

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

Original Application No. 152 of 2021 (SZ)

IN THE MATTER OF:

D. Hema Kmar,
Chittoor District, Andhra Pradesh

.....APPLICANT

VS

UNION OF INDIA & OTHERS

....RESPONDENTS

**COUNTER AFFIDAVIT ON BEHALF OF THE MINISTRY OF
ENVIRONMENT, FOREST AND CLIMATE CHANGE
(RESPONDENT No. 1)**

MOST RESPECTFULLY SHOWETH:

I, Dr. Suresh Babu Pasupuleti, currently working as Scientist 'D' in the Ministry of Environment, Forest and Climate Change (MoEF&CC), Integrated Regional Office, Vijayawada, Andhra Pradesh, do hereby solemnly affirm and state as under:-

1. That I, in my official capacity of in the Ministry Environment, Forest and Climate Change, Chennai i.e. Respondent No. 1 in the above mentioned matter, am conversant with the facts and circumstances of the case on the basis of official records, and as such authorized and competent to swear this affidavit.
2. It is submitted at the very outset that the Respondent No. 1 denies each averment and/or submission made in the application which is contrary to and inconsistent with the averments made and facts stated in the present reply. It is submitted that the nothing stated in the application may be

Suresh

deemed to have been admitted by the Respondent No. 1 unless and until the same is expressly admitted in the present reply.

3. That a short affidavit is being filed by the answering respondent at this stage and craves leave and liberty to file a detailed Counter Affidavit to the aforesaid application, as and when required.
4. That the applicant in the present matter has alleged that the respondent no. 7 & 8 are engaged in illegal sand mining on the river banks of "River Aaraniaar" which runs through the Villages, namely, Karani, Suruttappalli, SSB Petta, BK Bedu, Nagalapuram and other nearby villages, and then enters in State of Tamil Nadu. Further, it was also alleged by the applicant that the said illegal sand mining was conducted without getting necessary environmental clearance and permissions from the concerned, authorities.
5. That the applicant has inter-alia prayed for that the Hon'ble Tribunal please to (a) Restrain the 2nd 6th and 7th Respondent or any other person from mining the (Aaranivar) River sand, from Nagalapuram to Surutuppalli Villages, to an extent of about 350 Ha, running about 11 Km in Chittoor District, Andhra Pradesh, without the necessary Environmental Clearance from the 1st Respondent; (b) To direct the Respondent, Authorities to initiate criminal prosecution against the officials of the 2, 6, 7 and 8 Respondents for the illegal sand quarrying activity at the impugned site; (c) To

direct the Respondent Authorities to remediate the impugned area.

6. That it is further submitted that respondent Ministry issued EIA Notification dated 14th September 2006 which requires certain projects to obtain prior Environmental Clearance ("EC") before any construction work in case of new projects or expansion and modernization of existing projects or activities. The Schedule to the Notification details the categories or projects or activities which require prior Environmental Clearance.
7. That it is further submitted that all projects and activities are broadly categorized into two categories - Category "A" and Category "B", based on the potential impacts on spatial extent and human health and natural and man-made resources. All projects or activities included as Category 'A' in the Schedule, including expansion and modernization of existing projects or activities and change in product mix, shall require prior environmental clearance from the Central Government in the Ministry of Environment, Forest and Climate Change (MoEF&CC) and all projects or activities included as Category 'B' in the Schedule will require prior environmental clearance from the State/Union territory Environment Impact Assessment Authority (SEIAA). In the absence of a duly constituted SEIAA or SEAC, a Category 'B' project shall be treated as a Category 'A' project.

8. That it is submitted that the answering respondent further came up with the notification having S.O. 141 (E) dated 15th January, 2016 which stipulates that '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 (District Environment Assessment Authority). The DEIAA shall base its decision on the recommendations of DEAC (District level Expert Appraisal Committee), as constituted for this notification. The copy of the notification S.O. 141 (E) dated 15th January, 2016 is annexed herein and marked as **ANNEXURE R1/1**.

9. It is most respectfully submitted that the notification having S.O. 141 (E) dated 15th January, 2016 has been challenged before Hon'ble Tribunal in the matter of *Original Application No. 186 of 2016* titled as *Satendra Pandey vs Ministry of Environment, Forest and Climate Change* wherein, Hon'ble Tribunal in para no. 25 of its order dated 13.09.2018 directed that:-

The MoEF&CC shall, therefore, take appropriate steps to revise the procedure laid down in the impugned Notification dated 15th January, 2016 in terms of the above directions and observations so that it is conformity with the letter and spirit of the directions passed by the Hon'ble Supreme Court in Deepak Kumar (supra).

The copy of the order dated 13.09.2018 is annexed herein and marked as **ANNEXURE R1/2**.

10. It is submitted that the Hon'ble National Green Tribunal *vide* its order dated 11th December, 2018 in Execution Application No. 55 of 2018 in Original Application No. 520 of 2016 entitled

“*Vikrant Tongad Versus Union of India*” has ordered the following:

“6.The direction that 15.01.2016 should still be acted upon is clearly illegal and in violation of judgment of this Tribunal. The same will stand suspended till a fresh Notification is issued by the MoEF&CC as directed hereinabove.

7. This direction will apply to all the State Environment Impact Assessment Authorities/ State Governments.”

A copy of the Order dated 11th December, 2018 passed by the Hon’ble National Green Tribunal is annexed herewith and marked as **ANNEXURE R1/3**.

11. That it is submitted that in pursuance to the order dated 13.09.2018 and 11.12.2018 passed by the Hon’ble Tribunal, the answering respondent has undergone to challenge the above mentioned orders by way of a Civil Appeal before Hon’ble Apex Court in the matter titled “*Union of India Vs Rajiv Suri*” having Civil Appeal No. 3799-3800 of 2019 and the case is sub-judice as of now.
12. That it is submitted that in exercise of 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 clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government made further amendments in the Environment Impact Assessment Notification, 2006 vide S.O.3977(E) dated 14th August, 2018 wherein, Schematic Presentation of Requirements on Environmental Clearance of Minor Minerals including cluster situation in Appendix-XI and entries relating thereto, the

following item and entries shall be substituted. The copy of the Notification S.O.3977 (E) dated 14th August, 2018 is attached herein and marked as **ANNEXURE R/4**.

13. It is most respectfully stated that in compliance of direction passed by Hon'ble National Green Tribunal in its order dated 04.09.2018 in O.A. 173/2018 in the matter of Sudarsan Das vs. State of West Bengal & Ors, answering respondent 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 (SSMG-2016), which 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, 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. A copy of the Enforcement & Monitoring Guidelines for Sand Mining, 2020 prepared by the Respondent Ministry is annexed herewith and marked as **Annexure R1/5**.
14. It is submitted that the EMGSM-2020 & SSMG-2016 shall be read and implemented in sync with each other. In case, any ambiguity or variation between the provisions of both these document arises, the provision made in "Enforcement & Monitoring Guidelines for Sand Mining-2020" shall prevail.



Further, it is submitted that the Hon'ble National Green Tribunal, New Delhi in O.A No. 8 of 2018 (CZ) titled as Suraj Pagare & Anr. Vs State of M.P vide order dated 11.06.2020 directed the Principle Secretary, Mines; Director, Mines and State of Madhya Pradesh to follow the guidelines issued by MoEF in January, 2020 i.e EMGSM- 2020.

15. It is most respectfully submitted that the Hon'ble Tribunal vide order dated 26.02.2021 passed in the matter of Original Application No. 360/2015 titled as National Green Tribunal Bar Association versus Virender Singh (State of Gujarat) directed all the States/UTs to strictly follow the SSMG-2016 read with EMGSM-2020 reinforced by mechanism for preparation of DSRs, Environment Management Plans, replenishment studies, mine closure plans, grant of EC supra), assessment and recovery of compensation, seizure and release of vehicles involved in illegal mining, other safeguards against violations, grievance redressal, accountability of the designated officers and periodical review at higher levels (in terms of the order refereed by the Hon'ble tribunal in the order).

16. That it is respectfully submitted that State Department of Mines and Geology is the nodal authority in the State for dealing with the allotment of mining leases under the Mines and Minerals (Development and Regulation) Act (MMDR Act) and is entrusted with the enforcement and regulation of mining operations in a State including illegal mining and

Respondent Ministry has no role to play with regard to the same. Further, the State Government is empowered under Section 23 C of the Mines and Minerals (Development and Regulation) Act 1957(MMDR Act) to make rules for prevention of illegal mining, transportation and storage of minerals and the State Department of Mines & Geology is the nodal authority in the state for dealing with the allotment of mining leases under the MMDR Act and is entrusted with the enforcement and regulation of mining operations in a state.

17. That in view of the aforementioned facts and circumstances, this Hon'ble Tribunal may kindly be pleased to pass appropriate order(s).



DEPONENT

(डॉ. सुरेश बाबु पसुपुलेटी)
(Dr. SURESH BABU PASUPULETI)
वैज्ञानिक 'सी' / SCIENTIST 'D'
भारत, सरकार / Govt. of India
जलवायु परिवर्तन मंत्रालय / Min. of Env. Forest & CC
एकीकृत क्षेत्रीय कार्यालय / Integrated Regional Office
विजयवाडा / VIJAYAWADA.

VERIFICATION

I, the above named deponent do hereby verify that the contents of the above affidavit are true and correct on the basis of official record maintained by the Respondent No. 1 in daily course of its business, no part of it is false and nothing material has been concealed there from.

Verified at Vijayawada on this the 22nd day of November, 2021.



DEPONENT
(डॉ. सुरेश बाबु पसुपुलेटी)
(Dr. SURESH BABU PASUPULETI)
वैज्ञानिक 'सी' / SCIENTIST 'D'
भारत, सरकार / Govt. of India
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एकीकृत क्षेत्रीय कार्यालय / Integrated Regional Office
विजयवाडा / VIJAYAWADA.



भारत का राजपत्र

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EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)

PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित

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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 बढ गए है ;

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 है ;

और पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय ने राज्य सरकारों के साथ परामर्श से भरणीय बालू खनन के लिए मार्गदर्शक सिद्धांत तैयार किए है 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 (डीईआईएए)";

(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 डीईआईएए 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 डीईआईएए का अध्यक्ष होगा ।

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

(4) डीईआईएए 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 है ।

(5) डीईआईएए के ऐसे सदस्य जो संबंधित राज्य सरकार या संघ राज्य क्षेत्र प्रशासन के सेवारत अधिकारी है 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 है ।

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

(11) जिला मजिस्ट्रेट या जिला कलक्टर किसी अभिकरण को डीईआईएए 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) डीईआईएए 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. स्क्रिनिंग, 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 स्क्रिनिंग, स्कोपिंग और निर्धारण तथा क्रमशः पांच हेक्टेयर से कम या उसके बराबर लघु खनिजों के खनन पट्टे की 'ख2' प्रवर्ग की परियोजनाओं की स्क्रिनिंग, 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 स्क्रिनिंग 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)-स्क्रिनिंग : ", 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।";

(ख) 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

	<p>(ii) पिच्छल पाइप लाइनें (कोयला लिगनाइट और अन्य अयस्क) जो राष्ट्रीय उद्यानों या अभ्यारण्यों या कोरल रीफ, पारिस्थितिकी संवेदी क्षेत्रों से गुजरती है।</p>	<p>का खनन सभी परियोजनाएं।</p>		<p>तट खनन परियोजनाएं। टिप्पण : (1) खनिज के पूर्वेक्षण 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 अभिप्राप्त की है, के लिए नई पर्यावरणीय अनापत्ति नवीकरण के दौरान प्राप्त करने की अपेक्षा नहीं होगी परंतु यह कि परियोजना के पास विधिमान्य और विद्यमान पर्यावरणीय अनापत्ति हो।</p>
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(ठ) परिशिष्ट 6 के पश्चात् निम्नलिखित परिशिष्ट अंतःस्थापित किए जाएंगे, अर्थात् :-

"परिशिष्ट 7"

(पैरा 3क देखें)

डीईआईएए 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 अंतर्वलित हों या (iv) विहित शिक्षुता/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। व्यष्टिक 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 पारिस्थितिकी, 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 स्रोतों 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 झूट के लिए सिफारिश किया गया नदी या धारा का भाग	खनिज झूट के लिए सिफारिश किए गए क्षेत्र की लंबाई (कि.मी. में)	खनिज झूट के लिए सिफारिश किए गए क्षेत्र की औसत चौड़ाई (मीटर में)	खनिज झूट 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 झूट के लिए सिफारिश किया गया नदी या धारा का भाग	खनिज झूट के लिए सिफारिश किए गए क्षेत्र की लंबाई (कि.मी. में)	खनिज झूट के लिए सिफारिश किए गए क्षेत्र की औसत चौड़ाई (मीटर में)	खनिज झूट 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 क्ले 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 व्यष्टिक परियोजना प्रस्तावक को जारी किया जाएगा। समूह में व्यष्टिक 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 डीईएसी, एसईएसी और ईएसी यह सुनिश्चित करेंगे कि पर्यावरण संघात निर्धारण या पर्यावरण प्रबंधन योजना से न्यूनीकरण उपाय अध्ययन को व्यष्टिक 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/ डीआईएए	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/ डीआईएए/	एमओईएफसीसी द्वारा नामनिर्देशित 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/ डीआईएए/	

समूह क्षेत्र और < 25 ha बिना किसी व्यक्ति पट्टे के > 5 ha		अनुमोदित खनन योजना तथा समूह में सभी पट्टों के लिए एक ईएमपी			प्रस्तावकों का समूह, परियोजना प्रस्तावक		
व्यक्ति 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 व्यक्ति पट्टे के आकार का कोई समूह	'क'	हां	हां	हां	राज्य, राज्य अभिकरण, परियोजना प्रस्तावकों का समूह, परियोजना प्रस्तावक	परियोजना प्रस्तावक	ईएसी/एमओईएफसीसी

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[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 पेंटओग्रॉफ
- (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 क्लर्क 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 सके 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 फोरमेट 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 पश्चात्कर्ती ठीक होने की भी इसी प्रकार सर्वर या काल सेंटर में रिपोर्ट की जानी चाहिए।

7. यानों की ट्रेकिंग :

यान के स्रोत से गंतव्य तक के मार्ग को जांच बिंदुओं, आरएफआईडी टैगों और जीपीएस ट्रेकिंग 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 इंताजामों 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 पश्चात्कर्ती 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		<p>Note:</p> <p>(1) Mineral prospecting is exempted. ”;</p> <p>(2) The prescribed procedure for environmental clearance for mining of minor minerals including cluster situation is given in Appendix XI.”;</p> <p>(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.</p>
	(ii) Slurry pipelines (coal lignite and other ores) passing through national parks or sanctuaries or coral reefs, ecologically sensitive areas.	All projects.		

(l) 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.

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**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

**Original Application No. 186/2016
(M.A. No. 350/2016)
And
Original Application No. 200/2016
And
Original Application No. 580/2016
(M.A. No. 1182/2016)
And
Original Application No. 102/2017
And
Original Application No. 404/2016
(M.A. No. 758/2016, M.A. No. 920/2016,
M.A. No. 1122/2016, M.A. No. 12/2017 & M.A. No. 843/2017)
And
Original Application No. 405/2016
And
Original Application No. 520 of 2016
(M.A. No. 981/2016, M.A. No. 982/2016 & M.A. No. 384/2017)**

IN THE MATTERS OF:

**Satendra Pandey
Vs.
Ministry of Environment, Forest & Climate Change & Anr.
And
Rajeev Suri Vs. Union of India
And
Badal Singh Vs. Union of India & Ors.
And
Nature Club of Rajasthan (NGO) Vs. Union of India & Ors.
And
Naresh Zargar Vs. Ministry of Environment & Forest and Anr.
And
Rajeev Suri Vs. Union of India & Anr.
And
Vikrant Tongad Vs. Union of India**

**CORAM : HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE DR. JUSTICE JAWAD RAHIM, JUDICIAL MEMBER
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

**Present: Applicant: Mr. Rahul Choudhary and Ms. Meera Gopal,
Adv. in Original Application No. 388/2018
Respondents Mr. Divya Prakash Pande, Adv. for Ministry of
Environment, Forest and Climate Change
Dr. Abhishek Atrey, Adv. for Ministry of
Environment, Forest and Climate Change
Mr. Amit Tiwari, Adv. for State of Uttar Pradesh
Mr. Ashok Kumar Sharma and Mr. Kshitij
Mudgal, Adv.
Mr. V.K. Shukla, and Ms. Vijay Lakshmi, Adv.
for State of MP, State Environment Impact
Assessment Authority & Mining Corporation
Mr. Rahul Pratap, Adv. for Ministry of
Environment, Forest and Climate Change
Mr. Shiv Mangal Sharma, AAG with Mr. Saurabh
Rajpal and Mr. Vikramjeet Singh, Adv. for
State of Rajasthan**

Date and Remarks	Orders of the Tribunal
<p data-bbox="321 282 472 352">Item Nos. 07 to 14</p> <p data-bbox="321 387 472 456">September 13, 2018</p> <p data-bbox="350 473 443 499">DV & AT</p>	<p data-bbox="513 303 1443 1311">1. By this application, the applicant has sought to assail Notifications dated 15.01.2016, 20.01.2016 and 01.07.2016 amending the EIA Notification dated 14.09.2006 on the ground that the procedure for obtaining Environmental Clearance in respect of mining of minor minerals for areas from 0 to 25 ha has been diluted by bringing it within B-2 category projects and exempting such category from Public Consultation, Environment Impact Assessment (EIA) and Environment Management Plan (EMP) which was in contravention of the judgment of the Hon'ble Supreme Court in <i>Deepak Kumar Vs. State of Haryana & Ors.: (2012) 4SCC 629</i> and also of this Tribunal in <i>Original Application No. 123 of 2014</i> dated 13.01.2015.</p> <p data-bbox="513 1392 1443 1956">2. The crux of the case of the applicant is that while in <i>Deepak Kumar</i> case (supra) it had been held that all mining leases in respect of its size would require to obtain Environmental Clearance and be subjected to strict regulatory framework as that of all major minerals, the impugned Notifications, more particularly 15.01.2016, exempts the necessity of having EIA and Public Consultation for areas upto 25 ha.</p> <p data-bbox="513 2026 1443 2440">3. According to the applicant the impugned Notification dated 15.01.2016 provided exemption of the rigors of the necessity of EIA and EMP even for areas ranging from 5 to 25 ha when in the earlier Notifications it was necessary from 5 to 50 ha. It was contended that the Hon'ble Supreme Court had expressed its concern on</p>

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dispensing with the necessity of obtaining Environmental Clearance and the other requirements cognate thereto for areas less than 5 ha in the case of *Deepak Kumar* (supra).

4. Further contention was that B-category as it stood originally, was broken to B-1 and B-2 categories by bringing areas of mining of minerals from 25 ha to 50 ha within B-1 category and 0 to 25 ha as B-2 category. For B-2 category, the authority prescribed for grant of Environmental Clearance is now the District Environment Impact Assessment Authority (DEIAA) which would base its decision on the recommendations of District Expert Appraisal Committee (DEAC).

5. Further contentions of the applicant in assailing the Notification dated 15.01.2016 are as follows:

- a) Form-1M prescribed in the impugned Notification dated 15.01.2016, required to be submitted for mining of minor minerals upto 5 ha under Category B-2 projects provided in Appendix-VII, is generic seeking only basic details pertaining to the lease holder and the mine with perfunctory information on the environmental effect of the project which was in contrast to Form-1 which is required to be filled up for all other categories which is comprehensive seeking detailed information on environmental implications of the project.
- b) B-2 projects of 0 – 5 ha under individual and cluster category are exempted from requirements of preparing an Environment Impact Assessment

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Report (EIA) and Environment Management Plan (EMP) and those greater than 5 ha and less than or equal to 25 ha are exempted from preparing Environment Impact Assessment Report (EIA) both with respect to individual Mine Lease and cluster situation. No such exemption has been provided in para 7 (i) of the EIA Notification, 2006 under Stage (2) - Scoping which stipulates such requirement, but it has been done away with now at Appendix-XI of Notification dated 15.01.2016.

c) EIA/EMP is an integral and most critical component of Environmental Clearance as it is only through the EIA that the potential impacts and risks of a project can be assessed and mitigation measures formulated and adopted in the EMP. By exempting EIA/EMP, critical environmental aspects like anticipated environmental impacts, mitigation measures and additional studies involving public consultation, risk assessment, social impact assessment and rehabilitation and resettlement action plans, stand exempted. These requirements provided under Appendix-III, defeats the very purpose of the Notification and the Environment (Protection) Act, 1986.

d) The District Level Environment Impact Assessment Authority (DEIAA) and District Level Expert Appraisal Committee (DEAC) comprises mostly of officers/bureaucrats who have no

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expertise and scientific knowledge to assess environmental implications, and have been conferred with excessive and uncanalized power devoid of any guidelines. Even the power to appoint the Expert Members vested upon the authorities in the DEIAA and DEAC are unguided whereas there is an extensive elaborations with regard to qualifications, skill sets and competencies for the members of SEAC and SEIAA.

6. Based, *inter-alia*, upon the aforesaid grounds, the applicant seeks a direction for quashing the impugned Notifications.

7. Mr. Divya Prakash Pande, Ld. Counsel for MoEF&CC in his arguments, at the outset, raised objection as to the maintainability of the application on the ground of jurisdiction of the Tribunal to grant relief for quashing the impugned notifications. It is contended that the decision of this Court in the case of *S.P. Muthuraman v. Union of India*, in O.A. No. 676 of 2017 (Earlier O.A. No. 37/2015) whereby the Tribunal has held that it had the jurisdiction to pass such orders has since been challenged before the Hon'ble Supreme Court in Civil Appeal No. 7191-7192 of 2015 and is yet to be decided and, by implication of the orders passed by the Hon'ble Supreme Court, operation of the impugned judgement stands stayed.

8. On the merits of the application, it is submitted that Notification dated 15th January, 2016 which is sought to

	<p>Item Nos. 07 to 14</p> <p>September 13, 2018</p> <p>DV & AT</p>	<p>be assailed, had been passed by the MoEF&CC in exercise of its 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 notification was issued after due deliberations with various stakeholders and the State Governments over the draft notification in respect thereof issued on 22nd September, 2015 and, after a committee constituted <i>vide</i> letter dated 3rd December, 2015 to examine the comments/suggestions submitted by them, had submitted its report. The impugned Notification provides for DIEAA/DEAC in the districts which also includes appointment of Officers/bureaucrats as experts in the two bodies. The impugned Notification is further justified by the Learned Counsel contending that as the Executive Engineer, Irrigation Department has been made part of the DEAC as he deals with the rivers and canals in the district and, therefore, has the best information and knowledge about sand and gravel deposits in the districts. The Forest Department officials are also part of these committees who have the ability to do value addition in forest areas or areas adjoining the forest having deposits of minor minerals.</p> <p>9. Upon consideration of the fact and circumstances set out in the original application and upon hearing the Ld. Counsel for parties, we find that the impugned Notification dated 15th January, 2016 is not consistent with the decision of the Hon'ble Supreme Court in the case of <i>Deepak Kumar (supra)</i>. We find substance in the</p>
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<p>Item Nos. 07 to 14</p> <p>September 13, 2018</p> <p>DV & AT</p>	<p>submissions of the Ld. Counsel for the applicant that while breaking category B of the mines to B-1 & B-2 may not <i>per se</i> be bad, it certainly dilutes the stringent requirement of lease areas upto 25 ha being exempted from the necessity of submitting EIA and EMP for grant of Environmental Clearance. It is undisputed that the impugned Notification is issued with the object to comply with the directions passed in the case of <i>Deepak Kumar (supra)</i>. This case had arisen as the EIA Notification dated 14th September, 2006 was being flouted by breaking homogenous areas into pieces of less than 5 ha in the States of Uttar Pradesh, Rajasthan and Haryana, as the notification then did not require Environmental Clearance for areas less than 5 ha. The Hon'ble Supreme Court after noting the serious deleterious effect of quarrying, mining and removal of sand in-stream and up-stream of rivers to the environment, in paragraphs 9 and 10 (of SCC), held as follows:</p> <p style="padding-left: 40px;"><i>“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, 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.</i></p> <p style="padding-left: 40px;"><i>10. We are expressing our deep concern since we are faced with a situation where the</i></p>
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auction notices dated 3-6-2011 and 8-8-2011 have permitted 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. The rivers mentioned in the auction notices are on the foothills of the fragile Shivalik hills. Shivalik hills are the source of rivers like Ghaggar, Tangri, Markanda etc. River Ghaggar is a seasonal river which rises up in the outer Himalayas between Yamuna and Satluj and enters Haryana near Pinjore, District Panchkula, which passes through Ambala and Hissar and reaches Bikaner in Rajasthan. River Markanda is also a seasonal river like Ghaggar, which also originates from the lower Shivalik hills and enters Haryana near Ambala. During monsoon, this stream swells up into a raging torrent, notorious for its devastating power, as also, river Yamuna.

11. We find that it is without conducting any study on the possible environmental impact on/in the river beds and elsewhere the auction notices have been issued. We are of the considered view that when we are faced with a situation where extraction of alluvial material within or near a riverbed 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 km, because their collective impact may be significant, hence the necessity of a proper environmental assessment plan.”

10. The Hon'ble Supreme Court also took note of the fact that the MoEF&CC had constituted a Core Group under the Chairmanship of the Secretary (Environment & Forest) to look into the environment aspects associated with mining of the minor minerals *vide* order dated 24th March, 2009 with specific terms and conditions. The Core Group after consideration of various issues including cluster of mine approach for addressing and implementing EMP in case of small mines, submitted a report on 29th

	<p>Item Nos. 07 to 14</p> <p>September 13, 2018</p> <p>DV & AT</p>	<p>January, 2010 with the recommendation to permit mining of minor minerals under strict regulatory regime and carried out only under an approved framework of mining plan which should provide for reclamation and rehabilitation of mine areas. For smaller mine lease areas a cluster approach was recommended. It was directed that the States should adopt the recommendations and the model guidelines framed by the Ministry of Mines, namely the Model Rules, 2010.</p> <p>11. In pursuance of the directions, the impugned Notification dated 15th January, 2016 was ultimately issued. The MoEF&CC Notification dated 14th December, 2006 as it stood earlier prescribed for two categories of projects and activities as Category A and Category B based on the spatial extent of potential impacts, potential impacts on human health and natural and man-made resources. Stage (1)-Screening that provides for Category 'B' projects or activities, entail scrutiny of an application seeking prior Environment 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 EIA for appraisal prior to grant of Environment Clearance depending upon the nature and location specificity of the project. It further provides that the project requiring EIA report would be termed as Category 'B-1' and remaining projects as Category 'B-2' that would not require EIA report. Discretion to make such categorization was left upon the MoEF&CC and to issue appropriate guidelines from time to time. This</p>
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	<p>Item Nos. 07 to 14</p> <p>September 13, 2018</p> <p>DV & AT</p>	<p>provision was a subject matter of challenge in the case of <i>Himmat Singh Shekhawat v. State of Rajasthan</i>, 2015 ALL (I) NGT Reporter (1) DEL 44 by which it was upheld as having been issued by the Ministry as a Subordinate Legislation. However, the office memorandums dated 24th June, 2013 and 24th December, 2013 prohibiting grant of Environment Clearance to the mine areas of less than 5 ha was quashed as being in conflict with the aforesaid provision.</p> <p>12. The only contention that require for us to consider in this case is as to whether the Notification dated 15th January, 2016 would satisfy the spirit of the directions issued in the case of <i>Deepak Kumar (supra)</i>. As already noted, EIA Notification dated 14th September, 2006 under the Schedule provided thereto require all mining lease area of equal to and up to 50 ha to seek Environment Clearance requiring to submit EIA for appraisal from the SEIAA.</p> <p>13. The impugned Notification dated 15th January, 2016, however, would clearly indicate that Category B has been split into category B1 and B2 and again, category B2 has been further split into areas of 0-5 ha and 5-25 ha. While 0-5 ha has been exempted from the requirement of EIA/Public Consultation, such exemption has also been provided even for mining areas of 5 ha to 25 ha with the DEAC and the DEIAA as the prescribed authority for evaluation and grant of Environmental Clearance. Category B-1 being mining areas of 25 ha to 50 ha, the authorities prescribed are the SEAC and SEIAA. For falling in excess of 50 ha being Category-A, it is the EAC and the</p>
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	<p>Item Nos. 07 to 14</p> <p>September 13, 2018</p> <p>DV & AT</p>	<p>MoEF&CC.</p> <p>14. The procedure for grant of the Environment Clearance by the DEIAA for areas between 0 to 5 ha falling under Category 'B-2' is found prescribed in paragraphs 6, 7(iii) (a) and 7(iii) (b) of the impugned Notification read with appendices VIII, X and XI. The Schematic Presentation of Requirement of Environment Clearance of Minor Minerals including cluster situation provided in a table to Appendix XI would substantiate indubitably that even for areas between 5 to 25 ha, no EIA and Public Hearing is required and in cluster situation also, the requirement of EIA and Public Hearing have been exempted.</p> <p>15. Introduction of such procedure, in our view, is clearly not consistent with the directions contained in the case of <i>Deepak Kumar (supra)</i> and the spirit behind such direction. By the provision, mining area upto from 5 ha to 25 ha has been completely exempted from the EIA and Public Consultation. For areas of 5 ha and below, apart from the exemption, it has been made only subject to a separate procedure of preparing a District Survey Report (DSR). These provisions quite apparently are more mine-centric rather than striving a balance between mining and environment especially with regard to Form-1M which needs to be made more elaborate incorporating environment related aspects.</p> <p>16. The Sustainable Sand Mining Management Guidelines, 2016 prepared by the MoEF&CC has also deprecated the procedure as will appear from below which</p>
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	<p>Item Nos. 07 to 14</p> <p>September 13, 2018</p> <p>DV & AT</p>	<p>is contained in the chapter on “The Issues and Management of Mining in Cluster”:-</p> <p>“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.”</p> <p>17. Thus, even according to the Sustainable Sand Mining Management Policy issued by the MoEF&CC by dispensing with Public Hearing, the judgment of the Hon'ble Supreme Court in the case of <i>Deepak Kumar (supra)</i> will stand defeated.</p> <p>18. We also find that parameters for consideration while preparing District Mining Plan (DMP) and District Survey Report (DSR) are only for the purpose of ascertaining whether an area is fit for mining which are quite different from the parameters laid down for EIA. The consideration of the view point of the public by keeping DSR in public domain is not a substitute of Public Hearing for consideration of the view point of the public for EIA.</p> <p>19. With specific reference to mining in cluster, the Report of the Committee of Secretaries, Ministry of Environment, Forest and Climate Change, 2010 recommended as follows:</p>
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“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.”

20. This report which is a part of the Sustainable Sand Mining Management Guidelines, 2016 finds reinforcement in the Chapter “The Issues and Management of Mining in Cluster” referred to earlier where it has inter-alia been recommended as under:

“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*

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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.
10.
11.”

21. Dispensing with the requirement of Public Hearing which forms a part of the Public Consultation under Stage-III of the Environmental Clearance process under EIA Notification, 2006 for areas measuring 0 to 25 ha for individual mine areas and in cluster situation where public hearing has been provided, has resulted in gross dilution of EIA Notification dated 14th September, 2006. Such dilution would, in our view, result in its misuse by unscrupulous elements and the situation would revert

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back to the lawless state prevailing prior to the decision in the case of *Deepak Kumar (supra)*. Stringent measures are, therefore, necessary if the rampant exploitation of the minor minerals is to be curbed. This apparently was also the view of the Hon'ble Supreme Court in the case of *Deepak Kumar (supra)*.

22. For all these reasons, we direct that the procedure laid down in the impugned Notification be brought in consonance and in accord with the directions passed in the case of *Deepak Kumar (supra)* by (i) providing for EIA, EMP and therefore, Public Consultation for all areas from 5 to 25 ha falling under Category B-2 at par with Category B-1 by SEAC/ SEIAA as well as for cluster situation wherever it is not provided; (ii) Form-1M be made more comprehensive for areas of 0 to 5 ha by dispensing with the requirement for Public Consultation to be evaluated by SEAC for recommendation of grant EC by SEIAA instead of DEAC/DEIAA; (iii) if a cluster or an individual lease size exceeds 5 ha the EIA/EMP be made applicable in the process of grant of prior environmental clearance; (iv) EIA and/or EMP be prepared for the entire cluster in terms of recommendation 5 (*supra*) of the Guidelines for the purpose of recommendations 6, 7 and 8 thereof; (v) revise the procedure to also incorporate procedure with respect to annual rate of replenishment and timeframe for replenishment after mining closure in an area; (vi) the MoEF&CC to prepare guidelines for calculation of the cost of restitution of damage caused to mined-out areas along with the Net Present Value of Ecological Services forgone because of illegal or unscientific mining.

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23. We have permitted retention of 0-5 ha as a category keeping in view that some States grant isolated single lease of 5 ha and less not falling in cluster situation for which stringent requirements in Form-1M will serve the purpose of providing safeguards for protection of the environment and sustainable mining of minor minerals. This is particularly true in smaller and mountainous States as will also appear from condition no. 2 under “The Issues and Management of Mining in Cluster” referred to earlier in para 20 of this order.

24. It is reiterated that any attempt to split the lease area for the purpose of avoiding the applicable regulatory regime shall be viewed seriously. This in our view will be in the interest of the environment as deliberated in detail in the case of *Deepak Kumar (supra)* and would also satisfy the Precautionary Principle and the Principle of Sustainable Development contemplated under Section 20 of the National Green Tribunal Act, 2010.

25. The MoEF&CC shall, therefore, take appropriate steps to revise the procedure laid down in the impugned Notification dated 15th January, 2016 in terms of the above directions and observations so that it is conformity with the letter and spirit of the directions passed by the Hon’ble Supreme Court in *Deepak Kumar (supra)*.

The applications stand disposed of.

....., CP
(Adarsh Kumar Goel)

....., JM
(Dr. Jawad Rahim)

	<p>Item Nos. 07 to 14</p> <p>September 13, 2018</p> <p>DV & AT</p>	<p>.....,JM (S.P. Wangdi)</p> <p>.....,EM (Dr. Nagin Nanda)</p> <p>13.09.2018</p>
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BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Executive Application No. 55/2018
IN
Original Application No. 520/2016

Vikrant Tongad

Applicant(s)

Versus

Union of India

Respondent(s)

Date of hearing: 11.12.2018

**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. Rahul Choudhary, Advocate and Mr. Sany Antony,
Advocate

ORDER

1. Grievance in this application is that there is non-compliance of the judgment of this Tribunal dated 13.09.2018 in *Original Application No. 186/2016, Satendra Pandey Vs. Ministry of Environment, Forest & Climate Change & Anr.* The Hon'ble Supreme Court, vide judgment in *Deepak Kumar Vs. State of Haryana & Ors.: (2012) 4 SCC 629*, required proper Environmental Clearance before grant of lease of minor minerals, including sand mining. Vide Notification dated 15.01.2016 issued by MoEF&CC, environmental clearance was to be given by the District Environment Impact Assessment Authority (DEIAA) which defeat the direction of the Hon'ble Supreme Court.
2. This Tribunal noted that the Notification dated 15.01.2016 issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC) was not consistent with the mandate in *Deepak Kumar (supra)*.
3. The District Expert Appraisal Committee (DEAC) comprised officers having no expertise or scientific knowledge to assess environment implications. Permitting DEAC to make assessment

was also not consistent with the Sustainable Sand Mining Management Guidelines, 2016. Accordingly, MoEF&CC was directed to take steps to revise the procedure laid down in the Notification dated 15.01.2016.

4. According to the applicant, the MoEF&CC failed to issue appropriate Notification. Moreover, the State of Uttar Pradesh vide the letter dated 25.10.2018 and State of Kerala vide the letter dated 29.10.2018 directed Environmental Clearance to be given in accordance with the Notification dated 15.01.2016 in violation of the judgment of this tribunal dated 13.09.2018 which in turn is to implement the direction of the Hon'ble Supreme Court in Deepak Kumar (*supra*).
5. Accordingly, we direct the MoEF&CC to comply with the order dated 13.09.2018 forthwith and furnish a report of compliance on or before 31.12.2018 failing which coercive measures may have to be taken. We also make it clear that till a fresh Notification is issued by the MoEF&CC, Notification dated 15.01.2016 will not be acted upon.
6. Since our attention has been drawn to letter dated 29.10.2018 issued by the State Environment Impact Assessment Authority, Kerala addressed to the District Environment Impact Assessment Authorities of various districts in Kerala that Notification dated 15.01.2016 having not being stayed, the same be followed. This interpretation is clearly contrary to the order of this Tribunal disapproving the Notification dated 15.01.2016 and requiring the same to be revised. The direction that 15.01.2016 should still be acted upon is clearly illegal and in violation of judgment of this Tribunal. The same will stand suspended till a fresh Notification is issued by the MoEF&CC as directed hereinabove.
7. This direction will apply to all the State Environment Impact Assessment Authorities/State Governments.

8. List for further consideration along with the report of the MoEF&CC on 14.01.2019.
9. Copy of this order be sent to the MoEF&CC by e-mail.
10. The report may also be furnished to this Tribunal by e-mail at ngt.filing@gmail.com.

Adarsh Kumar Goel, CP

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

December 11, 2018
Executive Application No. 55/2018
in Original Application No. 520/2016
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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

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अधिसूचना

नई दिल्ली, 14 अगस्त, 2018

का. आ. 3977 (अ).—भारत सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 3 की उपधारा (1) और उपधारा (2) के खंड (v) के साथ पठित पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) के खंड (घ) के अधीन भारत सरकार के तत्कालीन पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की अधिसूचना सं. 1533(अ) तारीख 14 सितंबर, 2006 द्वारा निदेश दिया गया कि इसके प्रकाशन की तारीख से ही उक्त अधिसूचना में सूचीबद्ध नई परियोजनाओं या क्रियाकलापों का अपेक्षित संनिर्माण या विद्यमान परियोजनाओं या क्रियाकलापों का विस्तार या आधुनिकीकरण, जिसमें प्रक्रिया या प्रौद्योगिकी या उत्पाद मिश्रण में परिवर्तन सहित क्षमता वर्धन, इसमें विनिर्दिष्ट प्रक्रिया के अनुसार, यथास्थिति, केंद्रीय सरकार से या उक्त अधिनियम की धारा 3 की उपधारा (3) के अधीन केंद्रीय सरकार द्वारा सम्यक्तः गठित राज्यस्तरीय पर्यावरण संघात निर्धारण प्राधिकरण द्वारा पूर्व पर्यावरण अनापत्ति के पश्चात् हो, भारत में किसी भी भाग में किया जाएगा ;

उक्त मंत्रालय ने राज्य पर्यावरण समाघात निर्धारण प्राधिकारी (एसईआईएए) और जिला पर्यावरण समाघात निर्धारण प्राधिकारी को पर्यावरण अनापत्ति को प्रदान करने के संबंध में और अधिक शक्तियों के प्रत्यायोजन के लिए अनुरोध को स्वीकार किया है ;

और पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) के खंड (क) उपबंध करता है कि जहां केंद्रीय सरकार का विचार है कि किसी उद्योग या किसी प्रक्रिया को चलाने या प्रचालन करने पर किसी क्षेत्र के प्रतिषेध या निर्बंधन अधिरोप किया जाना चाहिए तो ऐसे करने के अपने आशय का नोटिस देगी ;

और 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 (1) और उपधारा (2) के खंड (v) के अधीन प्रदत्त शक्तियों का प्रयोग करते हुए, जारी पर्यावरण समाघात निर्धारण अधिसूचना, 2006 में संशोधन करने के लिए ड्राफ्ट अधिसूचना संख्यांक का.आ. 3933(अ) तारीख 18 दिसंबर, 2017 को प्रकाशित की गई थी, जिसमें उन सभी व्यक्तियों से, जिनके उससे प्रभावित होने की संभावना है, उक्त अधिसूचना के भारत के राजपत्र में प्रकाशन की तारीख साठ दिन की अवधि के भीतर आक्षेप और सुझाव आमंत्रित किए गए थे ;

और उक्त राजपत्र की प्रतियां जनता को 18 दिसंबर, 2017 को उपलब्ध करा दी गई थी ;

और केंद्रीय सरकार द्वारा पूर्वोक्त वर्णित प्रारूप अधिसूचना पर प्राप्त सभी आक्षेपों और सुझावों पर सम्यक्तः विचार किया गया था ;

केंद्रीय 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 (1) और उपधारा (2) के खंड (v) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, पर्यावरण समाघात निर्धारण अधिसूचना 2006 में निम्नलिखित और संशोधन करती है, अर्थात् :-

उक्त अधिसूचना की अनुसूची में, मद 1(क), 1(ग) और लघु खनिज के पर्यावरणीय अनापत्ति पर अपेक्षाओं का स्कीम संबंधी प्रस्तुति, जिसके अंतर्गत परिशिष्ट-XI में समूह स्थिति भी है और उससे संबंधित प्रविष्टियों के स्थान पर निम्नलिखित मद और प्रविष्टियां रखी जाएंगी, अर्थात् :-

परियोजना या कार्यकलाप		प्रारंभिक सीमा सहित प्रवर्ग		शर्तें यदि कोई हों
		क	ख	
1		खनन, प्राकृतिक संसाधनों का निष्कर्षण तथा विद्युत उत्पादन		(विनिर्दिष्ट उत्पादन क्षमता के लिए)
(क) (1)	(2)	(3)	(4)	(5)
1(क)	(i) खनिजों का खनन (ii) पिच्छल पाइप लाइने (कोयला लिफ्ट और अन्य अयस्क) जो राष्ट्रीय उद्यानों/अभ्यारण्यों /कोरल रीफ, पारिस्थितिकी संवेदी क्षेत्रों से गुजरती है	गैर कोयला खनन पट्टे के संबंध में > हे. खनन पट्टा क्षेत्र कोयला खनन पट्टे के संबंध में > 150 हे. खनन पट्टा क्षेत्र खनन क्षेत्र पर विचार किए बिना अज़बेस्टो का खनन क्षेत्र सभी परियोजनाएं।	गैर कोयला खनन पट्टे के संबंध में < 100 हे. खनन पट्टा क्षेत्र कोयला खनन पट्टे के संबंध में < 150 हे. खनन पट्टा क्षेत्र	सामान्य शर्तें लागू होंगी, सिवाय : (i) प्रवर्ग 'ख2' लघु खनिजों के खनन (25 हेक्टेयर खनन पट्टा क्षेत्र तक) के लिए परियोजना का कार्यकलाप ; (ii) खनन पट्टा क्षेत्र के समूह की दशा में 'ख1' प्रवर्ग के लघु खनिज के खनन की परियोजना और क्रियाकलाप के लिए ; और (iii) अंतरराज्यीय सीमा के कारण नदी तल खनन परियोजनाएं। टिप्पण : (1) खनिज के पूर्वोक्षण को छूट दी गई है। (2) लघु खनिजों, जिनके अंतर्गत समूह अवस्थिति है, के खनन के लिए पर्यावरणीय अनापत्ति की विहित प्रक्रिया परिशिष्ट XI में दी गई है ;
1(ग)	(i) नदी घाटी परियोजनाएं (ii) सिंचाई परियोजना	(i) <50 मे.वा. जल विद्युत उत्पादन (ii) >50,000 हे. खेती योग्य कमान क्षेत्र	(i) ≥ 25 मे.वा. और <50 मे.वा.जल विद्युत उत्पादन (ii) >2000 हे और <50,000 हे.. खेती योग्य कमान क्षेत्र सिंचाई प्रणाली (क) लघु सिंचाई प्रणाली (<2000 हे.) (ख) मध्यम सिंचाई	साधारण शर्तें लागू होंगी टिप्पण : (i) एक से अधिक राज्य में आने वाली प्रवर्ग 'ख' नदी घाटी परियोजनाओं का मूल्यांकन केंद्रीय सरकार स्तर पर किया जाएगा ; (ii) किसी विद्यमान परियोजना द्वारा पर्यावरणीय लाभयुक्त सिंचाई प्रौद्योगिकी में परिवर्तन किया जाना (उदाहरणार्थ बाढ़ सिंचाई से ड्रिप सिंचाई) जिसके फलस्वरूप खेती योग्य कमान क्षेत्र में वृद्धि हो, किंतु बांध की ऊंचाई और जलमग्नता में वृद्धि न हो, के लिए पर्यावरणीय स्वीकृति अपेक्षित नहीं होगी।

			प्रणाली (>2000 <10,000 हे.)	(ख2 प्रवर्ग) तैयार करना अपेक्षित।	
			(ग) महा सिंचाई प्रणाली (>10000 से <50000 हे.)	इआईए/ईएमपी और राज्य स्तरीय (ख1 प्रवर्ग) तैयार करना अपेक्षित।	

लघु खनिज के पर्यावरणीय अनापत्ति पर अपेक्षाओं का स्कीम संबंधी प्रस्तुति, जिसके अंतर्गत परिशिष्ट-XI में समूह स्थिति भी है

पट्टे का क्षेत्र (हेक्टेयर)	परियोजना का प्रवर्ग	ईआईए/ ईएमपी की अपेक्षा	लोक सुनवाई की अपेक्षा	ईसी की अपेक्षा	कौन ईआईए/ ईएमपी तैयार कर सकता है	ईसी के लिए कौन आवेदन करेगा	ईसी का मूल्यांकन/ स्वीकृति देने 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								
0-5 हे.	'ख2'	प्रारूप-1 एमपीएफआर, डीएसआर और अनुमोदित खनन योजना	नहीं	हां	परियोजना प्रस्तावक	परियोजना प्रस्तावक	डीईएसी/ डीआईएए	डीआईएए एमआईएए एपीसीबी सीपीसीबी एमओईएफसीसी एमओईएफसीसी अभिकरण द्वारा नामनिर्देशिती
>5 हे. और <25 हे.	'ख2'	प्रारूप-1 पीएफआर और डीएसआर अनुमोदित खनन योजना और ईएमपी	नहीं	हां	परियोजना प्रस्तावक	परियोजना प्रस्तावक	एसईएसी/ एसईआईएए	
>25 हे. और <100 हे.	'ख1'	प्रारूप-1 पीएफआर और डीएसआर अनुमोदित खनन योजना और ईआईए तथा ईएमपी	हां	हां	परियोजना प्रस्तावक	परियोजना प्रस्तावक	एसईएसी/ एसईआईएए	
>100 हे.	'क'	प्रारूप-1 पीएफआर और डीएसआर अनुमोदित खनन योजना और ईआईए तथा ईएमपी	हां	हां	परियोजना प्रस्तावक	परियोजना प्रस्तावक	ईएसी/ एमओईएफसीसी	
समूह स्थिति में बालू खनन और अन्य लघु खनिज के लिए ईसी प्रस्ताव								
5 हे. तक खनन पट्टे का समूह क्षेत्र	'ख2'	प्रारूप-1 एमपीएफआर, डीएसआर और अनुमोदित खनन योजना	नहीं	हां	राज्य, राज्य अभिकरण, परियोजना प्रस्तावकों का समूह, परियोजना प्रस्तावक	परियोजना प्रस्तावक	डीईएसी/ डीआईएए	डीआईएए एमआईएए एपीसीबी सीपीसीबी एमओईएफसीसी एंजेसी द्वारा नामनिर्देशिती
>5 हे. और <25 हे. के खनन पट्टे के समूह क्षेत्र, >5 हे. के बिना किसी व्यष्टिक पट्टे के	'ख2'	प्रारूप-1 पीएफआर, डीएसआर और अनुमोदित खनन योजना तथा समूह में सभी पट्टों के लिए एक ईएमपी	नहीं	हां	राज्य, राज्य अभिकरण, परियोजना प्रस्तावकों का समूह, परियोजना प्रस्तावक	परियोजना प्रस्तावक	डीईएसी/ डीआईएए	

खनन पट्टे के समूह क्षेत्र, >5 हे. के किसी व्यष्टिक पट्टे के साथ	ख 2	प्रारूप-1 पीएफआर, डीएसआर और अतुमोदित खनन योजना तथा समूह में सभी पट्टों के लिए एक ईएमपी	नहीं	हां	राज्य, राज्य अभिकरण, परियोजना प्रस्तावकों का समूह, परियोजना प्रस्तावक	परियोजना प्रस्तावक	एसईएसी/एसईआईएए	
व्यष्टिक पट्टा आकार <100 हे. के साथ >25 के खनन पट्टों का समूह	'ख1'	प्रारूप-1 पीएफआर, डीएसआर और अतुमोदित खनन योजना तथा समूह में सभी पट्टों के लिए एक ईआईए/ईएमपी	हां	हां	राज्य, राज्य अभिकरण, परियोजना प्रस्तावकों का समूह, परियोजना प्रस्तावक	परियोजना प्रस्तावक	सीईएसी/एसईआईएए	
>100 हे. से किसी व्यष्टिक पट्टे के आकार का कोई समूह	'क'	प्रारूप-1 पीएफआर, डीएसआर और अतुमोदित खनन योजना तथा समूह में सभी पट्टों के लिए एक ईआईए/ईएमपी	हां	हां	राज्य, राज्य अभिकरण, परियोजना प्रस्तावकों का समूह, परियोजना प्रस्तावक	परियोजना प्रस्तावक	ईएसी/एमओईएफसीसी	

[फा. सं. 19-2/2013-आईए. III (पार्ट. II)]

ज्ञानेश भारती , संयुक्त सचिव

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

1. का.आ. 1949(अ), तारीख 13 नवम्बर, 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) 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 सितम्बर, 2016;
30. का.आ. 3518(अ), तारीख 23 नवंबर, 2016 ;
31. का.आ. 3999(अ), तारीख 9 दिसंबर, 2016;
32. का.आ. 4241(अ), तारीख 30 दिसम्बर, 2016; और
33. का.आ. 3611(अ), तारीख 25 जुलाई, 2018 ।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 14th August, 2018

S.O. 3977(E).— Whereas, by 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 issued under 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 directed that on and from the date of its publication, the required construction of new projects or activities or the expansion or modernisation of existing projects or activities listed in the Schedule to the said notification entailing capacity addition with change in process or technology or product mix shall be undertaken in any part of India only after prior environmental clearance from the Central Government or as the case may be, by the State Level Environment Impact Assessment Authority, duly constituted by the Central Government under sub-section (3) of section 3 of the said Act, in accordance with the procedure specified therein;

And whereas, the said Ministry has received requests, for delegation of more powers to State Environment Impact Assessment Authority (SEIAA) and District Environment Impact Assessment Authority (DEIAA) with respect to grant of Environment Clearances;

And whereas clause (a) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 provides that, whenever the Central Government considers that prohibition or restrictions of any industry or carrying on any processes or operation in any area should be imposed, it shall give notice of its intention to do so;

And whereas, a draft notification for making amendments in the Environment Impact Assessment Notification, 2006 in exercise of the powers conferred under 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 was published, vide number S.O.3933 (E) dated the 18th December 2017, inviting objections and suggestions from all the persons likely to be affected thereby, within a period of sixty days from the date of publication of said notification in the Gazette of India;

And whereas, copies of the said notification were made available to the public on 18th December 2017;

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

			(c) Major irrigation system (≥10,000 to < 50,000 ha.)	Required to prepare EIA/EMP and to be dealt at State Level (B ₁ category).	
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Schematic Presentation of Requirements on Environmental Clearance of Minor Minerals including cluster situation in Appendix-XI:

Area of Lease (Hectare)	Category of Project	Requirement of EIA / EMP/ DSR	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 –IM, PFR, DSR 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, DSR and Approved Mine Plan and EMP	No	Yes	Project Proponent	Project Proponent	SEAC / SEIAA	
≥ 25ha and ≤ 100ha	'B1'	Form –I, PFR, DSR and Approved Mine Plan and EIA and EMP	Yes	Yes	Project Proponent	Project Proponent	SEAC / SEIAA	
> 100 ha	'A'	Form –I, PFR, DSR and Approved Mine Plan and EIA and EMP	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, DSR 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, DSR 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 area of Mine leases > 5 ha and < 25 ha with any individual lease > 5 ha	'B2'	Form –I, PFR, DSR 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	SEAC/ SEIAA	

Cluster of mine leases of area ≥ 25 hectares with individual lease size ≤ 100 ha	'B1'	Form -I, PFR, DSR and Approved Mine Plan and one EIA/EMP for all leases in the Cluster	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 > 100 ha	'A'	Form -I, PFR, DSR and Approved Mine Plan and one EIA/EMP for all leases in the Cluster	Yes	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	EAC/MoEFCC	

[F. No. 19-2/2013-IA.III (Pt.II)]

GYANESH BHARTI, 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. 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;

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30. S.O. 3518 (E) dated 23rd November 2016;
 31. S.O. 3999 (E) dated the 9th December, 2016;
 32. S.O. 4241(E) dated the 30th December, 2016; and
 33. S.O. 3611(E) dated the 25th July, 2018.



Enforcement & Monitoring Guidelines for Sand Mining



Ministry of Environment, Forest and Climate change

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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 GUIDLINES

- 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 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 Cleanace 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

Lease No	Transportation Route No	Number of tipper s /day of lease	Number of tipper s /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 tipper s /day of cluster	Number of tipper s /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

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

Annexure VIII

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.