिज्यिक खनन, पत्थर उत्खनन और अपघर्षण इकाईयां	(क) नए खनन (लघु और वृहत खनिज), पत्थर उत्खनन और तोड़ने की इकाईयों को व्यक्तिगत उपभोग के लिए मकानों के सन्ननिर्माण या मरम्मत के लिए और भूमि को खोदने या मकानों के लिए देसी टाइल्स या ईंटों के निर्माण के प्रतिनिर्देश से स्थानीय निवासियों के सदभाविक घरेलू आवश्यकताओं के सिवाए प्रतिषिद्ध किया जाएगा ; (ख) खनन संक्रियाएं, माननीय उच्चतम न्यायालय की रिट याचिका (सिविल) सं. 1995 का 202 टी.एन. गौडाबर्मन थिरूमूलपाद बनाम भारत सरकार के मामले में आदेश तारीख 4.8.2006 और रिट याचिका (सी) सं. 2012 का 435 गोवा फाउंडेशन बनाम भारत सरकार के मामले में तारीख 21.04.2014 के अंतरिम आदेश के अनुसरण में सर्वदा प्रचालन होगा ।
2.	आरा मशीनों की स्थापना	पारिस्थितिक संवेदी जोन के भीतर नई और विद्यमान आरा मशीनों का विस्तार अनुज्ञात नहीं होगा ।
3.	किसी परिसंकटमय पदार्थों का उपयोग या उत्पादन	लागू विधियों के अनुसार प्रतिषिद्ध (अन्यथा उपबंधित के सिवाय) ।
4.	जल या वायु या मृदा या ध्वनि प्रदूषण कारित करने वाले उद्योगों की स्थापना	पारिस्थितिक संवेदी जोन के भीतर नए और विद्यमान प्रदूषण कारित करने वाले का विस्तार अनुज्ञात नहीं होगा ।
5.	नए वृहत तापीय और जल-विद्युतीय परियोजना	लागू विधियों के अनुसार प्रतिषिद्ध (अन्यथा उपबंधित के सिवाय) ।
6.	जलावन लकड़ी का वाणिज्यिक उपयोग	लागू विधियों के अनुसार प्रतिषिद्ध (अन्यथा उपबंधित के सिवाय) ।
7.	पर्यटन से संबंधित क्रियाकलाप जैसे रोप-वे, गर्म वायु गुबारों आदि द्वारा अभ्यारण्य क्षेत्र के ऊपर से उड़ना जैसे क्रियाकलाप करना	लागू विधियों के अनुसार प्रतिषिद्ध (अन्यथा उपबंधित के सिवाय) ।
8.	प्राकृतिक जल निकायों या भू-क्षेत्र में अनपचारित बहिस्स्राव और ठोस अपशिष्टों का निस्तारण	लागू विधियों के अनुसार प्रतिषिद्ध (अन्यथा उपबंधित के सिवाय) ।
9.	मछली पकड़ना	बुरहाचापोरी वन्यजीव अभयारण्य (ब्रह्मपुत्र नदी में) की उत्तरी सीमा से 1000 मीटर तक कोई भी मछली पकड़ने संबंधी वाणिज्यिक गतिविधि नहीं होगी ।
10.	यंत्रित नाव को चलाना	पीएस की सीमा से 1000 मीटर के भीतर कोई वाणिज्यिक यंत्रित नाव नहीं चलाई जाएगी । संबद्ध प्राधिकारी द्वारा नियमित मानीटर के साथ केवल रजिस्ट्रीकृत वाणिज्यिक यंत्रित नाव को ही पीएस की सीमा से 1000 से 6000 मीटर के भीतर चलाने की अनुज्ञा दी जानी चाहिए ।
विनियमित क्रियाकलाप		
11.	होटल और विश्राम स्थलों का स्थापन	पारिस्थितिक अनुकूल पर्यटन क्रियाकलापों से संबंधित पर्यटकों के अस्थायी

		अधिभोग के लिए आवास के सिवाय संरक्षित क्षेत्र की सीमा से 1 किलोमीटर के भीतर किसी नए वाणिज्यिक होटलों और विश्रामस्थलों की अनुज्ञा नहीं दी जाएगी। लेकिन एक किलोमीटर से परे और पारिस्थितिकीय संवेदी जोन की सीमा तक; सभी नए पर्यटन संबंधी कार्यकलाप अथवा मौजूदा, कार्यकलापों के विस्तार पर्यटन महायोगना के अनुसार होंगे।
12.	सन्निर्माण क्रियाकलाप	(क) संरक्षित क्षेत्र की सीमा से एक किलोमीटर के भीतर किसी भी प्रकार के नए वाणिज्यिक सन्निर्माण की अनुज्ञा नहीं दी जाएगी। परन्तु स्थानीय लोगों को पैरा 3 के उप पैरा (1) में सूचीबद्ध क्रियाकलापों सहित अपने रिहायशी उपयोग के लिए अपनी भूमि पर सन्निर्माण करने की अनुज्ञा दी जाएगी। परन्तु यह और कि प्रदूषण न कारित करने वाले लघु उद्योगों से संबंधित सन्निर्माण क्रियाकलापों को विनियमित किया जाएगा और लागू नियमों और विनियमों, यदि कोई हैं, के अनुसार सक्षम प्राधिकारी से पूर्व अनुज्ञा के साथ न्यूनतम तक रखा जाएगा। (ख) इसके अतिरिक्त पारिस्थितिक संवेदी के जोन के विस्तार तक से एक किलोमीटर परे वास्तविक स्थानीय आवश्यकताओं के लिए सन्निर्माण की अनुज्ञा दी जाएगी और अन्य सन्निर्माण क्रियाकलापों का विनियमन आंचलिक महायोजना के अनुसार किया जाएगा।
13.	खाई का मैदान	नए खाई खोदने के मैदान का स्थापित किया जाना प्रतिषिद्ध है। पुराने खाई के मैदान लागू विधियों के अधीन विनियमित किए जाएं।
14.	प्लास्टिक बैग का उपयोग	लागू विधियों के अधीन विनियमित होंगे।
15.	वायु और यानीय प्रदूषण	लागू विधियों के अधीन विनियमित होंगे।
16.	ध्वनि प्रदूषण	लागू विधियों के अधीन विनियमित होंगे।
17.	भू-जल उत्कर्षण	लागू विधियों के अधीन विनियमित होंगे।
18.	वृक्षों की कटाई	(क) राज्य सरकार में सक्षम प्राधिकारी की पूर्व अनुमति के बिना वन, सरकारी या राजस्व या निजी भूमि पर या वनों में किंही वृक्षों की कटाई नहीं होगी। (ख) वृक्षों की कटाई संबंधित केन्द्रीय या राज्य अधिनियम या उसके अधीन बनाए गए नियमों के उपबंध के अनुसार विनियमित होगी। (ग) आरक्षित वनों और संरक्षित वनों की दशा में कार्य योजना अनुदेशों का पालन किया जाएगा।
19.	प्राकृतिक जल निकायों या सतही क्षेत्र में उपचारित बहिर्वाह का निस्सारण	लागू विधियों के अधीन विनियमित होंगे।
20.	विद्युत लाइनों का पृथक्करण	भूमिगत केबलों का प्रोन्नयन। पारिस्थितिक संवेदी जोन के भीतर से गुजरने वाली सभी विद्यमान विद्युत लाइनों को आंचलिक महायोजना के अधीन विहित समय सीमा के भीतर पर्याप्त रूप से पृथक्कृत किया जाएगा।
21.	विद्यमान सड़कों को चौड़ा करना और उन्हें सुदृढ़ करना तथा नई सड़कों का संनिर्माण	उचित पर्यावरण समाघात निर्धारण और न्यूनिकरण उपाय यथा लागू अनुसार होंगे।
22.	होटलों और लॉज के विद्यमान परिसरों में बाड़ लगाना	लागू विधियों के अधीन विनियमित होंगे।
23.	साइन बोर्ड और होर्डिंग्स	लागू विधियों के अधीन विनियमित होंगे।

24.	रात्रि में यानिक यातायात का संचलन	लागू विधियों और आंचलिक महायोजना के अनुसार वाणिज्यिक वाहनी के लिए विनियमित होंगे।
25.	कृषि प्रणाली में मूलभूत परिवर्तन	लागू विधियों के अधीन विनियमित होंगे।
26.	प्राकृतिक जल स्रोत जिसमें भूजल संचयन भी है का वाणिज्यिक उपयोग	(क) सतही जल और भू जल का निष्कर्षण केवल भूमि के स्वामी के वास्तविक कृषि संबंधी उपयोग और घरेलू उपभोग के लिए अनुमत होगा। (ख) औद्योगिक अथवा वाणिज्यिक उपयोग हेतु निष्कर्षण किए जाने के परिणाम सहित सतही जल और भू जल के निष्कर्षण हेतु संबंधित विनियामक प्राधिकरण से पूर्व लिखित अनुमति प्राप्त करनी अपेक्षित होगी। (ग) सतही जल अथवा भू जल की कोई विक्री अनुमत नहीं होगी। (घ) कृषि सहित किसी अन्य स्रोत से पानी के संदूषण अथवा प्रदूषण की रोकथाम हेतु कदम उठाए जाएंगे।
संबंधित क्रियाकलाप		
27.	स्थानीय समुदायों द्वारा चल रही कृषि और बागवानी प्रथाओं के साथ पशुपालन, पशुपालन कृषि और मछली पालन	सक्रिय रूप से बढ़ावा दिया जाए।
28.	जैव उर्वरक के उपयोग सहित जैविक खेती	सक्रिय रूप से बढ़ावा दिया जाए।
29.	सभी गतिविधियों के लिए हरित प्रौद्योगिकी को ग्रहण करना	सक्रिय रूप से बढ़ावा दिया जाए।
30.	प्रदूषण उत्पन्न न करने वाले लघु उद्योग	पारिस्थितिक संवेदी जोन से गैर प्रदूषण, गैर परिसंकटमय, लघु और सेवा उद्योग, कृषि उद्यान, कृषि या कृषि आधारित देशीय माल से औद्योगिक उत्पादों का उत्पादन उद्योग और जो पर्यावरण पर कोई विपरीत प्रभाव नहीं डालते हैं।
31.	वर्षा जल संचयन	सक्रिय रूप से बढ़ावा दिया जाए।
32.	कुटीर उद्योगों जिसके अंतर्गत ग्रामीण कारीगर आदि भी हैं	सक्रिय रूप से बढ़ावा दिया जाए।
33.	नवीकरणीय ऊर्जा स्रोत का उपयोग	सक्रिय रूप में बढ़ावा दिया जाए।

5. मानीटरी समिति- (1) केंद्रीय सरकार पारिस्थितिक संवेदी जोन के प्रभावी मानीटरी के लिए एक मानीटरी समिति का गठन करेगी जो निम्नलिखित से मिलकर बनेगी, अर्थात् :-

1.	आयुक्त, नाड	अध्यक्ष
2.	निदेशक, काजीरंगा टाइगर रिजर्व	सदस्य
3.	जिला कलक्टर, सोनितपुर	सदस्य
4.	जिला कलक्टर, नागांव	सदस्य
5.	जिला वन अधिकारी, सोनितपुर वेस्ट डिवीजन	सदस्य
6.	उद्योग विभाग, असम सरकार का प्रतिनिधि	सदस्य
7.	कृषि विभाग, असम सरकार का प्रतिनिधि	सदस्य
8.	मत्स्य विभाग, असम सरकार का प्रतिनिधि	सदस्य
9.	क्षेत्रीय कार्यालय, राज्य प्रदूषण नियंत्रण बोर्ड का प्रतिनिधि	सदस्य
10.	अध्यक्ष/सदस्य-सचिव, एलबीसीएस	सदस्य
11.	पुलिस अधीक्षक, सोनितपुर और नागांव	सदस्य

12. (पर्यावरण, जिसमें विरासत संरक्षण भी सम्मिलित है के क्षेत्र में कार्य करने वाले) गैर सरकारी संगठन का राज्य सरकार द्वारा प्रत्येक मामले में एक वर्ष के लिए नामित एक प्रतिनिधि सदस्य
13. पारिस्थिति विज्ञान और पर्यावरण के क्षेत्र में कार्य करने वाले गैर सरकारी संगठन का राज्य सरकार द्वारा प्रत्येक मामले में एक वर्ष के लिए नामित एक प्रतिनिधि सदस्य
14. संभागीय वन अधिकारी, नागांव वन्यजीव संभाग सदस्य सचिव

6. निर्देश शर्तें -

(1) मानीटरी समिति इस अधिसूचना के उपबंधों के अनुपालन को मानीटर करेगी।

(2) पारिस्थितिक संवेदी जोन में भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की अधिसूचना सं. का.आ. 1533(अ) तारीख 14 सितंबर, 2006 की अनुसूची में के अधीन सम्मिलित क्रियाकलापों और इस अधिसूचना के पैरा 4 के अधीन प्रतिषिद्ध गतिविधियों के सिवाय आने वाले ऐसे क्रियाकलापों की दशा में वास्तविक विनिर्दिष्ट स्थलीय दशाओं पर आधारित मानीटरी समिति द्वारा संवीक्षा की जाएगी और उक्त अधिसूचना के उपबंधों के अधीन पूर्व पर्यावरण निकासी के लिए केन्द्रीय सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय को निर्दिष्ट की जाएगी।

(3) इस अधिसूचना के पैरा 4 के अधीन यथा विनिर्दिष्ट प्रतिषिद्ध क्रियाकलापों के सिवाय, भारत सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की अधिसूचना संख्यांक का.आ. 1533(अ) तारीख 14 सितंबर, 2006 की अधिसूचना के अनुसूची के अधीन ऐसे क्रियाकलापों, जिन्हें सम्मिलित नहीं किया गया है, परंतु पारिस्थितिक संवेदी जोन में आते हैं, ऐसे क्रियाकलापों की वास्तविक विनिर्दिष्ट स्थलीय दशाओं पर आधारित मानीटरी समिति द्वारा संवीक्षा की जाएगी और उसे संबद्ध विनियामक प्राधिकरणों को निर्दिष्ट किया जाएगा।

(4) मानीटरी समिति का सदस्य-सचिव या संबद्ध कलक्टर या संरक्षित क्षेत्र का प्रभारी ऐसे व्यक्ति के विरुद्ध, जो इस अधिसूचना के किसी उपबंध का उल्लंघन करता है, पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 19 (1986 का 29) के अधीन परिवाद फाइल करने के लिए सक्षम होगा।

(5) मानीटरी समिति मुद्दों के आधार पर अपेक्षाओं पर निर्भर रहते हुए संबद्ध विभागों के प्रतिनिधियों या विशेषज्ञों, औद्योगिक संगमों या संबद्ध पणधारियों के प्रतिनिधियों को अपने विचार-विमर्श में सहायता के लिए आमंत्रित कर सकेगी।

(6) मानीटरी समिति प्रत्येक वर्ष की 31 मार्च तक की राज्य के मुख्य वन्यजीव वार्डन को अपनी वार्षिक कार्रवाई रिपोर्ट **उपाबंध IV** पर उपाबद्ध प्रारूप पर 30 जून तक प्रस्तुत करेगी।

(7) केन्द्रीय सरकार का पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय मानीटरी समिति को अपने कृत्यों के प्रभावी निर्वहन के लिए समय-समय पर ऐसे निदेश दे सकेगा, जो वह ठीक समझे।

6. इस अधिसूचना के उपबंधों को प्रभाव देने के लिए केन्द्रीय सरकार और राज्य सरकार अतिरिक्त उपाय, यदि कोई हों, विनिर्दिष्ट कर सकेंगे।

7. भारत के माननीय उच्चतम न्यायालय या उच्च न्यायालय या राष्ट्रीय हरित प्राधिकरण द्वारा पारित कोई आदेश या पारित होने वाले किसी आदेश, यदि कोई हों, के अधीन, इस अधिसूचना के उपबंध होंगे।

[फा. सं. 25/110/2015ईएसजेड-आरई]

डॉ. टी चान्दनी, वैज्ञानिक जी'

उपाबंध - I**लाखोवा और बुरहाचापोरी वन्यजीव अभ्यारण्य और उसके पारिस्थितिक संवेदी जोन का सीमा विवरण**

उक्त पारिस्थितिकीय संवेदी जोन, 26°28' अक्षांश से 26°33'उ. उत्तरी अक्षांश और 92°35' पूर्व से 92°47' पूर्वी देशांतर रेखांश के बीच असम के नागांव और सोनितपुर में स्थित लाखोवा और बुरहाचापोरी वन्यजीव अभ्यारण्यों के सुरक्षित क्षेत्र की दक्षिणी सीमा (सुतीरपुर-गराजन-लाखोवा कस्बा) पर 26°29'54" और 92°33'17" पूर्व से 26°33'13" उ. और 92°47'45" पूर्व तक 1.86 किलोमीटर और उत्तरी सीमा (ब्रह्मापुत्र नदी) पर 26°33'13" उत्तर और 92°47'45" पूर्व से 26° 29' 54" उ. और 92°33'17" पू. तक 7.14 किलोमीटर का क्षेत्र है।

पारिस्थितिकी संवेदी जोन का मानचित्र अनुबंध-II पर है और उक्त पारिस्थितिकी संवेदी जोन में लाखोवा और बुरहाचापोरी वन्यजीव अभ्यारण्यों के सुरक्षित क्षेत्र के दक्षिणी सीमा (सुतीरपुर-गराजन-लाखोवा कस्बा) पर 26°29'54"उ. और 92°33'17" पूर्व से 26°33'13" उ. और 92°47'45" पूर्व तक 1.86 किलोमीटर और उत्तरी सीमा (ब्रह्मापुत्र नदी) पर 26°33'13" उत्तर और 92°47'45" पूर्व से 26° 29' 54" उ. और 92°33'17" पू. तक 7.14 किलोमीटर के भीतर आ रहे गांवों की सूची निम्नवत है :

बोगामुख सं. 7, बोगामुख सं.6, बोगामुख सं. 5, बोगामुख सं. 4, बोगामुख सं.3, बोगामुख सं. 2, बोगामुख सं. 1, भूरबांधा सं. 4, भूरबांधा सं.3, भूरबांधा सं.2, भूरबांधा सं.1, भूरबांधा बाजार, निजलॉखोवा, लाखोवा टी.वी., दखिन बेलगुरी, हरिभांगा, बरूनगुरी टी.वी. लैलुरी, पब लरीमुख, करोईगुईर, पब सल्पारा, सल्पारा सिंगीमारी एफवी, पश्चिम सलपारा, पश्चिम सिंगीमारी, पब सिंगमारी, काचाखैती, कालाडोवा, लांगिया, उद्यानतोला, कन्डुलीमारी, चेनीमारी बिल एनसी, चितलमारी पत्थर, चितलमारी बिल, चेनीमारी बिल, जहाजन, सुतीरपार, बोरालीमारी, पुरानीअती, हल्दीया सूती टीवी, धींगाबारी छापारी, धींग बारी पत्थर, ललूंग गांव, ललूंग गांव टीवी, कालिआडिंगा, कालियाडिंगा टीवी, कालिया डिंगा पाम, कचारीगांव, कसारीगांव, गोदाईमारी पत्थर, महेरीपार, पश्चिम फोतलजार, पब-फातेलजार, पब-अमराकांडा, पश्चिम अमराकांडा, सनसहर टीवी, नलकटा टीवी, हाथीपुखुरी, कंचनपुर, नांगलधोवा, गोराजन, धनिया, झावोनी, शिशुवती, जहाजघाट छापारी, जहाज टापू, बिलाल टापू, पियाज टापू, लांके टापू, संध्या टापू, कोरीओनी टापू, मजरबली टापू, खेसरी टापू, गणेश टापू, रफीक छापारी, कोचमारा छोपारी।

उपाबंध - I क

लाखोवा और बुरहाचापोरी वन्यजीव अभ्यारण्य का सीमा विवरण जीपीएस निर्देशांकों के संदर्भ में लाखोवा और बुरहाचापोरी वन्यजीव अभ्यारण्य की सीमा के साथ-साथ बिंदुओं के जीपीएस निर्देशांक

क्र.सं.	जीपीएस	अक्षांश	देशांतर
1	पू01	92° 35.564' पू	26° 30.782' उ.
2	पू 02	92° 38.463' पू	26° 32.026' उ.
3	पू 03	92° 41.005' पू	26° 33.725' उ.
4	पू 04	92° 46.156' पू	26° 33.433' उ.
5	पू 05	92° 44.160' पू	26° 30.504' उ.
6	पू 06	92° 47.051' पू	26° 32.298' उ.
7	पू 07	92° 47.128' पू	26° 30.405' उ.
8	पू 08	92° 45.123' पू	26° 28.624' उ.
9	पू 09	92° 41.453' पू	26° 28.842' उ.
10	पू 10	92° 39.084' पू	26° 28.628' उ.

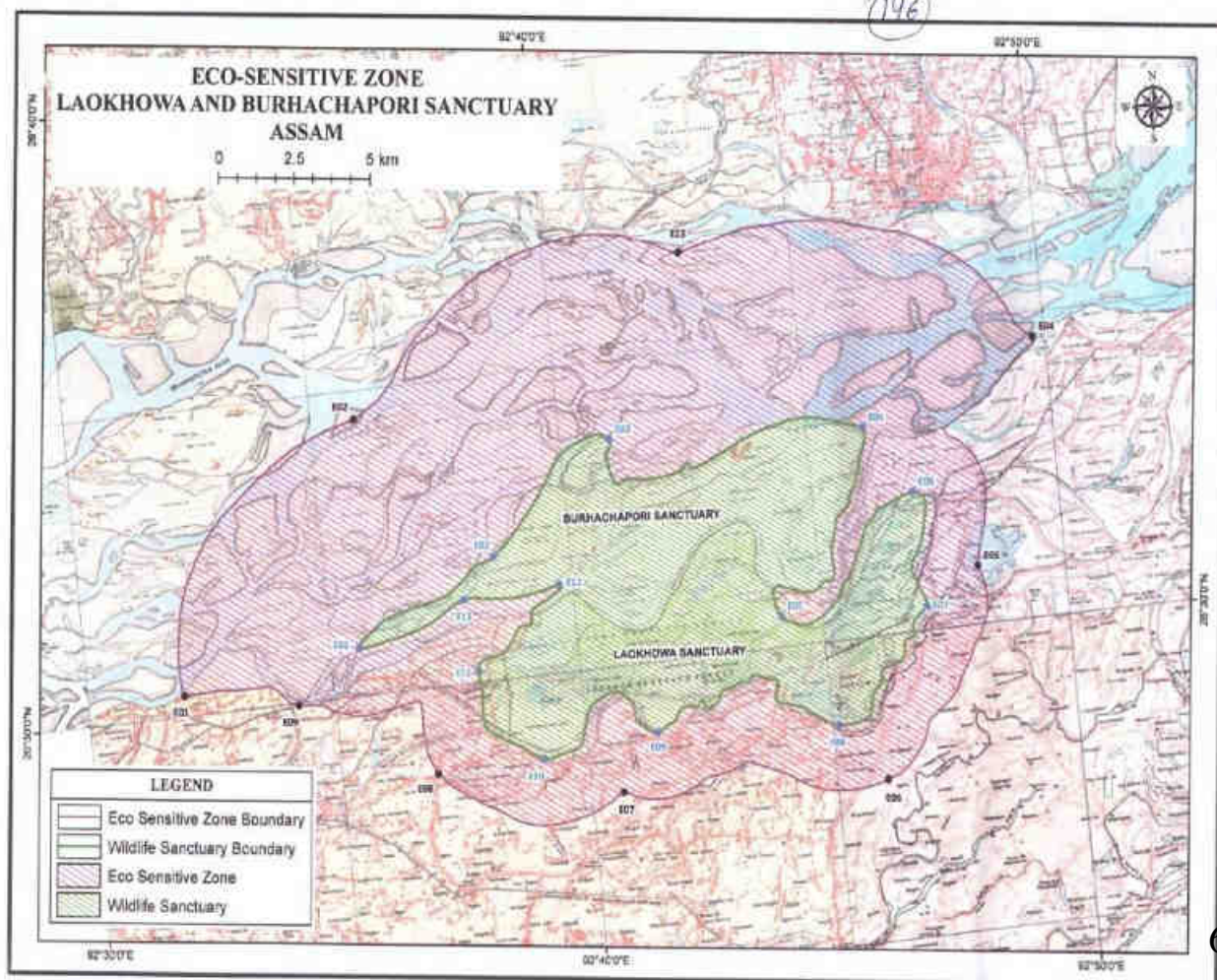
11	पू 11	92° 37.945' पू	26° 30.204' दृ.
12	पू 12	92° 39.731' पू	26° 31.450' दृ.
13	पू 13	92° 37.774' पू	26° 31.373' दृ.

लाखोवा और बुरहाचापोरी वन्यजीव अभयारण्य के पारिस्थितिकीय-संवेदी जोन की सीमा के बिंदुओं के जीपीएस निर्देशांक

क्र.सं.	जीपीएस	अक्षांश	देशांतर
1	पू 01	92° 31.955' पू	26° 30.336' दृ.
2	पू 02	92° 35.881' पू	26° 34.539' दृ.
3	पू 03	92° 42.761' पू	26° 36.644' दृ.
4	पू 04	92° 49.774' पू	26° 34.601' दृ.
5	पू 05	92° 48.230' पू	26° 30.961' दृ.
6	पू 06	92° 46.017' पू	26° 27.641' दृ.
7	पू 07	92° 40.646' पू	26° 27.936' दृ.
8	पू 08	92° 36.934' पू	26° 28.587' दृ.
9	पू 09	92° 34.248' पू	26° 29.961' दृ.

उपाबंध II

लाखोवा और बुरहाचापोरी वन्यजीव अभयारण्य के पारिस्थितिक संवेदी जोन का मानचित्र अक्षांशों और देशान्तरों के साथ



उपाबंध III

लाखोवा और बुरहाचापोरी वन्यजीव अभ्यारण्य के पारिस्थितिक संवेदी जोन में आने वाले ग्रामों की सूची
पारिस्थितिकीय संवेदी जोन के अंदर आने वाले गांवों और नदी द्वीप समूहों का ब्यौरा

गांवों की सूची और उनका ब्यौरा

क्रम सं.	गांव का नाम	मंडल	जिला	गांव का प्रकार	प्रमुख समुदाय	कुल परिवार	कुल पुरुष	कुल महिलाएं	कुल जनसंख्या
1	बोगमुख सं.7	समापुरी	नागांव	राजस्व	मुस्लिम	320	995	945	1940
2	बोगमुख सं.6	-वही-	-वही-	राजस्व	मुस्लिम	198	655	598	1253
3	बोगमुख सं.5	-वही-	-वही-	राजस्व	मुस्लिम	111	370	366	736
4	बोगमुख सं.4	-वही-	-वही-	राजस्व	मुस्लिम	159	531	498	1029
5	बोगमुख सं.3	-वही-	-वही-	राजस्व	मुस्लिम	4	13	14	27
6	बोगमुख सं.2	-वही-	-वही-	राजस्व	मुस्लिम	74	197	201	398
7	बोगमुख सं.1	-वही-	-वही-	राजस्व	मुस्लिम	88	299	248	547
8	भूरबांधा सं.1	-वही-	-वही-	राजस्व	मुस्लिम	353	1055	994	2049
9	भूरबांधा सं.2	-वही-	-वही-	राजस्व	मुस्लिम	177	518	476	994
10	भूरबांधा सं.3	-वही-	-वही-	राजस्व	मुस्लिम	256	825	717	1542
11	भूरबांधा सं.4	-वही-	-वही-	राजस्व	मुस्लिम	206	729	658	1387
12	भूरबांधा बाजार			राजस्व		39	106	94	200
13	निजलॉखोवा	-वही-	-वही-	राजस्व	बंगाली हिंदु	419	1174	1112	2286
14	लाखोवा टीबी	-वही-	-वही-	पन गांव	बोडो/खलुंग	85	437	-	-
15	दखिन बेल्लुरी	-वही-	-वही-	राजस्व	मुस्लिम और बंगाली हिंदु	314	890	850	1740
16	हरिभांगा	-वही-	-वही-	राजस्व	बंगाली हिंदु	209	600	517	1117
17	बरूनपुरी टीबी	-वही-	-वही-	टेंगिया गांव	बोडो/खलुंग	42	175	-	-
18	पब लरीमुखक	-वही-	-वही-	राजस्व	मुस्लिम	492	1543	1381	2924
19	रोईगुईर	-वही-	-वही-	राजस्व	मुस्लिम	588	1646	1610	3256
20	पब सल्पारा	-वही-	-वही-	राजस्व	मुस्लिम	279	849	761	1610
21	सल्पारा सिंगीमारी टीबी	-वही-	-वही-	राजस्व	बोडो/खलुंग	185	968	-	-
22	पश्चिम सल्पारा	-वही-	-वही-	राजस्व	मुस्लिम	468	1300	1259	2559
23	पश्चिम सिंगीमारी	-वही-	-वही-	राजस्व	मुस्लिम	788	2198	2058	4256
24	पब सिंगीमारी	-वही-	-वही-	राजस्व	मुस्लिम	628	1718	1649	3367
25	काचाखैती	-वही-	-वही-	राजस्व	मुस्लिम और बंगाली हिंदु	402	1182	1166	2348
26	चूनीमारी बिल एनसी	रूपाही	रूपाही	राजस्व	मुस्लिम	138	636	613	1249
27	चितलमारी बिल एनसी	-वही-	-वही-	राजस्व	मुस्लिम	236	1480	784	696

28	चितलमारी पत्थर	नही-	नही-	राजस्व	मुस्लिम	401	1468	1435	2903
29	चितलमारी बिल	नही-	नही-	राजस्व	मुस्लिम	268	925	835	1760
30	चूनीमारी बिल	नही-	नही-	राजस्व	मुस्लिम	266	928	869	1797
31	जहाजन	नही-	नही-	राजस्व	मुस्लिम	268	876	829	1705
32	सुतीरपार	नही-	नही-	राजस्व	मुस्लिम	247	888	787	1675
33	हल्दीया सूती टीवी	नही-	नही-	टोंगिया गांव	बोडो/ललुंग	65	438	-	-
34	धींगाबोरी छापोरी	नही-	नही-	राजस्व	मुस्लिम	638	1973	1875	3847
35	धींगाबोरी पत्थर	नही-	नही-	राजस्व	मुस्लिम	339	980	941	1921
36	ललूंग गरंप	नही-	नही-	राजस्व	मुस्लिम	662	2039	1888	3927
37	ललूंग गांव टीवी	नही-	नही-	टोंगिया गांव	ललुंग	67	336	-	-
38	कालिआडिंगा	नही-	नही-	राजस्व	मुस्लिम	662	2030	1895	3925
39	कालियाडिंगा टीवी	नही-	नही-	टोंगिया गांव	बोडो/ललुंग	55	272	-	-
40	कालियाडिंगा पाम	नही-	नही-	राजस्व	मुस्लिम	407	1182	1143	2325
41	कचारीगांव	नही-	नही-	राजस्व	मुस्लिम	313	920	857	1777
42	कसारी गांव	नही-	नही-	राजस्व	मुस्लिम	769	2227	2045	4272
43	गोदाईमारी गांव	नही-	नही-	राजस्व	मुस्लिम	396	1175	1082	2257
44	महेरीपार	नही-	नही-	राजस्व	मुस्लिम	880	2672	2499	5171
45	पश्चिम फोतलजार	नही-	नही-	राजस्व	मुस्लिम	442	1290	1260	2550
46	पब-फातेलजार	नही-	नही-	राजस्व	मुस्लिम	868	2711	2643	5354
47	पश्चिम अमराकांडा	नही-	नही-	राजस्व	मुस्लिम	409	1148	1070	2218
48	पब अमराकांडा	नही-	नही-	राजस्व	मुस्लिम	431	1322	1229	2551
49	सतसहर टीवी	नही-	नही-	टोंगिया गांव	बोडो	48	326	-	-
50	नलकटाटीवी	नही-	नही-	टोंगिया गांव	बोडो	47	280	-	-
51	तेलिया चापोरी टापू	नही-	नही-	राजस्व	मुस्लिम	304	922	932	1854
52	हाथीपुखुरी	नही-	नही-	राजस्व	मुस्लिम	618	1806	1732	3538
53	कंचनपुर	नही-	नही-	राजस्व	मुस्लिम और बंगाली हिंदु	528	1320	1473	2793
54	नांगलधोवा	नही-	नही-	राजस्व	मुस्लिम	577	1741	1676	3417
55	गोराजन	नही-	नही-	राजस्व	मुस्लिम और बंगाली हिंदु	466	1268	1165	2433
56	धनिया	सदर	सोनितपुर	राजस्व	नेपाली	223	-	-	934
57	ढाबोनी	नही-	नही-	राजस्व	नेपाली	197	-	-	860
58	शिशुवती	नही-	नही-	राजस्व	नेपाली	113			654

उपाबंध IV**की गई कार्रवाई की रिपोर्ट का प्रोफार्मा - पारिस्थितिक संवेदी जोन मानीटरी समिति**

1. बैठकों की संख्या और तिथि
2. बैठकों के कार्यवृत्त नदुओं का उल्लेख करें। अलग उपाबंध पर बैठकों उल्लेखनीय बि के कार्यवृत्त संलग्न करें।
3. पर्यटनमहायोजना सहित आंचलिक महायोजना की तैयारी की स्थिति
4. भूमि अभिलेख पारि संवेदी जोन वार के ऊपर सपष्ट तुटी के संशोधन हेतु निस्तारित मामलों का सारांश। उपाबंध के रूप में विवरण संलग्न किए जाएं।
5. पर्यावरण प्रभाव निर्धारण अधिसूचना, 2006 के अंतर्गत शामिल कार्यकलापों के लिए जांच किए गए मामलों का सारांश। उपाबंध के रूप में अलग से विवरण संलग्न किए जाएं।
6. पर्यावरण प्रभाव निर्धारण अधिसूचना, 2006 के अंतर्गत शामिल न किए गए कार्यकलापों के लिए जांच किए गए मामलों का सारांश। उपाबंध के रूप में अलग से विवरण संलग्न किए जाएं।
7. पर्यावरण (संरक्षण) अधिनियम 1986 की धारा 19 के अंतर्गत दर्ज की गई शिकायतों का सारांश।
8. कोई अन्य महत्वपूर्ण मामला।

MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE**NOTIFICATION**

New Delhi, the 27th November, 2015

S.O. 3236(E).—The following draft of the notification, which the Central Government proposes to issue in exercise of the powers conferred by sub-section (1), read with clause (v) and clause (xiv) of sub-section (2) and sub-section (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) is hereby published, as required under sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, for the information of the public likely to be affected thereby; and notice is hereby given that the said draft notification shall be taken into consideration on or after the expiry of a period of sixty days from the date on which copies of the Gazette containing this notification are made available to the public;

Any person interested in making any objections or suggestions on the proposals contained in the draft notification may forward the same in writing, for consideration of the Central Government within the period so specified to the Secretary, Ministry of Environment, Forests and Climate Change, Indira Paryavaran Bhawan, Jorbagh Road, Aliganj, New Delhi-110003, or send it to the e-mail address of the Ministry at: - esz-mef@nic.in

Draft Notification

WHEREAS, the Laokhowa and Burhachapori Wildlife Sanctuaries situated in Nagaon and Sonitpur districts of Assam respectively lying between 26°28'N to 26°-33'N North latitude and between 92° 35'E to 92°47'E East longitude are spread over an area of 70.10 sq. kms and 44.06 sq kms respectively and are notified buffer areas of the Kaziranga Tiger Reserve hereinafter referred to as the Sanctuaries;

AND WHEREAS, the area supports a good population of birds, fishes, mammals, reptiles, butterflies and such other small animals;

AND WHEREAS, it is necessary to conserve and protect the area upto 1.86 kilometres from 26°29'54"N & 92°33'17"E to 26° 33' 13"N & 92° 47' 45"E on southern boundary (Sutirpar–Garajan-Laokhowa town) and upto 7.14 kilometres from 26° 33' 13"N and 92° 47' 45"E to 26°29'54"N and 92°33'17"E on northern boundary (Brahmaputra river) of the protected areas of Laokhowa and Burhachapori Wildlife Sanctuary;

AND WHEREAS, it is necessary to conserve and protect the area, the extent and boundaries of which are specified in paragraph 1 of this notification around the protected area of the Laokhowa and Burhachapori Wildlife

Sanctuary as Eco-sensitive Zone from ecological and environmental point of view and to prohibit industries or class of industries and their operations and processes in the said Eco-sensitive Zone;

NOW THEREFORE, in exercise of the powers conferred by sub section(1) and clauses (v) and (xiv) of sub-section (2) and sub-section (3) of section 3 of the Environment (Protection) Act 1986 (29 of 1986) read with sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby notifies an area to an extent varying from 1.86 kms to 7.14 kms around the boundaries of Laokhowa and Burhachapori Wildlife Sanctuaries in the State of Assam as Eco-sensitive Zone of Laokhowa and Burhachapori Wildlife Sanctuaries (hereinafter referred to as the Eco-sensitive Zone) details of which are as under, namely:-

1. Extent and Boundaries of Eco-sensitive Zone.- (1) The Eco-Sensitive Zone shall be with a peripheral area of 263.33 sq. kms with an extent varying from 1.86 kms to 7.14 kms around the boundaries of Laokhowa and Burhachapori Wildlife Sanctuaries.

(2) The boundary description of the Laokhowa and Burhachapori Wildlife Sanctuaries and its Eco-sensitive Zone are given in **Annexure-I**.

(3) The Global Positioning system coordinates of Laokhowa and Burhachapori Wildlife Sanctuaries and its Eco-sensitive Zone along with latitudes and longitudes are given in **Annexure-I A**.

(4) The map of the Eco-sensitive Zone along with Global Positioning system coordinates is appended as **Annexure-II**.

(5) The list of villages falling in Eco-sensitive Zone is appended as **Annexure-III**.

2. Zonal Master Plan for the Eco-sensitive Zone.- (1) The State Government shall, for the purpose of the Eco-sensitive Zone prepare, a Zonal Master Plan, within a period of two years from the date of publication of final notification in the Official Gazette, in consultation with local people and adhering to the stipulations given in this notification.

(2) The Zone Master Plan shall be approved by the Competent Authority in the State Government.

(3) The Zone Master Plan for the Eco-sensitive Zone shall be prepared by the State Government in such a manner as is specified in this notification and also in consonance with the relevant Central and State laws and the guidelines issued by the Central Government, if any.

(4) The Zone Master Plan shall be prepared in consultation with all concerned State Departments, namely:-

- (i) Environment,
- (ii) Forest,
- (iii) Urban Development,
- (iv) Tourism,
- (v) Municipal,
- (vi) Revenue,
- (vii) Agriculture
- (ix) Assam State Pollution Control Board,
- (x) Irrigation
- (xi) Public Works Department

for integrating environmental and ecological considerations into it.

(5) The Zone Master Plan shall not impose any restriction on the approved existing land use, infrastructure and activities, unless so specified in this notification and the said Master Plan shall factor in improvement of all infrastructure and activities to be more efficient and eco-friendly.

(6) The Zone Master plan shall provide for restoration of denuded areas, conservation of existing water bodies, management of catchment areas, watershed management, groundwater management, soil and moisture conservation, needs of local community and such other aspects of the ecology and environment that needs attention.

(7) The Zone Master Plan shall demarcate all the existing worshipping places, village and urban settlements, types and kinds of forests, tribal areas, agricultural areas, fertile lands, green area, such as, parks and like places, horticultural areas, orchards, lakes and other water bodies.

(8) The Zone Master Plan shall regulate development in Eco-sensitive Zone so as to ensure Eco-friendly development for livelihood security of local communities.

3. Measures to be taken by State Government.-The State Government shall take the following measures for giving effect to the provisions of this notification, namely:-

(1) **Land use.-** Forests, horticulture areas, agricultural areas, parks and open spaces earmarked for recreational purposes in the Eco-sensitive Zone shall not be used or converted into areas for commercial or industrial related development activities:

Provided that the conversion of agricultural lands within the Eco-sensitive Zone may be permitted on the recommendation of the Monitoring Committee, and with the prior approval of the State Government, to meet the residential needs of local residents, and for the activities listed against serial numbers 11, 21, 30, 31 and 32 in column (2) of the Table in paragraph 4, namely:-

- (i) Eco-friendly cottages for temporary occupation of tourists, such as tents, wooden houses, etc. for Eco-friendly tourism activities,
- (ii) Widening and strengthening of existing roads and construction of new roads.
- (iii) Small scale industries not causing pollution
- (iv) Rainwater harvesting, and
- (v) Cottage industries including village industries, convenience stores and local amenities,

Provided further that no use of tribal land shall be permitted for commercial and industrial development activities without the prior approval of the State Government and without compliance of the provisions of article 244 of the Constitution or the law for the time being in force, including the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (2 of 2007):

Provided also that any error appearing in the land records within the Eco-sensitive Zone shall be corrected by the State Government, after obtaining the views of Monitoring Committee, once in each case and the correction of said error shall be intimated to the Central Government in the Ministry of Environment, Forests and Climate Change:

Provided also that the above correction of error shall not include change of land use in any case except as provided under this sub-paragraph.

Provided also that there shall be no consequential reduction in green area, such as forest area and agricultural area and efforts shall be made to reforest the unused or unproductive agricultural areas.

(2) **Natural springs:** The catchment areas of all natural springs shall be identified and plans for their conservation and rejuvenation shall be incorporated in the Zonal Master Plan and the guidelines shall be drawn up by the State Government in such a manner as to prohibit development activities at or near these areas which are detrimental to such areas.

(3) **Tourism.-** (a) The activity relating to tourism within the Eco-sensitive Zone shall be as per Tourism Master Plan, which shall form part of the Zonal Master Plan.

(b) The Tourism Master Plan shall be prepared by the Department of Tourism, in consultation with the Department of Forests and Environment of the State Government.

(c) The activity of tourism shall be regulated as under, namely:-

(i) all new tourism activities or expansion of existing tourism activities within the Eco-sensitive Zone shall be in accordance with the guidelines issued by the Central Government in the Ministry of Environment, Forests and Climate Change with emphasis on eco-tourism, eco-education and eco-development and based on carrying capacity study of the Eco-sensitive Zone;

(ii) new construction of hotels and resorts shall not be permitted within one kilometer from the boundary of the Laokhowa and Burhachapori Wildlife Sanctuaries except for accommodation for temporary occupation of tourists related to Eco-friendly tourism activities:

Provided that beyond the distance of one kilometer from the boundary of the Protected Areas till the extent of the Eco-sensitive Zone, the establishment of new hotels and resorts shall be permitted only in pre-defined and designated areas for Eco-tourism facilities as per Tourism Master Plan;

(iii) till the Zonal Master Plan is approved, development for tourism and expansion of existing tourism activities shall be permitted by the concerned regulatory authorities based on the actual site specific scrutiny and recommendation of the Monitoring Committee.

(4) **Natural heritage.-** All sites of valuable natural heritage in the Eco-sensitive Zone, such as the gene pool Project areas, rock formations, waterfalls, springs, gorges, groves, caves, points, walks, rides, cliffs, etc., shall be identified and projected and plan shall be drawn up for their protection and conservation, within six months from the date of publication of this notification and such plan shall form part of the Zonal Master Plan.

(5) **Man-made heritage sites.-** Buildings, structures, artefacts, areas and precincts of historical, architectural, aesthetic, and cultural significance shall be identified in the Eco-sensitive Zone and plans for their conservation shall be prepared within six months from the date of publication of this notification and incorporated in the Zonal Master Plan.

(6) **Noise pollution.-** The Environment Department of the State Government or Assam State Pollution Control Board shall draw up guidelines and regulations for the control of noise pollution in the Eco-sensitive Zone in accordance with the provisions of the Air (Prevention and Control of Pollution) Act, 1981(14 of 1981) and the rules made there under.

(7) **Air pollution.**- The Environment Department of the State Government or Assam State Pollution Control Board shall draw up guidelines and regulations for the control of air pollution in the Eco-sensitive Zone in accordance with the provisions of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981) and the rules made there under.

(8) **Discharge of effluents.**- No discharge of untreated effluent shall be permitted. The discharge of treated effluent in Eco-sensitive Zone shall be in accordance with the provisions of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) and the rules made there under.

(9) **Solid wastes.** - Disposal of solid wastes shall be as under:-

(i) the solid waste disposal in Eco-sensitive Zone shall be carried out as per the provisions of the Municipal Solid Waste (Management and Handling) Rules, 2000 published by the Government of India in the erstwhile Ministry of Environment and Forests *vide* notification number S.O. 908 (E), dated the 25th September, 2000 as amended from time to time;

(ii) the local authorities shall draw up plans for the segregation of solid wastes into biodegradable and non-biodegradable components;

(iii) the biodegradable material shall be recycled preferably through composting or vermiculture;

(iv) The inorganic material may be disposed in an environmentally acceptable manner at site identified outside the Eco-sensitive Zone and no burning or incineration of solid wastes shall be permitted in the Eco-sensitive Zone

(10) **Bio-medical waste.**- The bio-medical waste disposal in the Eco-sensitive Zone shall be carried out in accordance with the provisions of the Bio-Medical Waste (Management and Handling) Rules, 1998 published by the Government of India in the erstwhile Ministry of Environment and Forests *vide* Notification number S.O. 630(E), dated the 20th July, 1998 as amended from time to time.

(11) **Vehicular traffic.** - The vehicular movement of traffic shall be regulated in a habitat friendly manner and specific provisions in this regard shall be incorporated in the Zonal Master Plan and till such time as the Zonal master plan is prepared and approved by the competent authority in the State Government, Monitoring Committee shall monitor compliance of vehicular movement under the relevant Acts and the rules and regulations made thereunder.

(12) Industrial Units

(a) No establishment of new wood based Industries within the proposed Eco-sensitive zone shall be permitted except the existing wood based Industries set up as per the Law.

(b) No establishment of any new Industry causing water, air, soil, noise pollution within the proposed Eco-sensitive zone shall be permitted.

4. List of activities prohibited or to be regulated within the Eco-sensitive Zone.- All activities in the Eco sensitive Zone shall be governed by the provisions of the Environment (Protection) Act, 1986 (29 of 1986) and the rules made thereunder, and be regulated in the manner specified in the Table below, namely:-

TABLE

S.No.	Activity	Remarks
(1)	(2)	(3)
Prohibited Activities:		
1.	Commercial Mining, stone quarrying and crushing units.	(a) All new and existing mining (minor and major minerals), stone quarrying and crushing units are prohibited except for the domestic needs of <i>bona fide</i> local residents including digging of earth for construction or repair of houses and for manufacture of country tiles or bricks for housing for personal consumption. (b) The mining operations shall strictly be in accordance with the orders of the Hon'ble Supreme Court dated 4 th August, 2006 in the matter of T.N. Godavarman Thirumulpad Vs. Union of India in Writ Petition (Civil) No.202 of 1995 and order of the Hon'ble Supreme Court dated 21 st April, 2014 in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.435 of 2012.
2.	Setting up of saw mills.	No new or expansion of existing saw mills shall be permitted within the Eco-sensitive Zone.
3.	Use or production of any hazardous substances.	Prohibited (except as otherwise provided) as per applicable laws.
4.	Setting up of industries including new oil and gas exploration causing	No new or expansion of polluting industries in the Eco-sensitive Zone shall be permitted.

	water or air or soil or noise pollution.	
5.	Establishment of major thermal and hydro-electric projects	Prohibited (except as otherwise provided) as per applicable laws.
6.	Commercial use of firewood.	Prohibited (except as otherwise provided) as per applicable laws.
7.	Undertaking activities related to tourism like over-flying the National Park Area by aircraft, hot-air balloons	Prohibited (except as otherwise provided) as per applicable laws.
8.	Discharge of untreated effluents and solid waste in natural water bodies or land area.	Prohibited (except as otherwise provided) as per applicable laws.
9.	Fishing	No commercial fishing should be undertaken within 1000 meters of the northern boundary of Burhachapori Wildlife Sanctuary (in Brahmaputra river).
10.	Plying of Mechanized boats	No commercial mechanized boats shall ply within 1000 meters from the boundary of the Protected Areas. Only registered commercial mechanized boats, with regular monitoring by the concerned authority should be allowed to operate within 1000 meter to 6000 meter from the boundary of PAs.
Regulated Activities:		
11.	Establishment of hotels and resorts	No new commercial hotels and resorts shall be permitted within one kilometer of the boundary of the Protected Area except for accommodation for temporary occupation of tourists related to Eco-friendly tourism activities. However, beyond one kilometre and upto the extent of the Eco-sensitive Zone all new tourism activities or expansion of existing activities would be in conformity with the Tourism Master Plan.
12.	Construction activities	(a) No new commercial construction of any kind shall be permitted within one kilometer from the boundary of the Protected Area: Provided that, local people shall be permitted to undertake construction in their land for their residential use including the activities listed in sub-paragraph (1) of paragraph 3: Provided further that the construction activity related to small scale industries not causing pollution shall be regulated and kept at the minimum, with the prior permission from the Competent Authority as per applicable rules and regulations, if any. (b) beyond one kilometre upto the extent of Eco sensitive Zone construction for bona fide local needs shall be permitted and other construction activities shall be regulated as per Zonal Master Plan.
13.	Trenching ground	Establishing of new trenching ground is prohibited. Old trenching grounds are to be regulated under applicable laws.
14.	Use of plastic bags	Regulated under applicable laws.
15.	Air and Vehicular Pollution	Regulated under applicable laws.
16.	Noise pollution	Regulated under applicable laws.
17.	Extraction of ground water	Regulated under applicable laws.
18.	Felling of trees	(a) There shall be no felling of trees in the forest or Government or revenue or private lands without prior permission of the Competent Authority in the State Government; (b) the felling of trees shall be regulated in accordance with the provisions of the concerned Central or State Acts and the rules made thereunder. (c) in case of Project Forests and Protected Forests the Working Plan prescriptions shall be followed.
19.	Discharge of treated effluents and solid waste in natural water bodies or land area.	Regulated under applicable laws
20.	Insulation of	Promote underground cabling. All existing electric lines passing through the Eco-sensitive Zone shall

	electric lines	be adequately insulated in the time frame prescribed under the Zonal Master Plan.
21.	Widening and strengthening of existing roads and construction of new roads.	Shall be done with proper Environment Impact Assessment and mitigation measures, as applicable.
22.	Fencing of existing premises of hotels and lodges.	Regulated under applicable laws.
23.	Sign Boards and Hoardings	Regulated under applicable laws.
24.	Movement of Vehicular Traffic at night	Regulated for commercial vehicles as per the Zonal Master Plan and the applicable laws.
25.	Drastic Change of Agriculture systems or land use pattern.	Regulated under applicable laws.
26.	Commercial water resources including ground water harvesting.	(a) the extraction of surface water and ground water shall be permitted only for <i>bona fide</i> agricultural use and domestic consumption of the occupier of the land; (b) extraction of surface water and ground water for industrial or commercial use including the amount that can be extracted, shall require prior written permission from the concerned Regulatory Authority; (c) no sale of surface water or ground water shall be permitted; (d) steps shall be taken to prevent contamination or pollution of water from any source including agriculture.
Promoted Activities:		
27.	Ongoing agriculture and horticulture practices by local communities along with dairies, dairy farming, aquaculture.	Shall be actively promoted.
28.	Organic farming including use of Bio Fertilizer.	Shall be actively promoted.
29.	Adoption of green technology for all activities.	Shall be actively promoted.
30.	Small scale industries not causing pollution.	Non polluting, non-hazardous, small-scale and service industry, agriculture, floriculture, horticulture or agro-based industry producing products from indigenous goods from the Eco-sensitive Zone, and which do not cause any adverse impact on environment shall be permitted.
31.	Rain water harvesting	Shall be actively promoted.
32.	Cottage industries including village artisans.	Shall be actively promoted.
33.	Use of renewable energy sources	Shall be actively promoted.

5. Monitoring Committee:- The Central Government hereby constitutes a Monitoring Committee, for effective monitoring of the Eco-sensitive Zone falling in the State of Assam, which shall comprise of the following namely:-

1.	Commissioner, NAD	Chairperson
2.	Director, Kaziranga Tiger Reserve	Member
3.	District Collector, Sonitpur	Member

4.	District Collector, Nagaon	Member
5.	District Forest Officer, Sonitpur West Division	Member
6.	Representative of Industries Department, Government of Assam	Member
7.	Representative of Agriculture Department, Government of Assam	Member
8.	Representative of Fishery Department, Government of Assam	Member
9.	Representative from Regional Office, State Pollution Control Board	Member
10.	Chairperson/Member Secretary, Laokhowa and Burhachapori Wildlife conservation Society	Member
11.	Superintendent of Police, Sonitpur and Nagaon	Member
12.	One representative of Non-Governmental Organization (working in the field of environment and heritage conservation) to be nominated by the State Government for a period of one year.	Member
13.	One expert in the area of ecology and environment to be nominated by the State Government for a period of one year	Member
14.	District Forest Officer, Nagaon Wildlife Division	Member-Secretary

6. Terms of Reference:

- (1) The Monitoring Committee shall monitor the compliance of the provisions of this Notification.
 - (2) The activities that are covered in the Schedule to the notification of the Government of India in the erstwhile Ministry of Environment and Forests number S.O. 1533 (E), dated the 14th September, 2006, and are falling in the Eco-sensitive Zone, except for the prohibited activities as specified in the Table under paragraph 4 thereof, shall be scrutinized by the Monitoring Committee based on the actual site-specific conditions and referred to the Central Government in the Ministry of Environment, Forests and Climate Change for prior environmental clearances under the provisions of the said notification.
 - (3) The activities that are not covered in the Schedule to the notification of the Government of India in the erstwhile Ministry of Environment and Forests number S.O. 1533 (E), dated the 14th September, 2006 and are falling in the Eco-sensitive Zone, except for the prohibited activities as specified in the Table under paragraph 4 thereof, shall be scrutinized by the Monitoring Committee based on the actual site-specific conditions and referred to the concerned Regulatory Authorities.
 - (4) The Member Secretary of the Monitoring Committee or the concerned Collector or the concerned park Deputy Conservator of Forests shall be competent to file complaints under section 19 of the Environment (Protection) Act, 1986 against any person who contravenes the provisions of this notification.
 - (5) The Monitoring Committee may invite representatives or experts from concerned Departments, representatives from Industry Associations or concerned stakeholders to assist in its deliberations depending on the requirements on issue to issue basis.
 - (6) The Monitoring Committee shall submit the annual action taken report of its activities as on 31st March of every year by 30th June of that year to the Chief Wildlife Warden of the State as per pro- forma appended at at **Annexure-IV**.
 - (7) The Central Government in the Ministry of Environment, Forests and Climate Change may give such directions, as it deems fit, to the Monitoring Committee for effective discharge of its functions.
6. The Central Government and State Government may specify additional measures, if any, for giving effect to provisions of this notification.

7. The provisions of this notification shall be subject to the orders, if any, passed, or to be passed, by the Hon'ble Supreme Court of India or the High Court or National Green Tribunal .

[F. No. 25/110/2015-ESZ-RE]

Dr. T. CHANDNI, Scientist 'G'

Annexure – I

BOUNDARY DETAILS OF LAOKHOWA AND BURHACHAPORI WILDLIFE SANCTUARIES AND ITS ECO-SENSITIVE ZONE

(i) The said Eco-sensitive Zone is the area upto 1.86 kilometres from 26°29'54"N and 92°33'17"E to 26° 33' 13"N & 92° 47' 45"E on southern boundary (Sutirpar – Garajan- Laokhowa town) and upto 7.14 kilometres from 26° 33' 13"N & 92° 47' 45"E to 26°29'54"N & 92°33'17"E on northern boundary (Brahmaputra river) of the protected area of Laokhowa and Burhachapori Wildlife Sanctuaries situated in the Nagaon and Sonitpur Districts of Assam between 26°28'N to 26°-33'N North latitude and between 92° 35'E to 92°47' East longitude.

i) The map of the Eco-sensitive Zone is in ANNEXURE M and the list of the villages falling within 1.86 kilometres from 26°29'54"N & 92°33'17"E to 26° 33' 13"N & 92° 47' 45"E on southern boundary (Sutirpar – Garajan- Laokhowa town) and upto 7.14 kilometres from 26° 33' 13"N and 92° 47' 45"E to 26°29'54"N and 92°33'17"E on northern boundary (Brahmaputra river) of the protected area of Laokhowa and Burhachapori Wildlife Sanctuaries in the Eco- sensitive Zone are as follows:

Bogamukh No.7, Bogamukh No.6, Bogamukh No.5, Bogamukh No.4, Bogamukh No.3, Bogamukh No.2, Bogamukh No.1, Bhurbandha No.4, Bhurbandha No.3, Bhurbandha No.2, Bhurbandha No.1, Bhurbandha Bazar, NizLawkhowa, Laokhowa T.V., DakhinBelguri, Haribhanga, Barunguri TV, Lailuri, Pub Larimukh, Karoiguir, Pub Salpara, Salpara Singimari F.V., Pachim Salpara, Pachim Singimari, Pub Singimari, KachaKhaity, Kaladoba, Langia, Udhantola, Kandulimari, Chenimari Bill N.C., Chitalmari Bill N.C., ChitalmariPathar, Chitalmari Bill, Chenimari Bill, Jahajan, Sutirpar, Boralimari, Puraniati, Haldiasuti TV, DhingbariChapari, Dhing Bari Pathar, Lalung Gaon, Lalung Gaon TV, KaliaDinga, KaliaDinga TV, KaliaDinga Pam, KachariGaon, KasariGaon, GodaimariPathar, Maheripar, PachimPhotaljar, Pub-Photaljar, Pub-Amrakanda, PachimAmrakanda, Sunsahar TV, Nalkata TV, HathiPukhuri, Kanchanpur, NangalDhowa, Gorajan, Dhania, Jhaoni, Sishuwati, Jahajghat Chapori, Jahaj Tapu, Bilal Tapu, Piyaz Tapu, Lanke Tapu, Sandhya Tapu, Korioni Tapu, Majarballi Tapu, Khesari Tapu, Ganesh Tapu, Rafique Chapori, Kochmara Chapori.

ANNEXURE-I A

BOUNDARY DETAILS OF LAOKHOWA AND BURHACHAPORI WILDLIFE SANCTUARIES IN TERMS OF GPS COORDINATES

GPS co-ordinates of points along the boundary

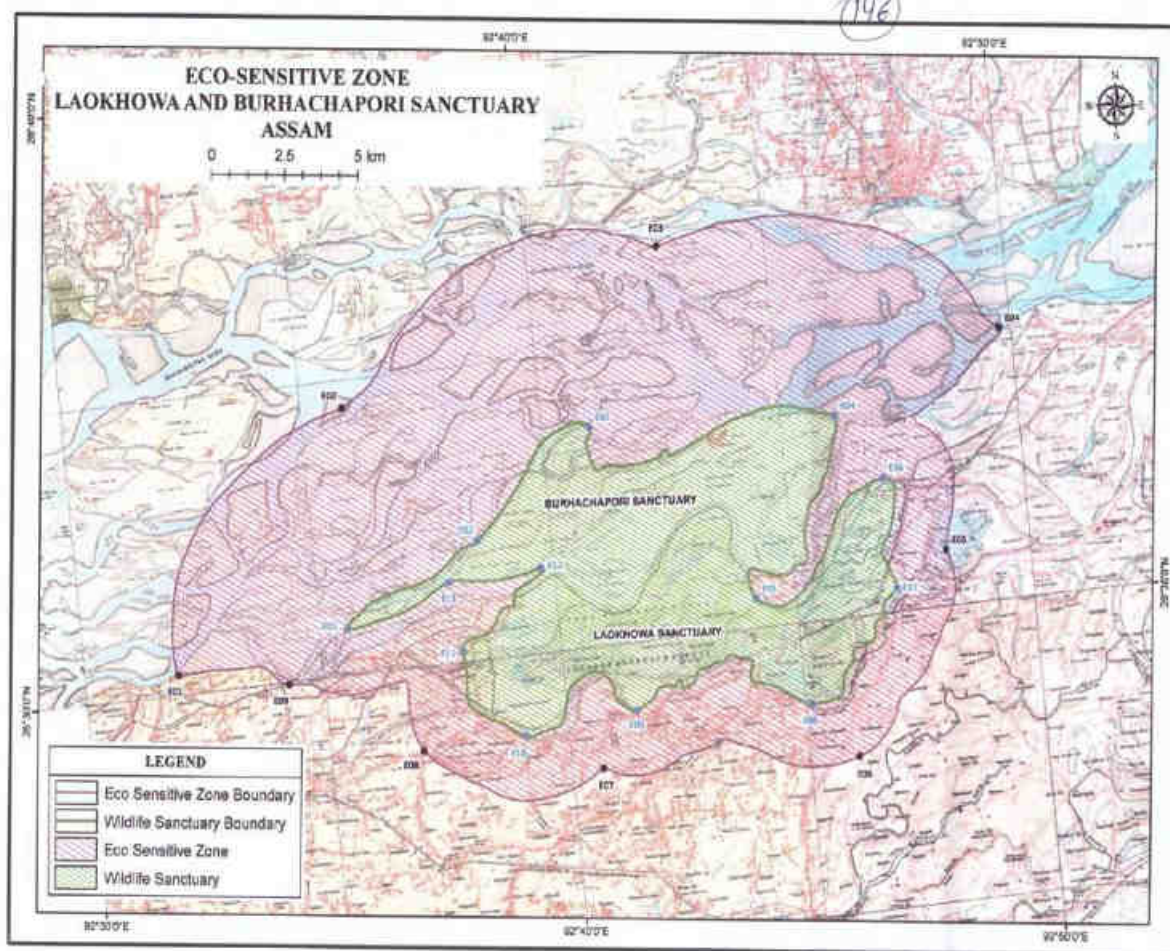
of Laokhowa-Burhachapori WLS

Sl. No.	GPS	Longitude	Latitude
1	E01	92° 35.564' E	26° 30.782' N
2	E02	92° 38.463' E	26° 32.026' N
3	E03	92° 41.005' E	26° 33.725' N
4	E04	92° 46.156' E	26° 33.433' N
5	E05	92° 44.160' E	26° 30.504' N
6	E06	92° 47.051' E	26° 32.298' N
7	E07	92° 47.128' E	26° 30.405' N
8	E08	92° 45.123' E	26° 28.624' N
9	E09	92° 41.453' E	26° 28.842' N
10	E10	92° 39.084' E	26° 28.628' N
11	E11	92° 37.945' E	26° 30.204' N
12	E12	92° 39.731' E	26° 31.450' N
13	E13	92° 37.774' E	26° 31.373' N

GPS co-ordinates of points along the boundary

of Eco-sensitive Zone Laokhowa-Burhachapori WLS

Sl. No.	GPS	Longitude	Latitude
1	E01	92° 31.955' E	26° 30.336' N
2	E02	92° 35.881' E	26° 34.539' N
3	E03	92° 42.761' E	26° 36.644' N
4	E04	92° 49.774' E	26° 34.601' N
5	E05	92° 48.230' E	26° 30.961' N
6	E06	92° 46.017' E	26° 27.641' N
7	E07	92° 40.646' E	26° 27.936' N
8	E08	92° 36.934' E	26° 28.587' N
9	E09	92° 34.248' E	26° 29.961' N

ANNEXURE-II**MAP OF ECO-SENSITIVE ZONE OF LAOKHOWA AND BURHACHAPORI WILDLIFE SANCTUARIES
WITH LATITUDES AND LONGITUDES****Annexure-III****Villages falling within the Eco-Sensitive Zone of Laokhowa and Burhachapori Wildlife Sanctuaries**

Sl.	Name of Village	Circle	District	Village type	Dominant Community	Total House Hold	Total Male	Total Female	Total Population
1	Bogamukh No.7	Samaguri	Nagaon	Revenue	Muslims	320	995	945	1940
2	Bogamukh No.6	do	do	Revenue	Muslims	198	655	598	1253
3	Bogamukh No.5	do	do	Revenue	Muslims	111	370	366	736
4	Bogamukh No.4	do	do	Revenue	Muslims	159	531	498	1029
5	Bogamukh No.3	do	do	Revenue	Muslims	4	13	14	27
6	Bogamukh No.2	do	do	Revenue	Muslims	74	197	201	398
7	Bogamukh No.1	do	do	Revenue	Muslims	88	299	248	547
8	Burbandha No.1	do	do	Revenue	Muslims	353	1055	994	2049
9	Burbandha No.2	do	do	Revenue	Muslims	177	518	476	994
10	Burbandha No.3	do	do	Revenue	Muslims	256	825	717	1542
11	Burbandha No.4	do	do	Revenue	Muslims	206	729	658	1387
12	Burbandha Bazar					39	106	94	200

13	Niz Laokhowa	do	do	Revenue	Bengali Hindu	419	1174	1112	2286
14	Laokhowa TV	do	do	Forest Village	Bodo/Lalung	85	437	-	-
15	Dakhin Beluguri	do	do	Revenue	Muslim & Bengali Hindu	314	890	850	1740
16	Haribhanga	do	do	Revenue	Bengali Hindu	209	600	517	1117
17	Barunguri TV	do	do	Taungiya Village	Bodo/Lalung	42	175	-	-
18	Pub Larimukh	do	do	Revenue	Muslims	492	1543	1381	2924
19	Koroiguri	do	do	Revenue	Muslims	588	1646	1610	3256
20	Pub Salpara	do	do	Revenue	Muslims	279	849	761	1610
21	Salpara Singimari TV	do	do	Revenue	Bodo/Lalung	185	968	-	-
22	Pachim Salpara	do	do	Revenue	Muslims	468	1300	1259	2559
23	Pachim Singimari	do	do	Revenue	Muslims	788	2198	2058	4256
24	Pub Singimari	do	do	Revenue	Muslims	628	1718	1649	3367
25	Kacha Kaity	do	do	Revenue	Muslim & Bengali Hindu	402	1182	1166	2348
26	Chanimari Beel NC	Rupahi	Rupahi	Revenue	Muslims	138	636	613	1249
27	Chitalmari Beel NC	do	do	Revenue	Muslims	236	1480	784	696
28	Chitalmari Pathar	do	do	Revenue	Muslims	401	1468	1435	2903
29	Chitalmari Beel	do	do	Revenue	Muslims	268	925	835	1760
30	Chenimari Beel	do	do	Revenue	Muslims	266	928	869	1797
31	Jahajan	do	do	Revenue	Muslims	268	876	829	1705
32	Sutirpur	do	do	Revenue	Muslims	247	888	787	1675
33	Haldiasuti TV	do	do	Taungiya Village	Bodo/Lalung	65	438	-	-
34	Dhing Bori Chapori	do	do	Revenue	Muslims	638	1973	1875	3847
35	Dhing Bori Pathar	do	do	Revenue	Muslims	339	980	941	1921
36	Lanung Gaon	do	do	Revenue	Muslim	662	2039	1888	3927
37	Lanung Gaon TV	do	do	Taungiya Village	Lalung	67	336	-	-
38	Kalia Dinga	do	do	Revenue	Muslim	682	2030	1895	3925
39	Kalia Dinga TV	do	do	Taungiya Village	Bodo/Lalung	55	272	-	-
40	Kalia Dinga Pam	do	do	Revenue	Muslim	407	1182	1143	2325
41	Kachari Gaon	do	do	Revenue	Muslim	313	920	857	1777
42	Kachari Gaon	do	do	Revenue	Muslim	769	2227	2045	4272
43	Godaimari Pathar	do	do	Revenue	Muslim	396	1175	1082	2257
44	Maheipar	do	do	Revenue	Muslim	880	2672	2499	5171
45	Pachim Photaltjar	do	do	Revenue	Muslim	442	1290	1260	2550
46	Pub Photaltjar	do	do	Revenue	Muslim	868	2711	2643	5354
47	Pachim Amrakanda	do	do	Revenue	Muslim	409	1148	1070	2218
48	Pub Amrakanda	do	do	Revenue	Muslim	431	1322	1229	2551
49	Sunsahar TV	do	do	Taungiya Village	Bodo	48	326	-	-
50	Nalkata TV	do	do	Taungiya Village	Bodo	47	280	-	-
51	Telia Chapori Toop	do	do	Revenue	Muslim	304	922	932	1854
52	Hathi Pukhuri	do	do	Revenue	Muslim	618	1806	1732	3538
53	Kanchanpur	do	do	Revenue	Muslim & Bengali Hindu	528	1320	1473	2793
54	Nangal Dhowa	do	do	Revenue	Muslim	577	1741	1676	3417
55	Gorajan	do	do	Revenue	Muslim & Bengali & Hindu	466	1268	1165	2433
56	Dhania	Sadar	Sonitpur	Revenue	Nepali	223	-	-	934
57	Jhaoni	do	do	Revenue	Nepali	197	-	-	860
58	Sisuwoti	do	do	Revenue	Nepali	113	-	-	654

Annexure -IV**Performa of Action Taken Report: - Eco-sensitive Zone Monitoring Committee.-**

1. Number and date of Meetings
2. Minutes of the meetings: Mention main noteworthy points. Attach Minutes of the meeting as separate Annexure.
3. Status of preparation of Zonal master Plan including Tourism master Plan
4. Summary of cases dealt for rectification of error apparent on face of land record (Eco-sensitive Zone wise).
Details may be attached as Annexure
5. Summary of cases scrutinised for activities covered under the Environment Impact Assessment Notification, 2006
Details may be attached as separate Annexure.
6. Summary of cases scrutinised for activities not covered under the Environment Impact Assessment notification, 2006.
Details may be attached as separate Annexure.
7. Summary of complaints lodged under section 19 of the Environment (Protection) Act, 1986.
8. Any other matter of importance.

ANNEXURE-14

Forest Diversion Permission Letter

Ministry of Environment, Forest and Climate Change
Government of India
New Delhi
Director, Forest Department
Dispur, Guwahati-781006
Phone: 0361-2536041/2536042
Fax: 0361-2536043
Email: forest@nic.in & forest@assam.gov.in

Ministry of Environment, Forest and Climate Change
Government of India
New Delhi
Director, Forest Department
Dispur, Guwahati-781006
Phone: 0361-2536041/2536042
Fax: 0361-2536043
Email: forest@nic.in & forest@assam.gov.in

03rd December, 2018

Ref: AS B 034/2017-SH 3037-38

सेवा में,

सचिव/Secretary,

पर्यावरण और वन विभाग/ Environment & Forest Department,

असम सरकार/ Government of Assam,

दिसपुर, गुवाहाटी-781006. / Dispur, Guwahati-781006.

Sub: Proposal for diversion of 1.0 hectare of forest land for operation of Bipin Stone Mahal under Nagaon Division in favour of Md. Ziaur Rahman, Nagaon.

Sir,
This has got reference to the State Govt letter No. FRS.148/2017/37 dated 22.06.2017 on the subject mentioned above, seeking prior approval of the Central Government in accordance with Section 2 of the FCA, 1980.

After careful consideration of the proposal, In-Principle approval was granted vide this office letter of even number dated 25.01.2018 subject to fulfillment of certain conditions. The State Government has furnished compliance report in respect of the conditions stipulated in the In-Principle Approval and has requested the Central Government to grant final approval.

In this connection and on the basis of the compliance report furnished by the State Government No. FRS.27/Nodal/Proposal/Bipin Stone Mahal/Nagaon dated 26.03.2018, No. FRS.148/2017/107 dated 14.11.2018 and confirmation of Ad-hoc CAMPA, New Delhi letter No 1-4/2014-CAMPA dated 29.10.2018, 'Final Approval' of the Central Government is hereby granted under Section-2 of the Forest (Conservation) Act, 1980 for diversion of 1.0 hectare of forest land for operation of Bipin Stone Mahal under Nagaon Division in favour of Md. Ziaur Rahman, Nagaon for a period of 5 (five) years from the date of the issue of this approval for the annual extraction of a maximum of 10000 m³ quantity as per the Environment Clearance given by District Environment Impact Assessment Authority, Hojai, Assam vide letter No. HJF01/2017/316 dated 25.08.2017 subject to the following conditions:

- (1) The legal status of the forest land shall remain unchanged.
- (2) The State Forest Deptt shall raise compensatory afforestation over 1.0 Ha Mopghai Phonglo village under Garampani Range of Dima Hasao District of

Assam as per the fund deposited by the User Agency & scheme furnished by the State Govt.

- (3) Additional amount of the NPV of the diverted forest land, if any, becoming due after revision of rates by Hon'ble Supreme Court of India shall be charged and collected by the State Government from the User Agency.
- (4) The State Govt. shall take all precautionary measures to ensure that the neighboring forests are not adversely impacted due to quarry operations.
- (5) The user agency shall not remove Stone/Boulders/Bajri etc. in a way to expose area to soil erosion and they shall also take all suitable measures to prevent probable erosion as well as land slips due to quarry operation or removal of stones.
- (6) No labour camps shall be set up over the diverted forest land or in the nearby Reserve Forest for the labour involved in the extraction works, and user agency shall ensure that no illicit removal of forest produce takes place surrounding their quarry site.
- (7) No stone crusher shall be set up near National Highway or near quarry site without proper permission under relevant rules from concerned competent authorities.
- (8) No removal of stone/forest produce shall be done before sunrise and after sunset.
- (9) There shall not be any tree felling and removal of natural forest beyond lease area of 1ha. Surrounding forest shall not be used for parking of trucks, etc or for any ancillary purpose of mining.
- (10) The user agency shall not make any fresh approach road over any part of forest land, but may use existing forest roads after due permission of competent Officer of Forest Department.
- (11) At least 7.5 meters strip of the forest land/other land all along the outer boundary of the mining lease area shall be fenced and maintained as Safety Zone. State Forest Department shall ensure execution of regeneration and protection of the safety zone by the fund provided by the User Agency.
- (12) The project area shall be demarcated on ground at the project cost, using four feet high RCC pillars, with each pillar inscribed with the serial number, forward and backward bearings and distance between two adjacent pillars.
- (13) Suitable garland drains on the periphery of quarry site shall be constructed so that surface water carrying loose silt/ fine stone powder is drained into garland drain. Garland drain will pass through settling tank before water is discharged into natural drainage system or is used for spraying.
- (14) After mining the mine-area shall be revegetated in consultation with concerned DFO at the cost of User Agency; a plan shall be prepared for such revegetation and submitted to this office by State Govt. a year in advance from the expiry of mining lease.
- (15) The proposal will be implemented under the overall supervision of the concerned Divisional Forest Officer.

- (16) In case of any violation of the stipulated conditions immediate action is to be taken by the Forest Department as per Ministry's letter No 5-5/86/FC dated 07.12.1999 and this office letter No 2-1-51/2004/RONE/Vol II/3181-02 dated 28.12.2006
- (17) All other clearances / NOCs under different rules / regulations / local laws and under Forest Dwellers (Recognition of Forest Rights) Act, 2006 as required vide MoEF, New Delhi guideline No. 11-9/1998-FC(Pt) dated 03.08.2009 shall be complied with.
- (18) Any other conditions as may be found appropriate in future for the betterment of environment & wildlife, may be imposed by North Eastern Regional Office, MoEF, Shillong.
- (19) This approval can be revoked, if the above conditions of approval are not complied to the satisfaction of the North Eastern Regional Office, Shillong.

भवदीय,



(आर. एल. सांगा)/R.L.Sanga

वन संरक्षक (केंद्रीय)/Conservator of Forests (Central)

Copy to:

1. प्रधान मुख्य वन संरक्षक & HoFF, असम सरकार, अन्या भवन, रोप कोवर ज्योति प्रसाद अग्रवाल पथ, श्रीमंत शंकरदेव कालखेत्र, पंजाबारी के पास गुवाहाटी -781037./ The Principal Chief Conservator of Forests & HoFF, Govt of Assam, Govt of Assam, Rop Konwar Jyoti Prasad Agarwal Path, Near Srimanta Sankardev Kalakhetra, Panjabari, Guwahati -781037.



3/12/18

वन संरक्षक (केंद्रीय)/Conservator of Forests (Central)

7c



GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE
NORTH EASTERN REGIONAL OFFICE
LAWUNDA, LUMBAYINGEN
SHILLONG - 793021
PHONE NO. 0364-2537609
FAX NO. 0364-2536041
Email: to.nez.shil@gmail.com

Susmit
4-4-18

1258

No. 3-AS B 036/2017-SH / CA-62

03rd April, 2018

To

The Secretary,
Environment & Forest Department,
Government of Assam,
Dispur, Guwahati

Sub: Proposal for diversion of 1.0 hectare of forest land for operation of Dholpahar Stone Mahal No.1 under Nagon Division in favour of Sri Biswajit Banik, Nagaon.

Sir,

This has reference to the State Govt letter No. FRS.145/2015/38 dated 22.06.2017 on the subject mentioned above, seeking prior approval of the Central Government in accordance with Section 2 of the FCA, 1980.

After careful consideration of the proposal, In-Principle approval was granted vide this office letter of even number dated 08.01.2018 subject to fulfillment of certain conditions. The State Government has furnished compliance report in respect of the conditions stipulated in the In-Principle Approval and has requested the Central Government to grant final approval.

In this connection and on the basis of the compliance report furnished by the State Government letter No FG.27/Nodal/Proposal/Dholpahar St Mahal No.1/Nagaon Divn dated 05.03.2018 of Govt of Assam and confirmation of Ad-hoc CAMPA, New Delhi letter No 1-4/2014-CAMPA dated 20.03.2018, 'Final Approval' of the Central Government is hereby granted under Section-2 of the Forest (Conservation) Act, 1980 for diversion of 1.0 hectare of forest land for operation of Dholpahar Stone Mahal No.1 under Nagon Division in favour of Sri Biswajit Banik, Nagaon, for a period of 5 (five) years from the date of the issue of this approval for the extraction of a total of 50,000 m³ quantity as per approved mining plan subject to the following conditions:

- (1) The legal status of the forest land shall remain unchanged.
- (2) The State Forest Department shall raise compensatory afforestation over 2.0 Ha in North Dizoo Reserve Forest as per the fund deposited by the User Agency & scheme furnished by the State Govt.
- (3) Permanent demarcation of forest land proposed for diversion shall be done on the ground at project cost using four feet high RCC pillars, with each pillar inscribed

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11/4/18
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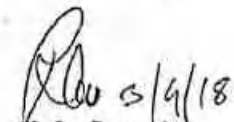
(25)

- with the serial number, forward and backward bearings and distance between two adjacent pillars before handing over the forest land to the User Agency.
- (4) State Govt not to hand over the land without demarcation & erection of pillars.
 - (5) At least 7.5 meters strip of the forest land/other land all along the outer boundary of the mining lease area shall be fenced and maintained as Safety Zone. State Forest Department shall ensure execution of regeneration and protection of the safety zone by the fund provided by the User Agency.
 - (6) The forest land shall not be used for any purpose other than that specified in the proposal.
 - (7) Additional amount of the NPV of the diverted forest land, if any, becoming due after revision of rates by Hon'ble Supreme Court of India shall be charged and collected by the State Government from the User Agency.
 - (8) The State Govt shall take all precautionary measures to ensure that the neighboring forests are not adversely impacted due to quarry operations.
 - (9) The user agency shall not remove Stone/Boulders/Bajri etc. in a way to expose area to soil erosion and they shall also take all suitable measures to prevent probable erosion as well as land slips due to quarry operation or removal of stones.
 - (10) No labour camps shall be set up over the diverted forest land or in the nearby Reserve Forest for the labour involved in the extraction works, and user agency shall ensure that no illicit removal of forest produce takes place surrounding their quarry site.
 - (11) No stone crusher shall be set up near National Highway or near quarry site without proper permission under relevant rules from concerned competent authorities.
 - (12) No removal of stone/forest produce shall be done before sunrise and after sunset.
 - (13) There shall not be any tree felling and removal of natural forest beyond lease area of 1ha. Surrounding forest shall not be used for parking of trucks, etc or for any ancillary purpose of mining.
 - (14) The user agency shall not make any fresh approach road over any part of forest land, but may use existing forest roads after due permission of competent Officer of Forest Department.
 - (15) Suitable garland drains on the periphery of quarry site shall be constructed so that surface water carrying loose silt/ fine stone powder is drained into garland drain. Garland drain will pass through settling tank before water is discharged into natural drainage system or is used for spraying.
 - (16) After mining the mine-area shall be revegetated in consultation with concerned DFO at the cost of User Agency; a plan shall be prepared for such revegetation and submitted to this office by State Govt. a year in advance from the expiry of mining lease.
 - (17) The proposal will be implemented under the overall supervision of the concerned Divisional Forest Officer.

- (256)
- (18) In case of any violation of the stipulated conditions immediate action is to be taken by the Forest Department as per Ministry's letter No 5-5/86/FC dated 07.12.1999 and this office letter No 2-1-51/2004/RONE/Vol II/3181-02 dated 28.12.2006.
 - (19) The updating of the details of Compensatory Afforestation, maps of CA, CA scheme etc. is to be done in Ministry's website in consultation with NIC, MoEF&CC New Delhi.
 - (20) All other clearances / NOCs under different rules / regulations / local laws and under Forest Dwellers (Recognition of Forest Rights) Act, 2006 as required vide MoEF, New Delhi guideline No. 11-9/1998-FC(Pt) dated 03.08.2009 shall be complied with.
 - (21) Any other conditions as may be found appropriate in future for the betterment of environment & wildlife, may be imposed by North Eastern Regional Office, MoEF, Shillong.
 - (22) This approval can be revoked, if the above conditions of approval are not complied to the satisfaction of the North Eastern Regional Office, Shillong.

This is issued with the approval of Addl. Principal Chief Conservator of Forests(C)

Yours faithfully,


(R.L. Sanga)

Conservator of Forests(C)

Copy to:

1. The Principal Chief Conservator of Forests & HoFF, Govt of Assam, Aranya Bhawan, Rop Konwar Jyoti Prasad Agarwal Path, Near Srimanta Sankardev Kalakhetra, Panjabari, Guwahati -781037


(R.L. Sanga)
Conservator of Forests(C)

Ministry of Environment, Forest & Climate Change
North Eastern Regional Office
Law-U-Sib, Lumbatnagen
Near MTC Workshop, Shillong-793021
Tel(0364)-253-7609/7340/7395/7278.
Fax No(0364)2536041/2536983.
Email - ro.nez.shill@gmail.com & moefro.shillong@gov.in

মহাপ্রাণ, পরিবেশ, বন ও জলবায়ু পরিবর্তন
উত্তর-পূর্ব অঞ্চল, শিলং
লাউ-উ-সিব, লুম্বাটনাগেন
নিকট MTC ورکشاپ, শিলং-৭৯৩০২১
টেলি(০৩৬৪) ২৫৩-৭৬০৯/৭৩৪০/৭৩৯৫/৭২৭৮
ফ্যাক্স (০৩৬৪)-২৫৩৬০৪১/২৫৩৬৯৮৩
ইমেইল: ro.nez.shill@gmail.com/moefro.shillong@gov.in

No. 3-AS B 035/2017-SH 3109-10

10th December, 2018

सेवा मे.

सचिव/Secretary,
पर्यावरण और वन विभाग/ Environment & Forest Department,
असम सरकार/ Government of Assam,
दिसपुर, गुवाहाटी-781006. / Dispur, Guwahati-781006.

Sub: Proposal for diversion of 1.0 hectare of forest land for operation of Tapatjuri Stone Mahal No.1 under Nagaon Division in favour of Sri Jayanta Kr. Laskar, Nagaon, Assam.

Sir,
This has got reference to the State Govt letter No. FRS.146/2017/40 dated 22.06.2017 on the subject mentioned above, seeking prior approval of the Central Government in accordance with Section 2 of the FCA, 1980.

After careful consideration of the proposal, In-Principle approval was granted vide this office letter of even number dated 25.01.2018 subject to fulfillment of certain conditions. The State Government has furnished compliance report in respect of the conditions stipulated in the In-Principle Approval and has requested the Central Government to grant final approval.

In this connection and on the basis of the compliance report furnished by the State Government No. FRS.146/2017/52 dated 16.07.2018, No. FRS.146/2017/81 dated 14.11.2018 and confirmation of Ad-hoc CAMPA, New Delhi letter No 1-4/2014-CAMPA dated 14.09.2018, 'Final Approval' of the Central Government is hereby granted under Section-2 of the Forest (Conservation) Act, 1980 for diversion of 1.0 hectare of forest land for operation of Tapatjuri Stone Mahal No.1 under Nagaon Division in favour of Sri Jayanta Kr. Laskar, Nagaon, Assam for a period of 5 (five) years from the date of the issue of this approval for the annual extraction of a maximum of 10000 m³ quantity as per the Environment Clearance given by District Environment Impact Assessment Authority, Nagaon, Assam vide letter No. NRFT2/2013/pt/20 dated 30.08.2017 subject to the following conditions:

- (1) The legal status of the forest land shall remain unchanged.
- (2) The State Forest Deptt shall raise compensatory afforestation over 1.0 Ha Monglai Phonglo village under Garampani Range of Dinna Hasao District of



11/12/18

Assam as per the fund deposited by the User Agency & scheme furnished by the State Govt.

- (3) Additional amount of the NPV of the diverted forest land, if any, becoming due after revision of rates by Hon'ble Supreme Court of India shall be charged and collected by the State Government from the User Agency.
- (4) The State Govt. shall take all precautionary measures to ensure that the neighboring forests are not adversely impacted due to quarry operations.
- (5) The user agency shall not remove Stone/Boulders/Bajri etc. in a way to expose area to soil erosion and they shall also take all suitable measures to prevent probable erosion as well as land slips due to quarry operation or removal of stones.
- (6) No labour camps shall be set up over the diverted forest land or in the nearby Reserve Forest for the labour involved in the extraction works, and user agency shall ensure that no illicit removal of forest produce takes place surrounding their quarry site.
- (7) No stone crusher shall be set up near National Highway or near quarry site without proper permission under relevant rules from concerned competent authorities.
- (8) No removal of stone/forest produce shall be done before sunrise and after sunset.
- (9) There shall not be any tree felling and removal of natural forest beyond lease area of 1ha. Surrounding forest shall not be used for parking of trucks, etc or for any ancillary purpose of mining.
- (10) The user agency shall not make any fresh approach road over any part of forest land, but may use existing forest roads after due permission of competent Officer of Forest Department.
- (11) At least 7.5 meters strip of the forest land/other land all along the outer boundary of the mining lease area shall be fenced and maintained as Safety Zone. State Forest Department shall ensure execution of regeneration and protection of the safety zone by the fund provided by the User Agency.
- (12) The project area shall be demarcated on ground at the project cost, using four feet high RCC pillars, with each pillar inscribed with the serial number, forward and backward bearings and distance between two adjacent pillars.
- (13) Suitable garland drains on the periphery of quarry site shall be constructed so that surface water carrying loose silt/ fine stone powder is drained into garland drain. Garland drain will pass through settling tank before water is discharged into natural drainage system or is used for spraying.
- (14) After mining the mine-area shall be revegetated in consultation with concerned DFO at the cost of User Agency; a plan shall be prepared for such revegetation and submitted to this office by State Govt. a year in advance from the expiry of mining lease.
- (15) The proposal will be implemented under the overall supervision of the concerned Divisional Forest Officer.

- (16) In case of any violation of the stipulated conditions immediate action is to be taken by the Forest Department as per Ministry's letter No 5-5/86/FC dated 07.12.1999 and this office letter No 2-1-51/2004/ROME/Vol II/3181-02 dated 28.12.2006
- (17) All other clearances / NOCs under different rules / regulations / local laws and under Forest Dwellers (Recognition of Forest Rights) Act, 2006 as required vide MoEF, New Delhi guideline No. 11-9/1998-FC(Pt) dated 03.08.2009 shall be complied with.
- (18) Any other conditions as may be found appropriate in future for the betterment of environment & wildlife, may be imposed by North Eastern Regional Office, MoEF, Shillong.
- (19) This approval can be revoked, if the above conditions of approval are not complied to the satisfaction of the North Eastern Regional Office, Shillong.

भवदीय,

(आर. एल. सांगा)/R.L.Sanga

वन संरक्षक (केंद्रीय)/Conservator of Forests (Central)

Copy to:

- 1/ प्रधान मुख्य वन संरक्षक & HoFF, असम सरकार, अन्या भवन, रोप कोवर ज्योति प्रसाद अग्रवाल पथ, श्रीमंत शंकरदेव कालखेत्र, पंजाबारी के पास गुवाहाटी -781037./ The Principal Chief Conservator of Forests & HoFF, Govt of Assam, Govt of Assam, Rop Konwar Jyoti Prasad Agarwal Path, Near Srimanta Sankardev Kalakhetra, Panjabari, Guwahati -781037.

वन संरक्षक (केंद्रीय) /Conservator of Forests (Central)

10/12/18



Government of India
Ministry of Environment, Forest & Climate Change
North Eastern Regional Office
Law-U-Sih, Lumbatnagen
Near MTC Workshop, Shillong-793021
Tel(0364)-253-7609/7340/7395/7278.
Fax No(0364)2536041/2536983.
Email : ro.ner/shil@moefra.gov.in & moefra.shillong@gov.in

14th December, 2018

पर्यावरण और वन विभाग, असम

लॉयड रोड, लुम्बातनगेन

नजद म्टीसीक वर्कशॉप, शिल्लॉन्ग-७९३०२१

टेली(०३६४) २५३-७६०९, ७३४०/७३९५/७२७८

फैक्स (०३६४)-२५३६०४१/२५३६९८३

ईमेल : ro.ner/shil@moefra.gov.in moefra.shillong@gov.in

No. 3-AS B 033/2017-SH1 3231-32

14th December, 2018

सेवा में,

सचिव/Secretary,

पर्यावरण और वन विभाग/ Environment & Forest Department,

असम सरकार/ Government of Assam,

दिसपुर, गुवाहाटी-781006. / Dispur, Guwahati-781006.

Sub: Proposal for diversion of 1.0 hectare of forest land for operation of Kafitoli Stone Mahal No.1 (River Bed) under Nagaon Division in favour of Sri Jayanta Kr. Laskar, Nagaon.

Sir,

This has got reference to the State Govt letter No. FRS.146/2017/38 dated 22.06.2017 on the subject mentioned above, seeking prior approval of the Central Government in accordance with Section 2 of the FCA, 1980.

After careful consideration of the proposal, In-Principle approval was granted vide this office letter of even number dated 25.01.2018 subject to fulfillment of certain conditions. The State Government has furnished compliance report in respect of the conditions stipulated in the In-Principle Approval and has requested the Central Government to grant final approval.

In this connection and on the basis of the compliance report furnished by the State Government No. FRS.147/2017/85 dated 16.07.2018, No. FRS.147/2017/112 dated 14.11.2018 and confirmation of Ad-hoc CAMPA, New Delhi letter No 1-4/2014-CAMPA dated 12.12.2018, 'Final Approval' of the Central Government is hereby granted under Section-2 of the Forest (Conservation) Act, 1980 for diversion of 1.0 hectare of forest land for operation of Kafitoli Stone Mahal No.1 (River Bed) under Nagaon Division in favour of Sri Jayanta Kr. Laskar, Nagaon for a period of 5 (five) years from the date of the issue of this approval for the annual extraction of a maximum of 10000 m³ quantity as per the Environment Clearance given by District Environment Impact Assessment Authority, Nagaon, Assam vide letter No. NRET2/2013/pt/19 dated 30.08.2017 subject to the following conditions:

- (1) The legal status of the forest land shall remain unchanged.
- (2) The State Forest Deptt shall raise compensatory afforestation over 1.0 Ha at Monglai Phonglo village under Garampani Range of Dima Hasao District of

- Assum as per the fund deposited by the User Agency & scheme furnished by the State Govt.
- (3) Additional amount of the NPV of the diverted forest land, if any, becoming due after revision of rates by Hon'ble Supreme Court of India shall be charged and collected by the State Government from the User Agency.
 - (4) The State Govt. shall take all precautionary measures to ensure that the neighboring forests are not adversely impacted due to quarry operations.
 - (5) The user agency shall not remove Stone/Boulders/Bajri etc. in a way to expose area to soil erosion and they shall also take all suitable measures to prevent probable erosion as well as land slips due to quarry operation or removal of stones.
 - (6) No labour camps shall be set up over the diverted forest land or in the nearby Reserve Forest for the labour involved in the extraction works; and user agency shall ensure that no illicit removal of forest produce takes place surrounding their quarry site.
 - (7) No stone crusher shall be set up near National Highway or near quarry site without proper permission under relevant rules from concerned competent authorities.
 - (8) No removal of stone/forest produce shall be done before sunrise and after sunset.
 - (9) There shall not be any tree felling and removal of natural forest beyond lease area of 1ha. Surrounding forest shall not be used for parking of trucks, etc or for any ancillary purpose of mining.
 - (10) The user agency shall not make any fresh approach road over any part of forest land, but may use existing forest roads after due permission of competent Officer of Forest Department.
 - (11) At least 7.5 meters strip of the forest land/other land all along the outer boundary of the mining lease area shall be fenced and maintained as Safety Zone. State Forest Department shall ensure execution of regeneration and protection of the safety zone by the fund provided by the User Agency.
 - (12) The project area shall be demarcated on ground at the project cost, using four feet high RCC pillars, with each pillar inscribed with the serial number, forward and backward bearings and distance between two adjacent pillars.
 - (13) Suitable garland drains on the periphery of quarry site shall be constructed so that surface water carrying loose silt/ fine stone powder is drained into garland drain. Garland drain will pass through settling tank before water is discharged into natural drainage system or is used for spraying.
 - (14) After mining the mine-area shall be revegetated in consultation with concerned DFO at the cost of User Agency; a plan shall be prepared for such revegetation and submitted to this office by State Govt. a year in advance from the expiry of mining lease.
 - (15) The proposal will be implemented under the overall supervision of the concerned Divisional Forest Officer.

1000 In case of any violation of the 2006 Forest Conservation Act, the necessary action is to be taken by the Forest Department as per Ministry's letter No 5-5/86-FC dated 07.12.1999 and this office letter No 2-1-51/2004/RO&F/Vol II/3181-02 dated 28.12.2006.

- (17) All other clearances / NOC's under different rules / regulations / local laws and under Forest Dwellers (Recognition of Forest Rights) Act, 2006 as required vide MoEF, New Delhi guideline No. 11-9/1998-FC(Pt) dated 03.08.2009 shall be complied with.
- (18) Any other conditions as may be found appropriate in future for the betterment of environment & wildlife, may be imposed by North Eastern Regional Office, MoEF & CC, Shillong.
- (19) This approval can be revoked, if the above conditions of approval are not complied to the satisfaction of the North Eastern Regional Office, Shillong.

भवदीय.



(आर. एल. सांगा)/R.L.Sanga

वन संरक्षक (केंद्रीय)/Conservator of Forests (Central)

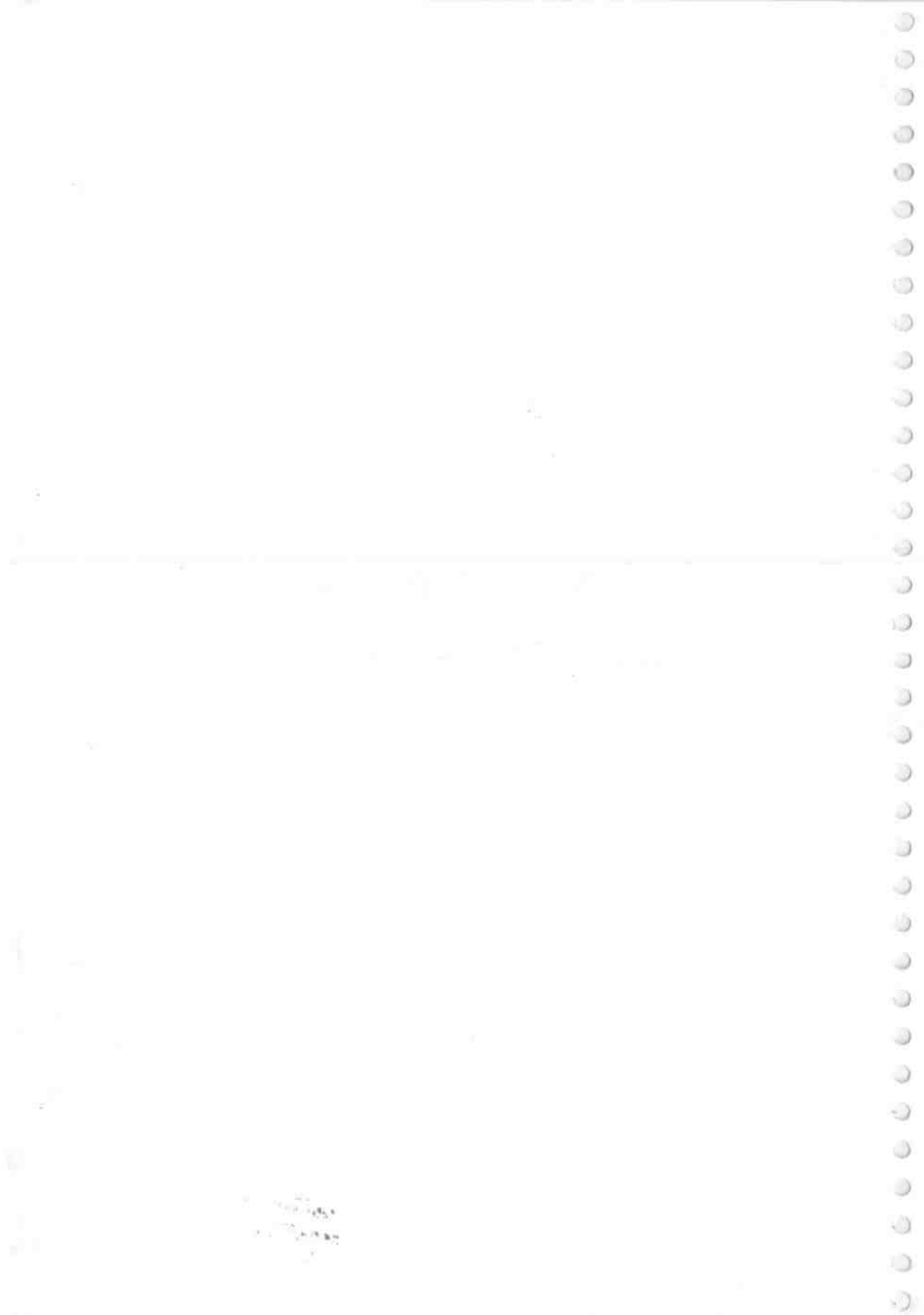
Copy to:

1. प्रधान मुख्य वन संरक्षक & HoFF, असम सरकार, अन्या भवन, रोप कोवर ज्योति प्रसाद अग्रवाल पथ, श्रीमंत शंकरदेव कालखेत्र, पंजाबारी के पास गुवाहाटी -781037./
The Principal Chief Conservator of Forests & HoFF, Govt of Assam, Govt of Assam, Rop Konwar Jyoti Prasad Agarwal Path, Near Srimanta Sankardev Kalakhetra, Panjabari, Guwahati -781037.



वन संरक्षक (केंद्रीय)/Conservator of Forests (Central)

ANNEXURE-15
Mineral Testing Report





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TEST CERTIFICATE

Report No. :	NTL-M-060223-627	Date : 30.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Chaparmukh Kapili Nodi BamunijanSilbheta Sand Permit Area - Kopili River	
Type of Sample:	Mineral - Sand	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 1 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	28.11.2024	
Date of Reporting:	30.11.2024	
Remark & Observation	Sample in fine aggregates	

Test Result

S. No.	Parameter	Result	Test Method
1.	Specific Gravity	2.61	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

1. All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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TEST CERTIFICATE

Report No. :	NTL-M-060223-628	Date : 30.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Chaparmukh- Kapili Nodi Sand Permit Area I (C) (Rev. Portion) Govt. Permit.- Kopili River	
Type of Sample:	Mineral – Sand	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 1 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	28.11.2024	
Date of Reporting:	30.11.2024	
Remark & Observation	Sample in fine aggregates	

Test Result

S. No.	Parameter	Result	Test Method
1.	Specific Gravity	2.60	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

1. All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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TEST CERTIFICATE

Report No. :	NTL-M-060223-619	Date : 30.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Borpani Sand Permit Area No. 1 (A) of 2020-22- Borpani River	
Type of Sample:	Mineral - Sand	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 1 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	28.11.2024	
Date of Reporting:	30.11.2024	
Remark & Observation	Sample in fine aggregates	

Test Result

S. No.	Parameter	Result	Test Method
1.	Specific Gravity	2.60	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

- All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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TEST CERTIFICATE

Report No. :	NTL-M-060223-620	Date : 30.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Chaparmukh-Kopili Nodi Sand Permit Area Part-I (B) of 2021-23 (Revenue Portion)- Kopili River	
Type of Sample:	Mineral - Sand	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 1 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	28.11.2024	
Date of Reporting:	30.11.2024	
Remark & Observation	Sample in fine aggregates	

Test Result

S. No.	Parameter	Result	Test Method
1.	Specific Gravity	2.60	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

1. All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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TEST CERTIFICATE

Report No. :	NTL-M-060223-621	Date : 30.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Chaparmuk-Kopili Nodi Sand Permit Area Part- 1 (B) (Rev. Portion) of 2016-18- 2018-20- Kopili River	
Type of Sample:	Mineral - Sand	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 1 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	28.11.2024	
Date of Reporting:	30.11.2024	
Remark & Observation	Sample in fine aggregates	

Test Result

S. No.	Parameter	Result	Test Method
1.	Specific Gravity	2.59	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

- All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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Handwritten signature and text in Hindi: "कम समय में प्रतिक्रिया", "अपना काम सफलतापूर्वक", "पूरा करने का प्रयास"

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TEST CERTIFICATE

Report No. :	NTL-M-060223-629	Date : 28.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Guimari Govt. Sand Permit Area (Rev. portion)- Kopili River	
Type of Sample:	Mineral - Sand	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 1 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	28.11.2024	
Date of Reporting:	30.11.2024	
Remark & Observation	Sample in fine aggregates	

Test Result

S. No.	Parameter	Result	Test Method
1.	Specific Gravity	2.60	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

1. All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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TEST CERTIFICATE

Report No. :	NTL-M-060223-622	Date : 30.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Chaprmukh-Kopili Nodi Sand Permit Area No. I (C) (Rev. Portion) of 2018-20- Kopili River	
Type of Sample:	Mineral - Sand	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 1 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	28.11.2024	
Date of Reporting:	30.11.2024	
Remark & Observation	Sample in fine aggregates	

Test Result

S. No.	Parameter	Result	Test Method
1.	Specific Gravity	2.61	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

- All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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TEST CERTIFICATE

Report No. :	NTL-M-060223-623	Date : 30.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Jamunamukh-Kopili Nodi Sand Permit Area Part- I (B) (Rev. Portion)- Kopili River	
Type of Sample:	Mineral - Sand	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 1 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	28.11.2024	
Date of Reporting:	30.11.2024	
Remark & Observation	Sample in fine aggregates	

Test Result

S. No.	Parameter	Result	Test Method
I.	Specific Gravity	2.59	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

- All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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Agriculture, India

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TEST CERTIFICATE

Report No. :	NTL-M-060223-624	Date : 28.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Jamunamukh-Kopili Nodi Sand Permit Area Part- I(C) of 2018-20 (Rev. Portion)- Kopili River	
Type of Sample:	Mineral - Sand	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 1 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	28.11.2024	
Date of Reporting:	30.11.2024	
Remark & Observation	Sample in fine aggregates	

Test Result

S. No.	Parameter	Result	Test Method
1.	Specific Gravity	2.60	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

- All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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TEST CERTIFICATE

Report No. :	NTL-M-060223-625	Date : 30.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Borpani Sand Permit Area (Govt. Permit)- Borpani River	
Type of Sample:	Mineral - Sand	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 1 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	28.11.2024	
Date of Reporting:	30.11.2024	
Remark & Observation	Sample in fine aggregates	

Test Result

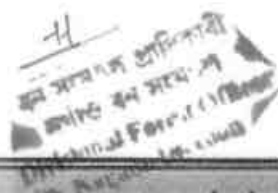
S. No.	Parameter	Result	Test Method
1.	Specific Gravity	2.60	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

1. All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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TEST CERTIFICATE

Report No. :	NTL-M-060223-626	Date : 28.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Borpani Sand Permit Area Part-I(B) Down Site (Govt. Permit)- Borpani River	
Type of Sample:	Mineral - Sand	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 1 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	28.11.2024	
Date of Reporting:	30.11.2024	
Remark & Observation	Sample in fine aggregates	

Test Result

S. No.	Parameter	Result	Test Method
I.	Specific Gravity	2.60	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

- All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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TEST CERTIFICATE

Report No. :	NTL-M-060223-632	Date : 30.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Dhulpahar Stone Mahal No. 1	
Type of Sample:	Mineral – Stone Mine	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 1 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	28.11.2024	
Date of Reporting:	30.11.2024	
Remark & Observation	Sample in fine aggregates	

Test Result

S. No.	Parameter	Result	Test Method
1.	Bulk Density	2.68	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

1. All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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The National Environmental
Agency India

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TEST CERTIFICATE

Report No. :	NTL-M-060223-633	Date : 30.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Tapatjuri Stone Mahal No. 1	
Type of Sample:	Mineral – Stone Mine	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 1 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	28.11.2024	
Date of Reporting:	30.11.2024	
Remark & Observation	Sample in fine aggregates	

Test Result

S. No.	Parameter	Result	Test Method
1.	Bulk Density	2.69	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

- All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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TEST CERTIFICATE

Report No. :	NTL-M-060223-634	Date : 23.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Shiv Sankar Brick Earth Mining Permit Area	
Type of Sample:	Mineral – Brick Earth Mine	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 1 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	18.11.2024	
Date of Reporting:	23.11.2024	
Remark & Observation	Sample in fine aggregates	

Test Result

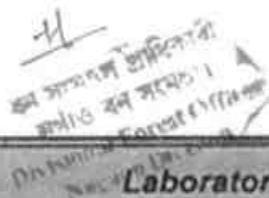
S. No.	Parameter	Result	Test Method
1.	Bulk Density	2.70	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

- All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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TEST CERTIFICATE

Report No. :	NTL-M-060223-635	Date : 23.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Sahari Brick Earth permit Area (Hanuman Bricks)	
Type of Sample:	Mineral – Brick Earth	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 1 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	18.11.2024	
Date of Reporting:	23.11.2024	
Remark & Observation	Sample in fine aggregates	

Test Result

S. No.	Parameter	Result	Test Method
1.	Bulk Density	2.69	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

- All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.


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आमंत्रण प्रमाणिका
आमंत्रण प्रमाणिका
Official For & Office
Noida Testing Laboratories

Laboratory : GT-20, Sector-117, Noida, Gautam Budh Nagar - 201301
E. : noida.laboratory@gmail.com, info@noidalabs.com W.: www.noidalabs.com



NOIDA TESTING LABORATORIES

(An ISO : 9001 : 2008, 14001 : 2004 & OHSAS : 18001 : 2007 Certified & NABL Accredited Laboratory)

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Analyzing for an Assured
Future

TEST CERTIFICATE

Report No. :	NTL-M-060223-709	Date : 25.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: New Proposal 3- Nagaon District, Assam State River- Kopili	
Type of Sample:	Mineral - Sand	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 1 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	21.11.2024	
Date of Reporting:	25.11.2024	
Remark & Observation	Sample in fine aggregates	

Test Result

S. No.	Parameter	Result	Test Method
1.	Specific Gravity	2.60	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

- All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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नवीन प्रयोगशाला
Noida Testing Laboratories
Pitampura, Delhi - 110034



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TEST CERTIFICATE

Report No. :	NTL-M-060223-710	Date : 26.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Basundhari Stone Mahal No. I (A) - Nagaon District, Assam State	
Type of Sample:	Mineral - Stone	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 2 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	23.11.2024	
Date of Reporting:	26.11.2024	
Remark & Observation	In Lumps	

Test Result

S. No.	Parameter	Result	Test Method
1.	Bulk Density	2.53	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

- All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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TEST CERTIFICATE

Report No. :	NTL-M-060223-711	Date : 26.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Bipin Stone Mahal of 2018-23- Nagaon District, Assam State	
Type of Sample:	Mineral - Stone	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 2 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	23.11.2024	
Date of Reporting:	26.11.2024	
Remark & Observation	In Lumps	

Test Result

S. No.	Parameter	Result	Test Method
1.	Bulk Density	2.50	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

- All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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Working for an Assured Future

TEST CERTIFICATE

Report No. :	NTL-M-060223-712	Date : 26.11.2024
Lab No. :	NTL-060223	Page 1/1
Issued to :	K. Ashish (Knowledge Partner) 676, Aggarwal Millinium Tower -II, Netaji Subhas Place, Pitampura, Delhi -110034	
Source of Material:	Mine Name: Kafitoli Stone Mahal No. 1 under Kothiatoli Range - Nagaon District, Assam State	
Type of Sample:	Mineral - Stone	
Packing, Marking, Seal :	Plastic Bag Marked	
Quantity:	Approx. 2 Kg.	
Mode of receipt of Sample:	Sample provided by Customer (K. Ashish)	
Date of Receipt of Sample:	23.11.2024	
Date of Reporting:	26.11.2024	
Remark & Observation	In Lumps	

Test Result

S. No.	Parameter	Result	Test Method
1.	Bulk Density	2.53	IS 2386- Part -III-1963 (Reaffirmed 2021)

Notes:

- All results given above are related to the tested sample as received and mentioned parameter. The Customer asked for the above test only.

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National Forest Office

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