

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

Original Application No.123 of 2022(SZ)

Between

Gottimukkala Suresh Reddy & Ors..... Applicant (S)

Versus

The District Collector &DLSC, Chairman, Telangana & Ors .

..... Respondent(S)

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S.Diwakar. Advocate

MoEF&CC

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**
Original Application No. 123 of 2022 (SZ)

IN THE MATTER OF:

Gottimukkala Suresh Reddy & Ors.APPLICANTS

VS

The District Collector & DLSC, Chairman, Telangana & ors.
.....RESPONDENTS

**REPLY AFFIDAVIT ON BEHALF OF THE MINISTRY OF
ENVIRONMENT, FOREST AND CLIMATE CHANGE (RESPONDENT
No. 5)**

MOST RESPECTFULLY SHOWETH:

I, Tarun Kathula S/o Shyamal Rao age about 45 , currently working as 'Director/Scientist 'F' in the Ministry of Environment, Forest and Climate Change (MoEF&CC), Integrated Regional Office, Hyderabad, do hereby solemnly affirm and state as under:-

1. That I, in my official capacity of in the Ministry of Environment, Forest and Climate Change, Hyderabad i.e. Respondent No. 5 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. 5 denies each averment and/or submission made in the application which is


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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 deemed to have been admitted by the Respondent No. 5 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 Reply Affidavit to the aforesaid application, as and when required.
4. The applicant in present application alleges large scale illegal sand extraction from Manair River of Peddapalli District in Telangana State. It is stated that the Telangana State Mineral Development Corporation (TSMDC) has invited tenders for extraction and transportation of sand and entered into agreements with the contractors in March 2022. The TSMDC had not obtained environmental pollution clearance from the concerned departments as they come under the exemption category. It is stated that since the sand sourced in the process of De-siltation of sand under the check dams they are exempted from the requirement of Environmental Clearance, CFE and CFO as per Clause No. 7 of S.O. 1224 Dt. 28.03.2020 which exempt "Dredging and De-siltation of Dams, Reservoirs, Barrages, Rivers and Canals for



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Disaster Management". The allegation of the applicant is that bringing it under the exempted category, the respondents are flouting the guidelines issued by the Ministry of Environment, Forest and Climate and also the Telangana State Sand Mining Rules, 2015.

5. That the applicant has inter-alia prayed for that the Hon'ble NGT may call records pertaining to impugned agreement ref no contract agreement no TSMDC/Madaka-2V/Odela(M) pedapalli dist/Sand/Legal/2022 made and entered in to on 11-04-2022 between TSDMC and private respondents. To direct resp 1 to7 to conduct deep and scientific study is solicited to prevent the illegal mining. To direct the official respondents 1-7 to stop issuing any such approvals and tender notification until the EC is achieved.
6. That in the present application, this Hon'ble Tribunal passed an order dated 23.12.2022 and 03.01.2023 raising some queries from the Answering Respondent at para 8 of the Order.

"8. However, we direct the MoEF&CC to file it in the form of a reply to enable other also to go through it. Let the reply also include and clarify the "B1 Category" and "B2 Category" and what is manual, mechanical and semi-mechanical mining and what are all the permitted methods under each category."



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7. That Answering Respondent issued EIA Notification dated 14.09.2006 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.
8. 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



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9. That referring to the query regarding “B1 category” and “B2 category” answering respondent vide its parent notification dated 14.09.2006 distinguished the categorization. The projects requiring an Environmental Impact Assessment report shall be termed as Category ‘B1’ and remaining projects shall be termed as Category ‘B2’ and will not require an Environment Impact Assessment report. Copy of the EIA Notification dated 14.09.2006 is marked and annexed herein as **ANNEXURE R5/1**.
10. That the Answering Respondent in the subsequent amendment to the parent notification categorically distinguished the “B1” and “B2” category vide Notification S.O. 3977(E) dated 14.08.2018 in the “Schematic Presentation of Requirements on Environmental Clearance of Minor Minerals including cluster situation in Appendix-XI”. Copy of the Notification S.O. 3977(E) dated 14.08.2018 is marked and annexed herein as **ANNEXURE R5/2**.
11. That the Ministry issued an Office Memorandum L-11011/175/2018-IA-II(M) dated 12.12.2018 in compliance to the judgment passed by the Hon’ble NGT (PB) in the matter of OA 173 of 2018 titled *Sudarshan Das vs State of West Bengal n ors* and in OA no 186 of 2016 titled *Satendra Pandey vs. Ministry Of Environment, Forests And Climate Change & ors.* where EIA,



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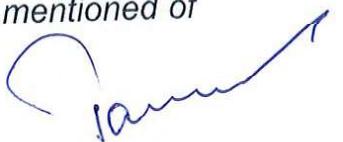
EMP and public consultation for all areas from 5 to 25 ha falling as category B2 shall be treated as B1 category as per EIA Notification 2006 and same shall apply for the cluster situation.

“(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/ SIEAA as well as for cluster situation wherever it is not provided”

Copy of the Office Memorandum L-11011/175/2018-IA-II(M) dated 12.12.2018 is marked and annexed herein as **ANNEXURE R5/3**.

12. That in reference to the second part of query regarding the *manual, mechanical and semi-mechanical mining and its uses in the different category, it is stated that Hon'ble National Green Tribunal (Principal Bench) has already adjudicated the concept in order dated 05.09.2018 passed in the Original Application No.44 of 2016 Mushtakeem versus Ministry of Environment, Forest and Climate Change & Ors based on the affidavit filed by the Ministry.*

“9. The MoEF&CC further states that environmental considerations are important to sustain quality of life and to balance the demands of economic developments and need for protection of environment. Manual mining is mining done by workers manually. If a machine is used the mining will be mechanized mining. Transportation is done by using tractors and trucks. Different mining methods mentioned of



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pit excavation, dry pit, wet pit, bar skimming (scalping), pit mining, terrance mining, mechanical dredging and suction using dredgers / pumps and scrapping.

13. According to MoEF&CC, combination of man and machines results in semi mechanized and mechanized mining. Manual mining is allowed in dry stretches of sand aggradations in river with width upto 100 meters from bank to bank”.

Copy of the Order dated 05.09.2018 passed in the Original Application No.44 of 2016 Mushtakeem versus Ministry of Environment, Forest and Climate Change & Ors is marked and annexed herein as **ANNEXURE R5/4**.

13. That it is most respectfully stated that as per the provision of Sustainable Sand Mining Management Guidelines, 2016 (SSMG-2016) “STANDARD ENVIRONMENTAL CONDITIONS FOR SAND MINING” has been laid down. The relevant para of the said guideline is reproduced herein below for ready reference:-

“19. Depending upon the location, thickness of sand, deposition, agricultural land/Riverbed, the method of mining may be manual, semi-mechanized or mechanized; however, manual method of mining shall be preferred over any other method.”



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The copy of the Sustainable Sand Mining Management Guidelines, 2016 issued by the Respondent Ministry is annexed herewith and marked as **ANNEXURE R5/5**.

14. That in compliance of the directions issued 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 another guidelines i.e. "Enforcement & Monitoring Guidelines for Sand Mining" (EMGSM-2020) supplemental to the 2016 guidelines i.e. Sustainable Sand Management Guidelines 2016 (SSMG-2016), which focuses on the effective monitoring of the sand mining right from identification of sand mineral sources to its dispatch and end-use by consumers and the general public. Further, it is envisaged that this document will serve as a guideline for collection of critical information for enforcement of the regulatory provision(s) and also highlight the essential infrastructural requirements necessary for effective monitoring for Sustainable Sand Mining.

15. It is submitted that the EMGSM-2020 & SSMG-2016 shall be read and implemented in sync with each other. In case of any ambiguity or variation between the provisions of both these



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document arises, the provision made in "Enforcement & Monitoring Guidelines for Sand Mining-2020" shall prevail.

16. 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 reviews at higher levels (in terms of the order referred by the Hon'ble tribunal in the order). The copy of the 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) is attached herein and marked as **ANNEXURE R5/6**.

17. That the Answering respondent vide notification S.O. 1886 (E) dated 20.04.2022 states that Environmental Clearances of all minor mineral shall be dealt at State level irrespective of mine



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lease area. Copy of the Notification S.O. 1886 (E) dated 20.04.2022 is marked and annexed herein as **ANNEXURE R5/7**.

18. 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. 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.

19. That is humbly submitted that, the State Pollution Control Board 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.



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



DEPONENT

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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. 5 in daily course of its business, no part of it is false and nothing material has been concealed there from.

Verified at *Hyderabad* on this the *23rd* day of *January*, 2023.



DEPONENT

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भारत का राजपत्र

The Gazette of India

असाधारण
EXTRAORDINARY

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NEW DELHI, THURSDAY, SEPTEMBER 14, 2006/BHADRA 23, 1928

पर्यावरण और वन मंत्रालय

अधिसूचना

नई दिल्ली, 14 सितम्बर, 2006

का.आ. 1533(अ).—केंद्रीय सरकार या केन्द्रीय सरकार द्वारा राज्य सरकार या संबंधित संघ राज्यक्षेत्र प्रशासन के परामर्श से गठित किए जाने वाले राज्य या संघ राज्यक्षेत्र स्तर पर्यावरण समाघात निर्धारण प्राधिकरण द्वारा इस अधिसूचना के प्रयोजन के लिए पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 3 की उपधारा (3) के अधीन संघ मंत्रिमंडल द्वारा 18 मई, 2006 को अनुमोदित राष्ट्रीय पर्यावरण नीति और अधिसूचना में विनिर्दिष्ट प्रक्रिया के उद्देश्यों के अनुसार जब तक पूर्व पर्यावरणीय अनापत्ति अभिलिखित नहीं हो जाती है, भारत के किसी भाग में, नई परियोजनाओं या क्रियाकलापों पर या इस अधिसूचना की अनुसूची में यथा उपवर्णित उनके सक्षम पर्यावरणीय समाघातों पर विद्यमान परियोजनाओं या क्रियाकलापों के विस्तार या आधुनिकीकरण पर कतिपय निर्बंधन और प्रतिषेध अधिरोपित करने के लिए, पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) के अधीन एक प्रारूप अधिसूचना भारत के राजपत्र, असाधारण, भाग 2, खंड 3, उपखंड (ii) में, का0आ0 सं0 1324(अ), तारीख 15 सितंबर, 2005 द्वारा प्रकाशित की गई थी जिसमें उन सभी व्यक्तियों से, जिनके उनसे प्रभावित होने की संभावना है, उस तारीख से, जिसको उक्त अधिसूचना को अंतर्विष्ट करने वाले राजपत्र की प्रतियां जनता को उपलब्ध करा दी गई थीं, साठ दिन की अवधि के भीतर आक्षेप और सुझाव आमंत्रित किए गए थे ;

और उक्त अधिसूचना की प्रतियां 15 सितंबर, 2005 को जनता को उपलब्ध करा दी गई थीं ;

और ऊपर उल्लिखित प्रारूप अधिसूचना के उत्तर में प्राप्त सभी आपेक्षों और सुझावों पर केन्द्रीय सरकार ने सम्यक् रूप से विचार कर लिया है ।

अतः, अब 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, और अधिसूचना सं० का.आ. 60(अ), तारीख 27 जनवरी, 1994 को उन बातों के सिवाए अधिकांश करते हुए, जिन्हें ऐसे अधिक्रमण से पूर्व किया गया है या करने का लोप किया गया है, यह निदेश देती है कि इसके प्रकाशन की तारीख से ही, नई परियोजनाओं या क्रियाकलापों का अपेक्षित संनिर्माण या इस अधिसूचना की अनुसूची में सूचीबद्ध विद्यमान परियोजनाओं या क्रियाकलापों का विस्तार या आधुनिकीकरण प्रक्रिया और या प्रौद्योगिकी में परिवर्तन सहित क्षमता में परिवर्धन करते हुए भारत के किसी भाग में, यथास्थिति, केंद्रीय सरकार द्वारा या इस अधिसूचना में इसमें इसके पश्चात् विनिर्दिष्ट प्रक्रिया के अनुसार उक्त अधिनियम की धारा 3 के

¹ भारत का राज्यक्षेत्रीय सागर खंड और अनन्य आर्थिक जोन सम्मिलित है।

अधीन केंद्रीय सरकार द्वारा सम्यक् रूप से गठित राज्य स्तर पर्यावरण समाघात निर्धारण प्राधिकरण द्वारा पूर्व पर्यावरण अनापत्ति के पश्चात् ही किया जाएगा।

2. पूर्व पर्यावरणीय अनापत्ति की अपेक्षाएं (ई.सी.) :-

निम्नलिखित परियोजनाओं या क्रियाकलापों के लिए, परियोजना प्रबंधन द्वारा भूमि को अभिप्राप्त करने के सिवाय, कोई संनिर्माण कार्य या भूमि तैयार करने से पूर्व उक्त अनुसूची में प्रवर्ग 'ख' के अंतर्गत आने वाले विषयों के लिए संबंधित विनियामक प्राधिकरण से, जिसे अनुसूची में 'क' के अंतर्गत आने वाले विषयों के लिए इसमें इसके पश्चात् केंद्रीय सरकार में पर्यावरण और वन मंत्रालय कहा गया है, और राज्य स्तर पर राज्य पर्यावरण समाघात निर्धारण प्राधिकरण कहा गया है, पूर्व पर्यावरणीय अनापत्ति अपेक्षित होगी जब परियोजना या क्रियाकलाप आरंभ किया जाता है।

- (i) इस अधिसूचना की अनुसूची में सूचीबद्ध सभी नई परियोजनाएं या क्रियाकलाप ;
- (ii) इस अधिसूचना की अनुसूची में सूचीबद्ध विद्यमान परियोजनाओं या क्रियाकलापों का, संबंधित क्षेत्र के लिए अर्थात् परियोजनाओं या क्रियाकलापों के लिए जो विस्तार या आधुनिकीकरण के पश्चात् अनुसूची में दी गई अधिकतम सीमाओं को पार कर लेते हैं, क्षमता में परिवर्धन सहित विस्तार या आधुनिकीकरण ;
- (iii) विनिर्दिष्ट रेंज से परे अनुसूची में सम्मिलित किसी विद्यमान विनिर्माणकर्ता यूनिट में उत्पाद मिश्रण में कोई परिवर्तन।

3. राज्य स्तर पर्यावरण समाघात निर्धारण प्राधिकरण :- (1) कोई राज्य स्तर पर्यावरण समाघात निर्धारण प्राधिकरण, जिसे इसमें इसके पश्चात् एसईआईएए कहा गया है, केंद्रीय सरकार द्वारा पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 3 की उपधारा (3) के अधीन गठित किया जाएगा जिसमें तीन सदस्य होंगे जिसके अंतर्गत एक अध्यक्ष और एक सदस्य-सचिव, राज्य सरकार या संबंधित संघ राज्यक्षेत्र प्रशासन द्वारा नामनिर्देशित किए जाएंगे।

- (2) सदस्य-सचिव संबंधित राज्य सरकार या संघ राज्यक्षेत्र प्रशासन का सेवारत अधिकारी होगा जो पर्यावरण विधियों से परिचित होगा ।
- (3) अन्य दो सदस्य या तो वृत्तिक या विशेषज्ञ होंगे जो इस अधिसूचना के परिशिष्ट VI में दी गई पात्रता कसौटी को पूरा करते हों ।
- (4) ऊपर उपपैरा (3) में विनिर्दिष्ट सदस्यों में से एक सदस्य जो पर्यावरण समाघात निर्धारण प्रक्रिया में विशेषज्ञ हो, एसईआईए का अध्यक्ष होगा ।
- (5) राज्य सरकार या संघ राज्यक्षेत्र प्रशासन उपपैरा (3) से उपपैरा (4) में निर्दिष्ट सदस्यों और अध्यक्ष के नामों को केन्द्रीय सरकार को अग्रेषित करेगी और केन्द्रीय सरकार नामों के प्राप्ति की तारीख से तीस दिन के भीतर इस अधिसूचना के प्रयोजनों के लिए एसईआईए को एक प्राधिकरण के रूप में गठित करेगी ।
- (6) गैर पदधारी सदस्य और अध्यक्ष की (प्राधिकरण को केन्द्रीय सरकार द्वारा गठित करने वाली अधिसूचना के प्रकाशन की तारीख से) तीन वर्षों की नियत पदावधि होगी ।
- (7) एसईआईए के सभी विनिश्चय एकमत से होंगे और किसी बैठक में लिए जाएंगे ।

4. परियोजना और क्रियाकलापों का प्रवर्गीकरण :-

- (i) सभी परियोजनाएं या क्रियाकलाप मुख्यतः दो प्रवर्गों में प्रवर्गीकृत हैं- प्रवर्ग 'क' और प्रवर्ग 'ख' सक्षम समाघात की स्थानिक सीमा और मानव स्वास्थ्य और प्राकृतिक तथा मानव निर्मित संसाधनों पर आधारित हैं ।
- (ii) अनुसूची में प्रवर्ग 'क' के रूप में सम्मिलित सभी परियोजनाओं या क्रियाकलापों, जिसके अंतर्गत विद्यमान परियोजनाओं या क्रियाकलापों का विस्तार और आधुनिकीकरण तथा उत्पाद मिश्रण में परिवर्तन सम्मिलित है, के लिए, इस अधिसूचना के प्रयोजनों के लिए केन्द्रीय सरकार द्वारा गठित की जाने वाली किसी विशेषज्ञ आंकलन समिति की सिफारिशों पर भारत सरकार में पर्यावरण और वन मंत्रालय से पूर्व पर्यावरण अनापत्ति अपेक्षित होगी ;
- (iii) अनुसूची में प्रवर्ग 'ख' के रूप में सम्मिलित सभी परियोजनाओं या क्रियाकलापों, जिसके अंतर्गत पैरा 2 के उपपैरा (ii) में यथाविनिर्दिष्ट विद्यमान परियोजनाओं या क्रियाकलापों का विस्तार और आधुनिकीकरण या पैरा 2 के उपपैरा (iii) में यथाविनिर्दिष्ट उत्पाद मिश्रण में परिवर्तन भी हैं, किन्तु जिसमें वे सम्मिलित नहीं हैं जो अनुसूची में निश्चित की गई साधारण शर्तों को पूरा करते हैं, राज्य/संघ राज्यक्षेत्र पर्यावरण समाघात निर्धारण प्राधिकरण से पूर्व पर्यावरणीय अनापत्ति अपेक्षित होगी । एसईआईए का अपना विनिश्चय, इस इस अधिसूचना में गठित की जाने वाली किसी राज्य या संघ राज्यक्षेत्र स्तर विशेषज्ञ आंकलन समिति (एसईएसी) की सिफारिशों पर आधारित होगा । एसईआईए सम्यक् रूप से गठित एसईआईए या एसईएसी की अनुपस्थिति में, कोई प्रवर्ग 'ख' परियोजना प्रवर्ग 'क' परियोजना समझी जाएगी ;

5. **स्क्रीनिंग, विस्तारण और आंकलन समिति :-** केंद्रीय सरकार के स्तर पर वही विशेषज्ञ आंकलन समिति और राज्य या संघ राज्य स्तर पर राज्य विशेषज्ञ आंकलन समिति (जिन्हें इसमें इसके पश्चात् ईएसी और एसईएसी कहा गया है) क्रमशः प्रवर्ग 'क' और प्रवर्ग 'ख' परियोजनाओं या क्रियाकलापों की स्क्रीनिंग, विस्तारण और आंकलन करेगी। ईएसी और एसईएसी की प्रत्येक मास में कम से कम एक बार बैठक होगी।

- (क) ईएसी की संरचना परिशिष्ट VI में दी जाएगी। राज्य या संघ राज्यक्षेत्र स्तर पर एसईएसी का गठन संबंधित राज्य सरकार या संघ राज्यक्षेत्र प्रशासन के परामर्श से समान संरचना सहित गठन किया जाएगा।
- (ख) केंद्रीय सरकार, संबद्ध राज्य सरकार या संघ राज्यक्षेत्र प्रशासन की पूर्व सहमति से प्रशासनिक सुविधा और लागत के कारणों से एक या अधिक राज्य या संघ राज्यक्षेत्र के लिए एक एसईएसी का गठन कर सकेगी।
- (ग) विशेषज्ञ आंकलन समिति और राज्य विशेषज्ञ आंकलन समिति तीन वर्ष की अवधि के लिए गठित की जाएगी।
- (घ) संबंधित विशेषज्ञ आंकलन समिति और राज्य विशेषज्ञ आंकलन समिति के प्राधिकृत सदस्य उस परियोजना या क्रियाकलाप के संबंध में जिसके लिए पूर्व पर्यावरणीय अनापत्ति मांगी गई है, को स्क्रीन करने या विस्तार करने या आंकलन के प्रयोजनों के लिए आवेदक को जो निरीक्षण के लिए आवश्यक सुविधाएं देगा, कम से कम सात दिन की पूर्व सूचना देगा।
- (ङ) विशेषज्ञ आंकलन समिति और राज्य विशेषज्ञ आंकलन समिति संयुक्त दायित्व के सिद्धांत पर कृत्य करेगी। अध्यक्ष प्रत्येक मामले में सहमति बनाने का प्रयास करेगा और सहमति नहीं बन पाती है तो बहुमत का विचार माना जाएगा।

6. **पूर्व पर्यावरणीय अनापत्ति के लिए आवेदन (ईसी) :-** सभी मामलों में पर्यावरणीय अनापत्ति मांगने के लिए कोई आवेदन, परियोजना और/या क्रियाकलापों के लिए, जिससे आवेदन संबंधित है, आवेदक द्वारा स्थल पर किसी सन्निर्माण क्रियाकलाप या भूमि की तैयारी के प्रारंभ के पूर्व, पूर्वक्षित स्थल (स्थलों) की पहचान के पश्चात् परिशिष्ट 2 दिखाने वाला है, यदि लागू हों, इससे संलग्न प्ररूप 1 और अनुपूरक प्ररूप 1क में किया जाएगा। आवेदक, उसके सिवाय, सन्निर्माण परियोजनाओं या क्रियाकलापों (अनुसूची की मद 8) के मामले में प्ररूप 1 और अनुपूरक प्ररूप 1क के अतिरिक्त पूर्व साध्यता परियोजना रिपोर्ट की एक प्रति, पूर्व साध्यता रिपोर्ट के स्थान पर धारणा योजना की एक प्रति आवेदन के साथ पेश करेगा।

7. (i) **नई परियोजनाओं के लिए पूर्व पर्यावरणीय अनापत्ति (ईसी) प्रक्रिया के प्रक्रम :-** नई परियोजनाओं के लिए पर्यावरणीय अनापत्ति प्रक्रिया में अधिकतम चार प्रक्रम समाविष्ट होंगे, जिनमें से सभी इस अधिसूचना में नीचे अद्यतनपरिवर्तित विशिष्ट मामलों में लागू नहीं होंगे, ये चार प्रक्रम श्रृंखलाबद्ध क्रम में होंगे :-

- प्रक्रम (1) स्क्रीनिंग (केवल प्रवर्ग 'ख' परियोजनाओं और क्रियाकलापों के लिए)
- प्रक्रम (2) विस्तारण
- प्रक्रम (3) लोक परामर्श
- प्रक्रम (4) आंकलन

I. प्रक्रम (1) - स्क्रीनिंग :

प्रवर्ग 'ख' परियोजनाओं या क्रियाकलापों के मामले में, यह प्रक्रम परियोजना की प्रकृति और अवस्थिति विनिर्देश पर आधारित पर्यावरणीय अनापत्ति मंजूर करने से पूर्व उसके आंकलन के लिए कोई पर्यावरणीय समाघात निर्धारण रिपोर्ट तैयार करने के लिए यह अवधारण करने के लिए कि परियोजना या क्रियाकलाप के लिए आगे पर्यावरणीय अध्ययन करना अपेक्षित है या नहीं संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति (एसईएसी) द्वारा प्ररूप 1 में पूर्व पर्यावरणीय अनापत्ति मांगने के लिए किसी आवेदन की संवीक्षा होगी। कोई पर्यावरणीय समाघात निर्धारण रिपोर्ट की अपेक्षा करने वाली परियोजनाओं को प्रवर्ग "ख1" कहा जाएगा और शेष परियोजनाओं को प्रवर्ग "ख2" कहा जाएगा और उसके लिए कोई पर्यावरणीय समाघात निर्धारण रिपोर्ट अपेक्षित नहीं होगी। मद 8ख के सिवाय परियोजनाओं के ख 1 या ख2 में प्रवर्गीकरण के लिए पर्यावरण और वन मंत्रालय समय-समय पर समुचित मार्गदर्शक सिद्धांत जारी करेगा।

II. प्रक्रम (2) विस्तारण :

(i) उस प्रक्रिया को निर्दिष्ट करता है जिसके द्वारा प्रवर्ग 'क' परियोजनाओं या क्रियाकलापों के मामले में विशेषज्ञ आंकलन समिति, और प्रवर्ग 'ख1' परियोजनाओं या क्रियाकलापों के मामले में, राज्य स्तर विशेषज्ञ आंकलन समिति, जिसके अंतर्गत विद्यमान परियोजनाओं या क्रियाकलापों के विस्तार और/या आधुनिकीकरण और/या उत्पाद मिश्रण में परिवर्तन के विस्तार, सौंपे जाने वाले विस्तृत और व्यापक कार्य अवधारित करने के लिए, उस परियोजना या क्रियाकलाप के संबंध में कोई पर्यावरणीय समाघात निर्धारण रिपोर्ट तैयार करने के लिए सभी सुसंगत पर्यावरणीय समुत्थानों को, जिसके लिए पूर्व पर्यावरणीय अनापत्ति ईप्सित की गई है, आवेदन सम्मिलित हैं। विशेषज्ञ आंकलन समिति या राज्य स्तर विशेषज्ञ आंकलन समिति विहित आवेदन प्ररूप 1/प्ररूप 1क में दी गई जानकारी के आधार पर सौंपे जाने वाले कार्य अवधारित करेगी, जिसके अंतर्गत आवेदक द्वारा सौंपे जाने वाले प्रस्थापित कार्य, किसी विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर आंकलन समिति के किसी सब ग्रुप द्वारा देखा गया कोई स्थल, यदि विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति द्वारा आवश्यक समझा जाए, आवेदक द्वारा सुझाए गए सौंपे जाने वाले कार्य और अन्य सूचना जो विशेषज्ञ आंकलन समिति या राज्य स्तर विशेषज्ञ आंकलन समिति के पास उपलब्ध हो, सम्मिलित हैं। अनुसूची की मद 8 में प्रवर्ग ख के रूप में सूचीबद्ध सभी परियोजनाओं और क्रियाकलापों (संनिर्माण, नगरी/वाणिज्यिक कामप्लेक्स/आवासन) के लिए विस्तार अपेक्षित नहीं होगा और उनका आंकलन प्ररूप 1/प्ररूप 1क और धारणा योजना के आधार पर किया जाएगा।

(ii) सौंपे गए कृत्यों को प्ररूप 1 की प्राप्ति के साठ दिनों के भीतर विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति द्वारा आवेदक को प्रेषित किया जाएगा। अनुसूची के प्रवर्ग क हाइड्रोक्लेक्टिक परियोजना मद 1 (ग) (i) के मामले में सौंपे गए कृत्यों को पूर्व संनिर्माण क्रियाकलापों के लिए अनापत्ति सहित प्रेषित किया जाएगा। यदि सौंपे गए कृत्यों को अंतिम रूप नहीं दिया गया है और प्ररूप 1 की प्राप्ति के साठ दिनों के भीतर आवेदक को प्रेषित किया जाता है तो आवेदक द्वारा सुझाए गए सौंपे जाने वाले कृत्य ईआईए अध्ययन के लिए अनुमोदित, अंतिम सौंपे गए कृत्यों के रूप में समझे जाएंगे। अनुमोदित सौंपे गए कृत्य, पर्यावरण और वन मंत्रालय तथा संबंधित राज्य स्तर पर्यावरण समाघात निर्धारण प्राधिकरण के लिए वेबसाइट पर प्रदर्शित किए जाएंगे।

(iii) इसी प्रक्रम पर संबंधित विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति की सिफारिश पर संबंधित विनियामक प्राधिकरण द्वारा पूर्व पर्यावरणीय अनापत्ति के लिए आवेदनों को नामंजूर किया जा सकेगा। ऐसे नामंजूर किए जाने की दशा में, विनिश्चय को उसके कारणों सहित आवेदक को, आवेदन की प्राप्ति के साठ दिनों के भीतर लिखित में संसूचित किया जाएगा।

III प्रक्रम (3) लोक परामर्श

(i) “लोक परामर्श” उस प्रक्रिया को निर्दिष्ट करता है जिसके द्वारा स्थानीय प्रभावी व्यक्तियों और ऐसे अन्य व्यक्तियों की चिंताओं को, जिनका परियोजना या क्रियाकलापों के पर्यावरणीय समाघातों में न्यायसंगत आधार है, समुचित रूप में अभिकल्पित परियोजना या क्रियाकलाप में संबंधित सभी सामग्री को ध्यान में रखते हुए सुनिश्चित किया जाएगा। सभी प्रवर्ग “क” और प्रवर्ग “ख 1” परियोजनाएं या क्रियाकलाप निम्नलिखित के सिवाय लोक परामर्श करेंगे :-

(क) सिंचाई परियोजनाओं का आधुनिकीकरण (अनुसूची की मद 1(ग) (ii))।

(ख) संबंधित प्राधिकारियों द्वारा अनुमोदित औद्योगिक संपदाओं या पार्कों के भीतर अवस्थित सभी परियोजनाएं या क्रियाकलाप (अनुसूची की मद 7(ग)) और जिन्हें ऐसे अनुमोदन में अननुज्ञात नहीं किया जाता है।

(ग) सड़कों और राजमार्गों का विस्तार (अनुसूची की मद 7(च)) जिनमें भूमि का कोई और अर्जन अंतर्वलित नहीं है।

(घ) सभी भवन/संनिर्माण परियोजनाएं/क्षेत्र विकास परियोजनाएं और नगरीय योजनाएं (मद 8)।

(ङ) सभी प्रवर्ग ख 2 परियोजनाएं और क्रियाकलाप।

(च) केन्द्रीय सरकार द्वारा यथा अवधारित राष्ट्रीय रक्षा और सुरक्षा से संबंधित सभी परियोजनाएं और क्रियाकलाप या जिसमें अन्य युक्तगत विचार अंतर्वलित हैं।

(ii) लोक परामर्श में साधारणतया दो घटक समाविष्ट होंगे :-

(क) स्थानीय प्रभावित व्यक्तियों की चिंताओं को सुनिश्चित करने के लिए परिशिष्ट 4 में विहित रीति में की जाने वाली स्थल पर या उसके निकट परिसर में जिला वार कोई लोक सुनवाई ;

(ख) परियोजना या क्रियाकलाप के पर्यावरणीय पहलुओं में कोई न्यायसंगत आधार रखने वाले अन्य संबंधित व्यक्तियों से लिखित में प्रतिक्रियाएं प्राप्त करना।

(iii) स्थल (स्थलों) पर या उसके निकट परिसर में सभी मामलों में लोक सुनवाई विनिर्दिष्ट रीति में संबंधित राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति द्वारा की जाएगी और कार्यवाहियों को आवेदक से प्राप्त अनुरोध के पैंतालीस दिनों के भीतर संबंधित विनियामक प्राधिकरण को अग्रेषित किया जाएगा ।

(iv) यदि संबंधित राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्य क्षेत्र प्रदूषण नियंत्रण समिति लोक सुनवाई नहीं करती है और लोक सुनवाई को विनिर्दिष्ट अवधि के भीतर पूरी नहीं करती है और/या लोक सुनवाई की कार्यवाहियां को विहित अवधि के भीतर यथाउपर्युक्त संबंधित विनियामक प्राधिकरण को प्रेषित नहीं करती है तो विनियामक प्राधिकरण अन्य लोक अभिकरण या प्राधिकरण को, जो विनियामक प्राधिकरण का अधीनस्थ नहीं है, प्रक्रिया को पैंतालीस दिनों की और अवधि के भीतर पूरा करने के लिए लगाएगी ।

(v) यदि ऊपर उपपैरा (iii) के अधीन नामनिर्दिष्ट लोक अभिकरण या प्राधिकरण, संबंधित विनियामक प्राधिकरण को यह रिपोर्ट करता है, कि स्थानीय अवस्थिति के कारण लोक सुनवाई करना संभव नहीं है, तो किसी रीति में स्पष्ट रूप से अभिव्यक्त किए जाने वाले संबंधित स्थानीय व्यक्तियों के विचारों का समर्थन करेंगे । वह उस तथ्य की रिपोर्ट संबंधित विनियामक प्राधिकरण को ब्यौरेवार देगा जो रिपोर्ट पर और अन्य विश्वसनीय सूचना पर सम्यक् रूप से विचार करने के पश्चात्, जिसका लोक परामर्श के लिए विनिश्चय किया गया है, उस दशा में जिसे लोक सुनवाई में सम्मिलित करने की आवश्यकता है, रिपोर्ट करेगा ।

(vi) परियोजना या क्रियाकलापों के पर्यावरणीय पहलुओं में कोई न्यायसंगत आधार रखने वाले अन्य संबंधित व्यक्तियों से लिखित में प्रक्रिया अभिप्राप्त करने के लिए, संबंधित विनियामक प्राधिकरण और राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति, आवेदक द्वारा परिशिष्ट 3क में दिए गए प्ररूप में तैयार की गई संक्षिप्त ईआईए रिपोर्ट को उनके वेबसाइट पर देते हुए ऐसे संबंधित व्यक्तियों से लोक सुनवाई की व्यवस्था के लिए किसी लिखित अनुरोध की प्राप्ति के सात दिनों के भीतर प्रतिक्रियाएं प्राप्त करेंगी । गोपनीय सूचना, जिसके अंतर्गत प्रकट न करने योग्य या विधिक रूप से विशेषाधिकार प्राप्त सूचना, जिसमें बौद्धिक संपदा अधिकार अंतर्भूत हैं, आवेदन में विनिर्दिष्ट स्रोत, वेबसाइट पर नहीं रखे जाएंगे । संबंधित विनियामक प्राधिकरण, परियोजना या क्रियाकलाप की बाबत विस्तृत प्रचार को सुनिश्चित करने के लिए अन्य समुचित मीडिया का उपयोग भी कर सकेगा । विनियामक प्राधिकरण, तथापि लोक सुनवाई की तारीख तक निरीक्षण के लिए प्रारूप ईआईए रिपोर्ट किसी संबंधित व्यक्ति से, सामान्य कार्यालय घंटों के दौरान अधिसूचित स्थान पर किसी लिखित अनुरोध पर उपलब्ध कराएगा । इस लोक परामर्श प्रक्रिया के भाग के रूप में प्राप्त सभी प्रतिक्रियाएं शीघ्रतम उपलब्ध साधन से आवेदक को अग्रेषित की जाएंगी ।

(vii) लोक परामर्श पूरा करने के पश्चात्, इस प्रक्रिया के दौरान अभिव्यक्त सभी सारवान पर्यावरणीय चिंताओं को संबोधित करेगा और प्रारूप ईआईए और ईएमपी में समुचित परिवर्तन करेगा । इस प्रकार तैयार की गई अंतिम ईआईए रिपोर्ट आवेदक के लिए संबंधित विनियामक प्राधिकरण को प्रस्तुत की जाएगी । आवेदक, लोक परामर्श के दौरान अभिव्यक्त की गई सभी चिंताओं को संबोधित करते हुए, प्रारूप ईआईए और ईएमपी की एक संक्षिप्त रिपोर्ट अनुकल्पतः प्रस्तुत करेगा ।

IV प्रक्रम(4) - आंकलन :

(i) आंकलन से आवेदन और अन्य दस्तावेजों, ऐसे अंतिम ईआईए रिपोर्ट, लोक परामर्शों का निष्कर्ष, जिसके अंतर्गत लोक सुनवाई की कार्यवाहियां हैं, पर्यावरणीय अनापत्ति मंजूर करने के लिए संबंधित विनियामक प्राधिकरण को

आवेदक द्वारा प्रस्तुत की गई विशेषज्ञ आंकलन समिति या राज्य स्तर विशेषज्ञ आंकलन समिति द्वारा विस्तृत संवीक्षा अभिप्रेत है। यह आंकलन विशेषज्ञ आंकलन समिति या राज्य स्तर विशेषज्ञ आंकलन समिति द्वारा किसी कार्यवाही को, जिसमें आवेदक को आवश्यक स्पष्टीकरण प्रस्तुत करने के लिए व्यक्तिगत रूप से या किसी प्राधिकृत प्रतिनिधि को आमंत्रित किया जाता है, एक पारदर्शी रीति में किया जाएगा। इस कार्यवाही के निष्कर्ष पर विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति संबंधित विनियामक प्राधिकरण को निश्चित निबंधनों और शर्तों पर पूर्व पर्यावरणीय अनापत्ति मंजूर करने के लिए या पूर्व पर्यावरणीय अनापत्ति के लिए आवेदन को नामंजूर करने के लिए उसके कारणों सहित स्पष्ट सिफारिशें करेंगी।

(ii) सभी परियोजनाओं या क्रियाकलापों का आंकलन जो लोक परामर्श के लिए अपेक्षित नहीं है या कोई पर्यावरण समाघात निर्धारण रिपोर्ट प्रस्तुत करना अपेक्षित नहीं है, जैसा लागू हो विहित आवेदन प्ररूप 1 और प्ररूप 1क के आधार पर उपलब्ध सभी अन्य सुसंगत विधिमान्य सूचना और दौरा किए स्थल को, जहां विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति द्वारा ऐसा करना आवश्यक समझा जाता है, कार्यान्वित किया जाएगा।

(iii) किसी आवेदन का आंकलन, विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति द्वारा अंतिम पर्यावरण समाघात निर्धारण रिपोर्ट और अन्य दस्तावेजों की प्राप्ति या प्ररूप 1 या प्ररूप 1क के साठ दिनों के भीतर पूरा किया जाएगा, जहां लोक परामर्श आवश्यक नहीं है, वहां विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति की सिफारिशों को सक्षम प्राधिकारी के समक्ष अगले पन्द्रह दिनों के भीतर अंतिम विनिश्चय के लिए रखा जाएगा। आंकलन की विहित प्रक्रिया परिशिष्ट V में दी गई है।

7. (ii) विद्यमान परियोजनाओं का विस्तार या आधुनिकीकरण या उत्पाद मिश्रण में परिवर्तन के लिए पूर्व पर्यावरणीय अनापत्ति प्रक्रिया,-

उस क्षमता के परे जिसके लिए इस अधिसूचना के अधीन पूर्व पर्यावरणीय अनापत्ति मंजूर की गई है, उत्पादन क्षमता में वृद्धि सहित या तो पट्टा क्षेत्र या खनन परियोजनाओं की दशा में उत्पादन क्षमता में वृद्धि सहित या इस अधिसूचना की अनुसूची में विहित अंतिम सीमा के परे कुल उत्पादन क्षमता में वृद्धि सहित विद्यमान यूनिट के आधुनिकीकरण के लिए, प्रक्रिया और/या प्रौद्योगिकी में परिवर्तन के माध्यम से या उत्पाद मिश्रण में किसी परिवर्तन के लिए पूर्व पर्यावरणीय अनापत्ति ईप्सित करने वाले सभी आवेदन प्ररूप 1 में किए जाएंगे और उन पर संबंधित विशेषज्ञ आंकलन समिति या राज्य स्तर विशेषज्ञ आंकलन समिति द्वारा साठ दिनों के भीतर विचार किया जाएगा, जो सम्यक् आवश्यक तत्परता से जिसके अंतर्गत ईआईए का तैयार किया जाना और लोक परामर्श भी है, विनिश्चय करेगी और आवेदन का तदनुसार पर्यावरणीय अनापत्ति मंजूर करने के लिए आंकलन किया जाएगा।

8. पूर्व पर्यावरणीय अनापत्ति मंजूर किया जाना या उसको खारिज किया जाना,-

(i) विनियामक प्राधिकरण, संबंधित ई ए सी या एस ई ए सी की सिफारिशों पर विचार करेगा और अपने विनिश्चय को आवेदक को विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति की सिफारिशों की प्राप्ति के पैंतालीस दिनों के भीतर प्रेषित करेगा या अन्य शब्दों में अंतिम पर्यावरणीय समाघात निर्धारण रिपोर्ट की प्राप्ति के एक सौ पांच दिनों के भीतर प्रेषित करेगा और जहां पर्यावरणीय समाघात निर्धारण पूरे आवेदन की प्राप्ति के एक सौ पांच दिनों के भीतर अपेक्षित नहीं है वहां अपेक्षित दस्तावेज, नीचे उपबंधित के सिवाय प्रेषित करेगा।

(ii) विनियामक प्राधिकरण, सामान्यतः विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति की सिफारिशों को स्वीकार करेगा। उन दशाओं में जहां विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति की सिफारिशों से असहमत है, वहां विनियामक प्राधिकरण विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति द्वारा विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति की सिफारिशों की प्राप्ति के पैंतालिस दिनों के भीतर असहमति के कारणों का कथन करते हुए पुनर्विचार का अनुरोध करेगा। इस विनिश्चय की सूचना आवेदक को साथ-साथ प्रेषित की जाएगी। उसके पश्चात् विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति, विनियामक प्राधिकरण के संप्रेक्षणों पर विचार करेगी और उस पर अपने विचार साठ दिनों की और अवधि के भीतर पेश करेगी। विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति के विचारों को ध्यान में रखने के पश्चात् विनियामक प्राधिकरण का विनिश्चय अंतिम होगा और संबंधित विनियामक प्राधिकरण को अगले तीस-दिनों के भीतर आवेदक को प्रेषित किया जाएगा।

(iii) उस दशा में जहां विनियामक प्राधिकरण का विनिश्चय आवेदक को, उम्र उपपैरा (i) या (ii) में, जहां लागू हो विनिर्दिष्ट अवधि के भीतर संसूचित नहीं किया जाता है, वहां आवेदक इस प्रकार अग्रसर हो सकेगा मानो मांगी गई पर्यावरण अनापत्ति मंजूर कर दी गई है या विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति की अंतिम सिफारिशों के निबंधनों में विनियामक प्राधिकरण द्वारा नामंजूर कर दी गई है।

(iv) उम्र पैरा (i) और (ii) के अधीन, जहां लागू हो, विनियामक प्राधिकरण द्वारा विनिश्चय के लिए विनिर्दिष्ट अवधि के अवसान पर, विनियामक प्राधिकरण का विनिश्चय और विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति की अंतिम सिफारिशें लोक दस्तावेज होंगे।

(v) अन्य विनियामक प्राधिकरणों से परियोजनाओं या क्रियाकलापों, या संबंधित विनियामक प्राधिकरण द्वारा स्क्रीनिंग, विस्तारण या आंकलन या विनिश्चय पूर्व पर्यावरण अनापत्ति के लिए आवेदनों की प्राप्ति के पूर्व तब तक अपेक्षित नहीं होगी जब तक या तो ऐसी अनापत्ति किसी विधि की अपेक्षा का आवश्यक तकनीकी कारणों से कोई श्रृंखलाबद्ध आधार न हो।

(vi) जान बूझ कर छिपाना और/या मिथ्या प्रस्तुतीकरण या भ्रामक सूचना या आंकड़े देना जो स्क्रीनिंग, विस्तारण या आंकलन या आवेदन पर विनिश्चय के लिए सारवान हो, आवेदन को नामंजूर किए जाने या उस आधार पर मंजूर की गई पूर्व पर्यावरणीय अनापत्ति के रद्दकरण के लिए दायी बनाएगी। किसी आवेदन को नामंजूर करना या इस आधार पर पहले मंजूर की गई किसी पूर्व पर्यावरणीय अनापत्ति के रद्दकरण का विनिश्चय विनियामक प्राधिकरण द्वारा आवेदक की व्यक्तिगत सुनवाई करने के पश्चात् किया जाएगा और उसमें नैसर्गिक न्याय के सिद्धांतों का पालन किया जाएगा।

9. पर्यावरणीय अनापत्ति की विधिमान्यता,-

“पर्यावरणीय अनापत्ति की विधिमान्यता” से वह अवधि अभिप्रेत है जिससे विनियामक प्राधिकरण द्वारा मंजूर की गई पूर्व पर्यावरणीय अनापत्ति मंजूर की जाती है या आवेदक द्वारा यह समझा जा सकेगा कि यह उम्र पैरा 7 के उपपैरा (iv) के अधीन परियोजना या क्रियाकलाप द्वारा उत्पादन प्रचालन आरंभ करने या संनिर्माण परियोजनाओं की दशा में (अनुसूची की मद 8) सभी संनिर्माण प्रचालन पूरा करने, जिसके के लिए पूर्व पर्यावरण अनापत्ति के लिए

आवेदन का निर्देश करता है, मंजूर की गई है। किसी परियोजना या क्रियाकलाप के लिए नदी घाटी परियोजनाओं (अनुसूची की मद 1(ग)) की दशा में दस वर्ष की अवधि के लिए, विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति द्वारा यथा प्राक्कलित परियोजना की अवधि खनन परियोजनाओं के लिए अधिकतम तीस वर्षों के लिए और सभी अन्य परियोजनाओं और क्रियाकलापों की दशा में पांच वर्ष होगी। तथापि क्षेत्र विकास परियोजनाओं और नगरीय की दशा में (मद 8(ख)) विधिमान्य अवधि केवल ऐसे क्रियाकलापों तक सीमित होगी जहां तक किसी विकासकर्ता के रूप में आवेदक का उत्तरदायित्व है। इस विधिमान्यता की अवधि को संबंधित विनियामक प्राधिकरण द्वारा पांच वर्ष की अधिकतम अवधि तक बढ़ाया जा सकेगा, परन्तु यह तब जब कि कोई आवेदन आवेदक द्वारा विनियामक प्राधिकरण को संनिर्माण परियोजनाओं या क्रियाकलापों के लिए (अनुसूची की मद 8) अद्यतन प्ररूप 1 और अनुपूरक प्ररूप 1क सहित विधिमान्य अवधि के भीतर किया जाता है। इस बाबत विनियामक प्राधिकरण, यथास्थिति, विशेषज्ञ आंकलन समिति या राज्य स्तर विशेषज्ञ आंकलन समिति से भी परामर्श कर सकेगा।

10. पश्च पर्यावरणीय अनापत्ति को मानीटर करना,-

(i) परियोजना प्रबंधन के लिए प्रत्येक कलेंडर वर्ष की 1 जून और 1 दिसंबर को संबंधित विनियामक प्राधिकरण को निश्चित पूर्व पर्यावरणीय अनापत्ति के निबंधनों और शर्तों के संबंध में अनुपालन रिपोर्टों को अर्धवार्षिक रूप में हार्ड और साफ्ट प्रतियों में प्रस्तुत करना आज्ञापक होगा।

(ii) परियोजना प्रबंधन द्वारा प्रस्तुत की गई सभी ऐसी अनुपालन रिपोर्टें लोक दस्तावेज होंगी, उसकी प्रतियां संबंधित विनियामक प्राधिकरण को आवेदन पर किसी व्यक्ति को दी जाएंगी। ऐसी अंतिम अनुपालन रिपोर्टें संबंधित विनियामक प्राधिकरण की वेबसाइट पर भी दर्शित की जाएगी।

11. पर्यावरणीय अनापत्ति की अंतरणीयता,-

किसी आवेदक को किसी विनिर्दिष्ट परियोजना या क्रियाकलाप के लिए मंजूर की गई कोई पूर्व पर्यावरणीय अनापत्ति अंतरक द्वारा या अंतरिकी द्वारा आवेदन पर परियोजना या क्रियाकलाप को करने के हकदार किसी अन्य विधिक व्यक्ति को अंतरक द्वारा लिखित "अनापत्ति सहित" जो इसकी विधिमान्यता की अवधि के दौरान संबंधित विनियामक प्राधिकरण द्वारा उन्हीं निबंधनों और शर्तों के अधीन पूर्व पर्यावरणीय अनापत्ति आरंभ में मंजूर की गई थी और उसी विधिमान्यता अवधि के लिए अंतरित की जा सकेगी। ऐसे मामलों में विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति को कोई निर्देश आवश्यक नहीं है।

12. लंबित मामलों के निपटान तक ई.आई.ए. अधिसूचना का प्रवर्तन,-

इस अधिसूचना के अंतिम प्रकाशन की तारीख से पर्यावरणीय समाघात निर्धारण की अधिसूचना सं० का.आ. 60(अ), तारीख 27 जनवरी, 1994 को, उन बातों के सिवाय, जिन्हें ऐसे अधिक्रमण से पूर्व किया गया है या करने से लोप किया गया है, उस सीमा तक अधिक्रान्त किया जाता है कि पूर्व पर्यावरणीय अनापत्ति के लिए किए गए और इस अधिसूचना के अंतिम प्रकाशन की तारीख को लंबित सभी या कुछ प्रकार के आवेदनों को, परियोजनाओं या क्रियाकलापों को, उस सूची के सिवाय जिनमें अनुसूची 1 में पूर्व पर्यावरणीय अनापत्ति अपेक्षित है, इस अधिसूचना के किसी एक या सभी उपबंधों से छूट दे सकेगी या उक्त अधिसूचना के कुछ या सभी उपबंधों के प्रवर्तन को इस अधिसूचना के जारी करने की तारीख से एक वर्ष से अनधिक अवधि के लिए जारी रख सकेगी।

अनुसूची

(पैरा 2 और 7 देखें)

पूर्व पर्यावरणीय अनापत्ति की अपेक्षा वाली परियोजनाओं या क्रियाकलापों की सूची

| क्र. सं. | परियोजना या क्रियाकलाप | अवसीमा सहित प्रवर्ग | | शर्तें, यदि कोई हों |
|----------|---|--|---|---|
| | | क | ख | |
| 1 | खनन, प्राकृतिक संसाधन का निष्कर्षण और विद्युत उत्पादन विनिर्दिष्ट उत्पादन क्षमता के लिए) | | | |
| 1 | 2 | 3 | 4 | 5 |
| 1(क) | खनिज का खनन | खनन पट्टा क्षेत्र का ≥ 50 है0 किसी भी खनन क्षेत्र का ध्यान दिए बिना ऐस्बेस्टज खनन | < 50 हेक्टेयर ≥ 5 हेक्टेयर खनन पट्टा क्षेत्र | साधारण शर्तें लागू होंगी टिप्पण खनिज पदार्थों के पूर्वक्षण (जिसमें ड्रिलिंग न हो) को छूट दी गई है बशर्त कि वास्तविक सर्वेक्षण के लिए छूट वाले क्षेत्रों की पूर्व अनुमति ली गई है। |
| 1(ख) | अपतट और तटवर्ती तेल तथा गैस की खोज, विकास और उत्पादन | सभी परियोजनाएं | | टिप्पण सार खोज सर्वेक्षण (जिसमें ड्रिलिंग न हो) को छूट दी गई है बशर्त कि वास्तविक सर्वेक्षण के लिए छूट वाले क्षेत्रों की पूर्व अनुमति ली गई है। |
| 1(ग) | नदी घाटी परियोजनाएं | (i) ≥ 50 मे0वा0 जल विद्युत उत्पादन (ii) $\geq 10,000$ है0 खेती योग्य प्रभावित क्षेत्र | (i) $< 50 \geq 25$ मे0वा0 जल विद्युत उत्पादन (ii) $< 10,000$ है0 खेती योग्य प्रभावित क्षेत्र | साधारण शर्तें लागू होंगी |
| 1(घ) | तापीय विद्युत संयंत्र | (कोयला लिग्नाइट और नेफ्था आधारित) ≥ 500 मे.वा. ≥ 50 मे.वा. (पैटकोक, डीजल और सभी अन्य ईंधन) | (कोयला/लिग्नाइट/नेफ्था एवं गैस आधारित) < 500 मे.वा. (पैटकोक, डीजल और सभी अन्य ईंधन) < 50 मे.वा ≥ 5 मे.वा. | साधारण शर्तें लागू होंगी |
| 1(ङ) | आणविक विद्युत परियोजनाएं और आणविक ईंधन का प्रसंस्करण | सभी परियोजनाएं | | |
| 2 | प्राथमिक प्रसंस्करण | | | |
| 2(क) | कोयला धोवनशालाएं | ≥ 1 मिलियन टन/ वार्षिक कोयले का उत्पादन | < 1 मिलियन टन/ वार्षिक कोयले का उत्पादन | साधारण शर्तें लागू होंगी (यदि खनन क्षेत्र के अंदर स्थित है तो प्रस्ताव का मूल्यांकन खनन प्रस्ताव के साथ किया जाना चाहिए) |

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| 2(ख) | खनिज सज्जीकरण | ≥ 0.1 मिलियन टन/ वार्षिक कोयले का उत्पादन | < 0.1 मिलियन टन/ वार्षिक कोयले का उत्पादन | साधारण शर्त लागू होगी अनापत्ति प्रदान करने के लिए खनन प्रस्ताव का खनिज सज्जीकरण के साथ ही मूल्यांकन किया जाना चाहिए |
| 3 पदार्थ उत्पादन | | | | |
| 3(क) | धातुकर्म उद्योग (फैरस और गैर फैरस) | क) प्राथमिक धातुकर्म उद्योग सभी परियोजनाएं ख) स्पंज आयरन विनिर्माण ≥ 200 टन पी डी ग) गौण धातु कर्म प्रसंस्करण उद्योग सभी विषाक्त और भारी धातु उत्पादित करने वाली इकाइयां ≥ 20,000 टन/ वार्षिक | स्पंज आयरन विनिर्माण < 200 टन पी डी गौण धातु कर्म प्रसंस्करण उद्योग 1) सभी विषाक्त और भारी धातु उत्पादित करने वाली इकाइयां < 20,000 टन/ वार्षिक 2) अन्य सभी विषरहित गौण धातुकर्म प्रसंस्करण उद्योग > 5000 टन / वार्षिक | स्पंज आयरन विनिर्माण के लिए साधारण शर्त लागू होगी |
| 3(ख) | सीमेंट संयंत्र | वार्षिक उत्पादन क्षमता ≥ 1.0 मिलियन टन | वार्षिक उत्पादन क्षमता < 1.0 मिलियन टन यह सभी ग्राइडिंग इकाइयों के लिए लागू है | साधारण शर्त लागू होगी |
| 4 पदार्थ प्रसंस्करण | | | | |
| 4(क) | पेट्रोलिम रिफाइनिंग उद्योग | सभी परियोजनाएं | - | - |
| 4(ख) | कोक भट्टी संयंत्र | ≥ 2,50,000 टन वार्षिक | < 2,50,000 एवं ≥ 25,000 टन वार्षिक | - |
| 4(ग) | एस्बेस्टास मिलिंग और एस्बेस्टास आधारित उत्पाद | सभी परियोजनाएं | - | - |
| 4(घ) | क्लोस्कार उद्योग, | उत्पादन क्षमता ≥ 300 टन पी डी या अधिसूचित औद्योगिक क्षेत्र/संपदा से बाह्य अवस्थित इकाई | उत्पादन क्षमता < 300 टन पी डी और अधिसूचित औद्योगिक क्षेत्र/संपदा में अवस्थित इकाई | विनिर्दिष्ट शर्त लागू होगी किसी नए पारा प्रकोष्ठ आधारित संयंत्र को अनुज्ञा नहीं दी जाएगी और इस अधिसूचना द्वारा झिल्लीमय प्रकोष्ठ प्रौद्योगिकी में परिवर्तन करने वाली विद्यमान इकाई को छूट प्राप्त है। |

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| 4 | सोडा भस्म उद्योग (ड) | सभी परियोजनाएं | - | - |
| 4(ब) | चमड़ा/त्वचा/खाल प्रसंस्करण उद्योग | औद्योगिक क्षेत्र से बाहर सभी नई परियोजनाएं या औद्योगिक क्षेत्र के बाहर विद्यमान ईकाइयों का विस्तार | अधिसूचित औद्योगिक क्षेत्र/संपदा में अवस्थित सभी नई परियोजनाएं या परियोजनाओं का विस्तार | विनिर्दिष्ट शर्त लागू होगी |
| 5 | उत्पादन/फैक्टिकेशन | | | |
| 5(क) | रासायनिक उर्वरक | सभी परियोजनाएं | - | - |
| 5(ख) | कीटनाशक उद्योग और कीटनाशक विशिष्ट मध्यक जीवमार (विनिर्मिति को छोड़कर) | तकनीकी श्रेणी के कीटनाशको को उत्पादन करने वाली सभी ईकाइयां | - | - |
| 5(ग) | पेट्रो रसायन परिसर (पेट्रोलियम के अंश और प्राकृतिक गैस और/या सुगन्धितों में सुधार प्रसंस्करण आधारित उद्योग | सभी परियोजनाएं | - | - |
| 5(घ) | मानव निर्मित फाइबर का उत्पादन | रेयन | अन्य | साधारण शर्त लागू होगी |
| 5(ङ) | पेट्रो रसायन आधारित प्रसंस्करण (भंजन से भिन्न अन्य प्रसंस्करण तथा सुधार और जो परिसर के भीतर समाविष्ट नहीं है) | अधिसूचित औद्योगिक क्षेत्र/संपदा के बाह्य अवस्थित | अधिसूचित औद्योगिक क्षेत्र/संपदा के भीतर अवस्थित | विनिर्दिष्ट शर्त लागू होगी |
| 5(च) | संश्लिष्ट कार्बनिक रसायन उद्योग (रंजक और रंजक मध्यक; थोक औषधि और औषधि विनिर्मितियों को छोड़कर मध्यक: संश्लिष्ट रबड़ मूल कार्बनिक रसायन, अन्य संश्लिष्ट कार्बनिक रसायन और रसायन मध्यक) | अधिसूचित औद्योगिक क्षेत्र/संपदा के बाह्य अवस्थित | अधिसूचित औद्योगिक क्षेत्र/संपदा के भीतर अवस्थित | विनिर्दिष्ट शर्त लागू होगी |
| 5(छ) | आसवनी | (i) सभी शीरा आधारित आसवनी । (ii) सभी गन्ने का रस/गैर-शीरा आधारित आसवनी ≥ 30 कि०ली० दैनिक | सभी गन्ने का रस/गैर शीरा आधारित आसवनी < 30 कि०ली० दैनिक | साधारण शर्त लागू होगी |
| 5(ज) | समेकित पेंट उद्योग | - | सभी परियोजनाएं | साधारण शर्त लागू होगी |
| 5(झ) | अपशिष्ट कागज से कागज का निर्माण और तैयार लुग्दी और विरंजन किए बिना तैयार लुग्दी से कागज निर्माण के अलावा लुग्दी एवं कागज | लुग्दी विनिर्माण और लुग्दी और कागज विनिर्माण उद्योग | लुग्दी विनिर्माण के बिना कागज विनिर्माण उद्योग | साधारण शर्त लागू होगी |

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| | उद्योग | | | |
| 5(अ) | चीनी उद्योग | | गन्ना पेरने की क्षमता \geq 5000 टन दैनिक | साधारण शर्त लागू होगी |
| 5(ट) | प्रेरण/आर्क मट्टी/कुपोला मट्टी 5 टन प्रति घंटा या ज्यादा | | सभी परियोजनाएं | साधारण शर्त लागू होगी |
| 6 | सेवा सेक्टर | | | |
| 6(क) | राष्ट्रीय उद्यानों/ अभयारण्यों/ प्रवाल भित्तियों/ एल एन जी टर्मिनल सहित पारिस्थिकीय संवेदनशील क्षेत्रों से गुजरने वाली तेल और गैस परिवहन पाइप लाइनें (अपरिकृष्ट और परिष्करणी /पेट्रो रसायन उत्पाद) | सभी परियोजनाएं | | |
| 6(ख) | एकल भंडारकरण और परिसंकटमय रसायन को संभालना (एमएसआईएचसी नियम, 1989 और 2000 की संशोधित अनुसूची 2 और 3 के स्तंभ 3 में उपदर्शित अवसीमा योजना परिमाण के अनुसार | | सभी परियोजनाएं | साधारण शर्त लागू होगी |
| 7 | पर्यावरणीय सेवाओं सहित भौतिक अवसंरचना | | | |
| 7(क) | विमानपत्तन | सभी परियोजनाएं | - | - |
| 7(ख) | सभी पोत भंजन यार्ड जिसमें पोत भंजन इकाई भी सम्मिलित है | सभी परियोजनाएं | - | - |
| 7(ग) | औद्योगिक सम्पदा/पार्क/परिसर/ क्षेत्र/निर्यात प्रसंस्करण जोन (नि.प्र.जो.), विशेष आर्थिक जोन (वि.आ.जो.) जैव प्रौद्योगिकी पार्क चमड़ा परिसर | प्रस्तावित औद्योगिक संपदा में यदि एक भी उद्योग श्रेणी क के अंतर्गत आता है तो पूरे औद्योगिक क्षेत्र को श्रेणी क ही समझा जाएगा चाहे वह किसी भी क्षेत्र में हो 500 हेक्टेयर से ज्यादा क्षेत्र की औद्योगिक संपदाएं और जिनमें कम से कम एक श्रेणी ख का उद्योग स्थित हो | औद्योगिक संपदाएं और जिनमें कम से कम एक श्रेणी ख का उद्योग स्थित है और क्षेत्र < 500 हेक्टेयर हो औद्योगिक संपदाएं क्षेत्र > 500 हेक्टेयर और जिसमें श्रेणी क या ख श्रेणी का कोई उद्योग नहीं है | विशेष शर्त लागू होगी टिप्पण 500 हेक्टेयर से कम क्षेत्र की औद्योगिक संपदाओं जिनमें क या ख श्रेणी का कोई उद्योग नहीं है, को मंजूरी की आवश्यकता नहीं है |
| 7(घ) | सामान्य परिसंकटमय अपशिष्ट उपचार भंडारकरण और निपटान सुविधाएं (उ.भं.नि.सु.) | सभी एकीकृत सुविधाएं जिनमें भस्मीकरण और भूमिभरण या केवल भस्मीकरण शामिल है | केवल भूमि भरण वाली सभी सुविधाएं | साधारण शर्त लागू होगी |

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| 7(ड) | पत्तन, बंदरगाह | ≥ 5 मिलियन टन वार्षिक स्थोरा की उठाई-धराई की क्षमता (मत्स्य बंदरगाह से भिन्न) | < 5 मिलियन टन वार्षिक स्थोरा की उठाई-धराई की क्षमता और पत्तन/बंदरगाह में ≥ 10,000 टन वार्षिक मछली पकड़ने की क्षमता | साधारण शर्त लागू होगी |
| 7(घ) | राजमार्ग | 1) नए राष्ट्रीय राजमार्ग: और 2) 30 कि.मी. से ज्यादा लंबाई के राष्ट्रीय राजमार्गों का विस्तार जिनमें मार्ग के दोनों ओर अतिरिक्त भूमि अधिग्रहण 20 मीटर से ज्यादा है और एक से अधिक राज्यों से गुजरते हैं। | 1) नए राज्य राजमार्ग: और 2) 30 कि.मी. से ज्यादा लंबे राष्ट्रीय /राज्य राजमार्गों का विस्तार जिनमें मार्ग के दोनों ओर अतिरिक्त भूमि अधिग्रहण 20 मीटर से ज्यादा है। | साधारण शर्त लागू होगी |
| 7(च) | आकाशी यात्री रज्जुमार्ग | | सभी परियोजनाएं | साधारण शर्त लागू होगी |
| 7(ज) | सामान्य स्राव उपचार संयंत्र (स.स्र.उ.सं.) | | सभी परियोजनाएं | साधारण शर्त लागू होगी |
| 7(झ) | नगरपालिका ठोस अपशिष्ट प्रबंधन सुविधा (स.न..अ.प्र.स.) | | सभी परियोजनाएं | साधारण शर्त लागू होगी |
| 8 | भवन/ संनिर्माण परियोजनाएं/क्षेत्र विकास परियोजनाएं और शहरीकरण | | | |
| 8(क) | भवन एवं संनिर्माण परियोजनाएं | | ≥ 20000 वर्ग मी. के निर्मित क्षेत्र और < 1,50,000 वर्ग मीटर के निर्मित क्षेत्र # | # आपूर्त संनिर्माण के लिए निर्मित क्षेत्र आकाश की ओर खुली सुविधाओं की दशा में यह क्रियाकलाप क्षेत्र भी होगा। |
| 8(ख) | नगरी और क्षेत्र विकास परियोजनाएं | | ≥ 50 हे० क्षेत्र को सम्मिलित करते हुए और या निर्मित क्षेत्र ≥ 1,50,000 वर्ग मीटर ++ | ++ 8 (ख) के अंतर्गत सभी परियोजनाओं को ख 1 प्रवर्ग के अनुसार निर्बंधित किया जाएगा। |

टिप्पण

साधारण शर्त (सा.श.)

प्रवर्ग "ख" में विनिर्दिष्ट किसी परियोजना या क्रियाकलाप को प्रवर्ग "क" माना जाएगा, यदि वह : (i) वन्य जीव (संरक्षण) अधिनियम, 1972 के अधीन अधिसूचित संरक्षित क्षेत्र; (ii) उसकी समय-समय पर केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा गंभीर रूप से प्रदूषित क्षेत्र के रूप में पहचान की गई है; (iii) परिस्थितिकी संवेदनशील क्षेत्र अधिसूचित है; और (iv) अंतरराज्यिक सीमाओं और अंतरराष्ट्रीय सीमाओं से दस किलोमीटर के भीतर संपूर्ण रूप से या आंशिक रूप में अवस्थित है।

विनिर्दिष्ट शर्त (वि.श.)

यदि कोई मद 4(घ), 4(च), 5(ङ), 5(ष) जैसी समयुक्त की प्रकार का उद्योगों वाला औद्योगिक संपदा/कांप्लेक्स/निर्यात प्रसंस्करण जोन/विशेष आर्थिक जोन/जैव प्रौद्योगिकी उद्यान/चमड़ा परिसर या पूर्व निर्धारित गतिविधियों वाले उद्योग (आवश्यक नहीं कि वे समयुक्त हों) पूर्व पर्यावरणीय अनापत्ति प्राप्त करते हैं, तो ऐसी संपदाओं/कांप्लेक्सों के भीतर प्रस्तावित उद्योगों सहित निजी उद्योगों को तब तक पूर्व पर्यावरणीय अनापत्ति लेना अपेक्षित नहीं है जब तक कि औद्योगिक कांप्लेक्स/संपदा के लिए निबंधनों और शर्तों का अनुपालन नहीं करते (ऐसी संपदा/कांप्लेक्सों की पूर्व पर्यावरणीय अनापत्ति की निबंधनों और शर्तों के लिए सहमता सुनिश्चित करने के विधिक उत्तरदायित्व से स्पष्ट रूप से पहचान करने का प्रबंध होना चाहिए जिसे कांप्लेक्स/संपदा के सारे जीवन में उसके अतिक्रमण के लिए उत्तरदायी ठहराया जा सकेगा)।

[सं. जे-11013/56/2004-आईए-II(I)]

आर. चन्द्रमोहन, संयुक्त सचिव

परिशिष्ट -I
(पैरा 6 देखें)
प्ररूप 1

(1) आधारभूत जानकारी

परियोजना का नाम :

विचाराधीन अनुकल्पी अवस्थिति/स्थान :

परियोजना का आकार * :

परियोजना की प्राक्कलित लागत

संपर्क जानकारी :

संवीक्षा प्रवर्ग :

- अंचलीय क्रियाकलाप के लिए तत्स्थानी क्षमता (जैसे विनिर्माण करने के लिए उत्पादन क्षमता, खनिज उत्पादन के लिए खनन पट्टा क्षेत्र और उत्पादन क्षमता, खनिज पूर्वक्षण के लिए क्षेत्र, अनुरेख परिवहन अवसंरचना के लिए लंबाई, विद्युत उत्पादन आदि के उत्पादन क्षमता)

(II) क्रियाकलाप

1. परियोजना का संनिर्माण, प्रचालन या न निकालना जिसमें ऐसी कार्रवाई भी सम्मिलित है जो परिक्षेत्र में भौतिक परिवर्तनों का कारण होगी (स्थलाकृति, भूमि उपयोग, जल निकायों में परिवर्तन आदि)

| क्र.सं. | जानकारी/जांच सूची पुष्टिकरण | हां/नहीं | उनके ब्योरे (लगभग मात्रा/दरों, सहित, जो संभव हो, सहित) आंकड़ों की जानकारी के स्रोत सहित। |
|---------|--|----------|---|
| 1.1 | भूमि उपयोग, समावेश भूमि या स्थलाकृति में स्थायी या अस्थायी जिसमें भूमि उपयोग की मात्रा(स्थानीय भूमि उपयोग योजना के बारे में वृद्धि भी सम्मिलित है) | | |
| 1.2 | विद्यमान भूमि, वनस्पति और भवनों की अनापत्ति | | |
| 1.3 | नई भूमि उपयोगों का सृजन | | |
| 1.4 | संनिर्माण पूर्व अन्वेषण अर्थात् बोर, गृह, मिट्टी का परिक्षण करना | | |
| 1.5 | संनिर्माण कार्य | | |
| 1.6 | विध्वंस कार्य | | |

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| 1.7 | संनिर्माण कार्य या संनिर्माण कर्मकारों के घर के प्रबंध के लिए उपयोग किए गए अस्थायी स्थल | | |
| 1.8 | उपर्युक्त भूमि, संरचनाएं या भूखंड जिसमें अनुरेखीय संरचनाएं, काटनी और भस्म या खुदाई भी सम्मिलित है। | | |
| 1.9 | भूमिगत कार्य जिसमें खनन या सुरंग बनाना भी सम्मिलित है। | | |
| 1.10 | भूमि उद्धार कार्य | | |
| 1.11 | तलकषक | | |
| 1.12 | अपतट संरचनाएं | | |
| 1.13 | उत्पादन और विनिर्माण प्रक्रियाएं | | |
| 1.14 | सामग्रियों या माल के भंडार की सुविधाएं | | |
| 1.15 | ठोस अवशिष्ट या तरल बहिःस्रावों के उपचार या निपटान के लिए सुविधाएं | | |
| 1.16 | परिचालन कर्मकारों के दीर्घकालिक घर का प्रबंध के लिए सुविधाएं | | |
| 1.17 | संनिर्माण या प्रचालन के दौरान नई सड़क, रेल या समुद्री यातायात | | |
| 1.18 | नई सड़क, रेल, वायु जल वाहिन या अन्य परिवहन अवसंरचना जिसमें नए या परिवर्तित मार्ग और स्टेशन, पत्तन, विमानपत्तन आदि भी सम्मिलित है। | | |
| 1.19 | विद्यमान परिवहन मार्गों को बंद करना या अपवर्तन या यातायात परिचालन में परिवर्तनों के लिए प्रमुख अवसंरचना | | |
| 1.20 | नई या अपवर्तित प्रेषण लाईनें या पाइपलाइनें | | |
| 1.21 | अवरुद्ध करना, बांध बनाना, पुलिया बनाना, पुनःरेखांकन या जलमार्गों या एक्वीकरों के जल विज्ञान के लिए अन्य परिवर्तन | | |
| 1.22 | प्रवाह पार | | |
| 1.23 | भूजल या भूतल से जल का अंतरण या धृक्करण | | |
| 1.24 | नालियों या प्रवाह को प्रभावित करने वाले जलनिष्पादों या भूमि स्तर में परिवर्तन | | |
| 1.25 | संनिर्माण, परिचालन या न निकालने के लिए कार्मिक या सामग्रियों का परिवहन | | |
| 1.26 | दीर्घकालिक रूप में तोड़ना, प्रारंभ करना या कार्य पुनः आरंभ करना। | | |
| 1.27 | आरंभ के दौरान जारी ऐसे क्रियाकलाप जो पर्यावरण पर समाघात कर सकेंगे। | | |
| 1.28 | जमता का किसी क्षेत्र के लिए या तो अस्थायी रूप से या स्थायी रूप से आना। | | |
| 1.29 | अन्य देशीय प्रजातियों का आना | | |
| 1.30 | मूल निवासी प्रजातियों या आनुवंशिक विविधता की हानि | | |
| 1.31 | अन्य कोई कार्रवाईयां | | |

2. परियोजना के संनिर्माण या प्रचालन के लिए प्राकृतिक संसाधनों का उपयोग (जैसे भूमि, जल सामग्री या ऊर्जा विशेष रूप से ऐसा कोई संसाधन जो नवीकरणीय नहीं है या जिसका प्रदाय कम है)

| क्र.सं. | सूचना/जांच सूची पुष्टीकरण | हां/नहीं | सूचना आंकड़ों के स्रोत सहित उनके ब्यौरे (लगभग मात्राओं/दरों सहित, जहां कहीं संभव हो) |
|---------|---|----------|--|
| 2.1 | विशेष रूप से अविकसित भूमि या कृषि भूमि (हे0) | | |
| 2.2 | जल (अनुमानित स्रोत और प्रतियोगी उपयोगकर्ता) इकाई : के.एल.डी. | | |
| 2.3 | खनिज (एम.टी.) | | |
| 2.4 | संनिर्माण सामग्री -- पत्थर और सत, बालू/मृदा (अनुमानित स्रोत एम.टी.) | | |
| 2.5 | वन और इमारती लकड़ी (स्रोत -- एम.टी.) | | |
| 2.6 | ऊर्जा जिसके अंतर्गत विद्युत और ईंधन (स्रोत, प्रतियोगी उपयोगकर्ता) इकाई : ईंधन (एम.टी.) ऊर्जा (एम.डब्ल्यू) | | |
| 2.7 | कोई अन्य प्राकृतिक संसाधन, (समुचित मानक इकाइयों के उपयोग करें) | | |

3. पदार्थों या सामग्रियों का उपयोग, परिवहन, उठाई धराई या उत्पादन, जो मानव स्वास्थ्य या पर्यावरण के लिए खतरनाक या जिनके मानव स्वास्थ्य की जोखिम की वास्तविकता के बारे में चिंताएं उठती हैं ।

| क्र.सं. | सूचना/जांच सूची पुष्टीकरण | हां/नहीं | सूचना आंकड़ों के स्रोत सहित उनके ब्यौरे (लगभग मात्राओं/दरों सहित, जहां कहीं संभव हो) |
|---------|---|----------|--|
| 3.1 | पदार्थों या सामग्रियों का उपयोग जो मानव स्वास्थ्य या पर्यावरण (फ्लोरा, फोना और जल प्रदाय के लिए परिसंकटमय) (एम एस.आई.एव.सी. नियमों के अनुसार) हैं | | |
| 3.2 | रोग के होने में परिवर्तन या रोग वाहकों के रोग का प्रभाव (उदहरणार्थ कीट या जल-जन्य रोग) | | |
| 3.3 | लोगों के कल्याण पर प्रभाव उदहरणार्थ जीवन दशाओं में परिवर्तन करके | | |
| 3.4 | लोगों के संवेदनशील समूह जो परियोजना अर्थात् अस्पताल रोगियों, बालकों, वृद्धों आदि द्वारा प्रभावित हो सकते हैं | | |
| 3.5 | कोई अन्य कारण | | |

4. निर्माण या प्रचालन या प्रारंभ न करने के दौरान ठोस अपशिष्टों का उत्पादन (एम.टी./मास)

| क्र.सं. | सूचना/जांच सूची पुष्टीकरण | हां/नहीं | सूचना आंकड़ों के स्रोत सहित उनके ब्यौरे (लगभग मात्राओं/दरों सहित, जहां कहीं संभव हो) |
|---------|---|----------|--|
| 4.1 | मृदा, अधिक भार या खान अपशिष्ट | | |
| 4.2 | नगरपालिक अपशिष्ट (घरेलू और या वाणिज्यिक अपशिष्ट) | | |
| 4.3 | परिसंकटमय अपशिष्ट (परिसंकटमय अपशिष्ट प्रबंध तंत्र नियमों के अनुसार) | | |
| 4.4 | अन्य औद्योगिक प्रक्रिया अपशिष्ट | | |
| 4.5 | अधिशेष उत्पाद | | |
| 4.6 | मल बही-स्राव उपचार से मल गाद या अन्य गाद | | |
| 4.7 | निर्माण या ढाये गए अपशिष्ट | | |
| 4.8 | बेकार मशीनरी या उपस्कर | | |
| 4.9 | संदूषित मृदाएं या अन्य सामग्रियां | | |
| 4.10 | कृषि अपशिष्ट | | |
| 4.11 | अन्य ठोस अपशिष्ट | | |

5. वायु में संदूषकों या किसी परिसंकटमय विषैले या जहरीले पदार्थों का विसर्जन

| क्र.सं. | सूचना/जांच सूची पुष्टीकरण | हां/नहीं | सूचना आंकड़ों के स्रोत सहित उनके ब्यौरे (लगभग मात्राओं/दरों सहित, जहां कहीं संभव हो) |
|---------|--|----------|--|
| 5.1 | लेखन सामग्री या चल संसाधनों से जीवाष्प ईंधनों के दहन से उत्सर्जन | | |
| 5.2 | उत्पादन प्रक्रियाओं से उत्सर्जन | | |
| 5.3 | सामग्रियों की उठाई धराई से जिसके अंतर्गत भंडारण या परिवहन भी है, उत्सर्जन | | |
| 5.4 | निर्माण क्रियाकलापों से जिसके अंतर्गत संयंत्र और उपस्कर भी हैं, उत्सर्जन | | |
| 5.5 | सामग्रियों की उठाई धराई से जिसके अंतर्गत निर्माण सामग्री, मल और अपशिष्ट भी हैं, धूल या गंध | | |
| 5.6 | अपशिष्ट के भस्मीकरण से उत्सर्जन | | |
| 5.7 | खुली वायु में अपशिष्ट के जलने से उत्सर्जन (उदाहरणार्थ स्तैश सामग्री, निर्माण सामग्री का ढेर) | | |
| 5.8 | किन्हीं अन्य स्रोतों से उत्सर्जन | | |

6. शोर और कंपन का पैदा होना तथा प्रकाश और उष्मा का उत्सर्जन

| क्र.सं. | सूचना/जांच सूची पुष्टीकरण | हां/नहीं | सूचना आंकड़ों के स्रोत सहित उनके ब्यौरे (लगभग मात्राओं/दरों सहित, जहां कहीं संभव हो) |
|---------|---|----------|--|
| 6.1 | उपस्कर के प्रचालन से उदाहरणार्थ ईंजन, वातायन संयंत्र, संदलनित्र | | |
| 6.2 | औद्योगिक या उसी प्रकार की प्रक्रियाओं से | | |
| 6.3 | निर्माण या ढहाने से | | |
| 6.4 | विस्फोटन या पाइलिंग से | | |
| 6.5 | निर्माण या प्रचालन संबंधी यातायात से | | |
| 6.6 | प्रकाशन या प्रशीतन प्रणालियों से | | |
| 6.7 | किन्हीं अन्य संसाधनों से | | |

7. भूमि या मल नालियों, सतही जल, भूमिगत जल, तटीय जल या समुद्र में प्रदूषकों के विसर्जन से भूमि या जल के संदूषण के जोखिम

| क्र.सं. | सूचना/जांच सूची पुष्टीकरण | हां/नहीं | सूचना आंकड़ों के स्रोत सहित उनके ब्यौरे (लगभग मात्राओं/दरों सहित, जहां कहीं संभव हो) |
|---------|--|----------|--|
| 7.1 | परिसंकटमय सामग्री की उठाई धराई, भंडारण, उपयोग या गाद से | | |
| 7.2 | जल या भूमि में (अनुमानित ढंग और विसर्जन का स्थान) मल या अन्य बही स्रावों के विसर्जन से | | |
| 7.3 | वायु से भूमि या जल में उत्सर्जित प्रदूषकों के जमा होने से | | |
| 7.4 | किन्हीं अन्य संसाधनों से | | |
| 7.5 | क्या इन संसाधनों से पर्यावरण में प्रदूषकों के जमा होने से दीर्घकालिक जोखिम है ? | | |

8. परियोजना के निर्माण या प्रचालन के दौरान दुर्घटनाओं का जोखिम जो मानव स्वास्थ्य या पर्यावरण को प्रभावित कर सकते हैं

| क्र.सं. | सूचना/जांच सूची पुष्टीकरण | हां/नहीं | सूचना आंकड़ों के स्रोत सहित उनके ब्यौरे (लगभग मात्राओं/दरों सहित, जहां कहीं संभव हो) |
|---------|---|----------|--|
| 8.1 | परिसंकटमय पदार्थों के विस्फोट, गाद, आग, भंडारण, उठाई धराई या उत्पादन से | | |
| 8.2 | किन्हीं अन्य कारणों से | | |
| 8.3 | क्या परियोजना प्राकृतिक विपदाओं द्वारा पर्यावरण को नुकसान पहुंचाएंगी (उदाहरणार्थ बाढ़, भूकंप, भू-सखलन, वृष्टिस्फोट आदि) ? | | |

9. बातें जिन पर विचार किया जाना चाहिए (जैसे पारिणामिक विकास) जिनके कारण पर्यावरणीय प्रभाव होते हैं या जो संचयी प्रभावों को करने के लिए अन्य विद्यमान प्रभावों सहित या पक्षेत्र में नियोजित क्रियाकलापों के लिए सामर्थवान हैं

| क्र.सं. | सूचना/जांच सूची पुष्टीकरण | हां/नहीं | सूचना आंकड़ों के स्रोत सहित उनके ब्यारे (लगभग मात्राओं/दरों सहित, जहां कहीं संभव हो) |
|---------|---|----------|--|
| 9.1 | जिसके कारण आधार का विकास, सहायक विकास या परियोजना द्वारा विकास को बल मिलता है जिसका पर्यावरण पर प्रभाव हो सकता है अर्थात् - <ul style="list-style-type: none"> • आधारीक अवसंरचना (सड़कें, बिजली प्रदाय, अपशिष्ट या अपशिष्ट जल उपचार आदि) • आवासन विकास • निष्कर्षित उद्योग • पूर्ति उद्योग • अन्य | | |
| 9.2 | जिसके कारण स्थल का बाद में उपयोग होता है जिसका पर्यावरण पर प्रभाव हो सकता है | | |
| 9.3 | पश्चात्वर्ती विकासों के लिए उदाहरण स्थापित करना | | |
| 9.4 | सामिप्य के कारण अन्य विद्यमान परियोजनाओं पर संचयी प्रभाव हैं या उसी प्रकार के प्रभावों सहित नियोजित परियोजनाएं | | |

(III) पर्यावरणीय संवेदनशीलता

| क्र.सं. | क्षेत्र | नाम/पहचान | आकाशी दूरी (15 किलोमीटर के भीतर) प्रस्तावित परियोजना अवस्थान सीमा |
|---------|--|-----------|---|
| 1. | उनके पारिस्थितिक भू-दृश्य, सांस्कृतिक या अन्य संबंधित मूल्यों के लिए अंतरराष्ट्रीय कन्वेंशन, राष्ट्रीय या स्थानीय विधान के अधीन संरक्षित क्षेत्र । | | |
| 2. | क्षेत्र जो पारिस्थितिक कारणों के लिए महत्वपूर्ण या संवेदनशील हैं - वेट लैंड्स, जल स्रोत या अन्य जल संबंधी निकाय, तटीय जोन, बायोस्फीयर, पहाड़ियां, वन | | |
| 3. | क्षेत्र जो प्रजनन, घासला बनाने, चारे के लिए, आराम करने के लिए, सर्दी के लिए, प्रवास के लिए फ्लोरा और फोना के संरक्षित महत्वपूर्ण या संवेदनशील प्रजातियों द्वारा उपयोग किए जाते हैं | | |
| 4. | अंतरदेशीय, तटीय, सामुद्रिक या भूमिगत जल | | |

| | | | |
|-----|--|--|--|
| 5. | राज्य, राष्ट्रीय सीमाएं | | |
| 6. | मनोरंजन की या अन्य पर्यटक/यात्रियों वाले क्षेत्रों में पहुंच के लिए जनता द्वारा उपयोग किए जाने वाले मार्ग या सुविधाएं | | |
| 7. | रक्षा प्रतिष्ठापन | | |
| 8. | सघन रूप से बसे हुए या निर्मित क्षेत्र | | |
| 9. | संवेदनशील मानव निर्मित भूमि उपयोगों के अधिभोगाधीन क्षेत्र अस्पताल, पाठशालाएं, पूजा स्थल, सामुदायिक सुविधाएं | | |
| 10. | महत्वपूर्ण, उच्च क्वालिटी या दुर्लभ संसाधनों वाले क्षेत्र (भूमिगत जल संसाधन, भूतल संसाधन, वनोद्योग, कृषि, मत्स्य उद्योग, पर्यटन, खनिज) | | |
| 11. | क्षेत्र जो पहले से ही प्रदूषण या पर्यावरणीय नुकसान के अधीन हैं (वे जहां विद्यमान विधिक पर्यावरणीय मानक अधिक होते हैं) | | |
| 12. | क्षेत्र जहां प्राकृतिक संकट हो सकता है जो वर्तमान पर्यावरणीय समस्याओं की योजनाओं को प्रभावित कर सकते हैं (धंसना, भूस्खलन, भूमि कटाव, बाढ़ या अत्यंत या प्रतिकूल वातावरणीय दशाएं) | | |

परिशिष्ट 2
(पैस 6 देखें)

प्ररूप 1क (केवल अनुसूची की मद 8 के अधीन सूचीबद्ध निर्माण परियोजनाओं के लिए)

पर्यावरणीय प्रभावों की जांच सूची

(पूर्ण जानकारी उपलब्ध कराने के लिए अपेक्षित परियोजना सलाहकार और जहां कहीं आवश्यक हो प्ररूप के साथ स्पष्टीकारक टिप्पण संलग्न करें तथा प्रस्तावित पर्यावरणीय प्रबंधन योजना और मॉनिटरिंग कार्यक्रम के साथ प्रस्तुत करें)

1. भूमि पर्यावरण

(परियोजना स्थल और आसपास का विशाल दृश्य संलग्न करें)

1.1 क्या विद्यमान भूमि के उपयोग में परियोजना से सारवान रूप से परिवर्तन किया जाएगा जो वातावरण आसपास से संगत नहीं है ? (प्रस्तावित भूमि उपयोग सक्षम प्राधिकारी के अनुमोदित मास्टर प्लान/विकास योजना के अनुरूप होना चाहिए। भूमि उपयोग में परिवर्तन यदि कोई हो और सक्षम प्राधिकारी से कानूनी अनुमोदन प्रस्तुत किया जाए)। (i) स्थल अवस्थान, (ii) प्रस्तावित स्थल (पांच सौ मीटर के भीतर आसपास के सक्षमों) और (iii) समुचित मापमान के स्थल (स्तर और समोच्च रेखा उपदर्शित करते हुए) के नक्शे संलग्न करें। यदि उपलब्ध नहीं है तो केवल अवधारणा युक्त योजना संलग्न करें।

1.2 भूमि क्षेत्र, निर्मित क्षेत्र, जल उपयोग, विद्युत अपेक्षा, संयोजकता, सामुदायिक सुविधाओं, पर्यावरण आवश्यकताओं आदि के अनुसार सभी बड़ी परियोजना की आवश्यकताओं को सूचीबद्ध करें।

1.3 प्रस्तावित स्थल से संलग्न विद्यमान सुविधाओं पर प्रस्तावित विकासकार्य के संभावित प्रभाव क्या हैं ? (उस खुले स्थल, सामुदायिक सुविधाएं, विद्यमान भूमि उपयोग के ब्यारे, स्थानीय परिस्थिति आदि के बारे में)

1.4 क्या किसी महत्वपूर्ण भूमि क्षेत्र के परिणामस्वरूप भूस्खलन, भूमि कटाव, बाढ़, अत्यंत वातावरण, धंसना, ढाल विश्लेषण, भूमि कटाव की संवेदनशीलता, भूकंपन आदि के खतरे दिए गए हैं?

1.5 क्या प्राकृतिक मल निकास प्रणाली के परिवर्तन से संबंधित प्रस्ताव है ? (प्रस्तावित परियोजना स्थल के निकट प्राकृतिक मल निकासी को दर्शाते हुए किसी समोच्च नक्शे के ब्यौरे दें)

1.6 निर्माण क्रियाकलाप — कर्तन, भरण, भूमि सुधार आदि में अंतर्वलित भूमि कार्य की मात्राएं क्या हैं ? (अंतर्वलित भूमि कार्य, स्थल आदि के बाहर से सामग्री भरने के परिवहन के ब्यौरे दें)

1.7 निर्माण अवधि के दौरान जल प्रदाय अपशिष्ट उठाई भराई आदि के संबंध में ब्यौरे दें ।

1.8 क्या नीचे के क्षेत्रों और वेट लैंड्स में परिवर्तन होंगे ? (वह ब्यौरे दें कि किस प्रकार निचले क्षेत्र और वेट लैंड्स प्रस्तावित क्रियाकलापों से उपांतरित हो रहे हैं)

1.9 क्या निर्माण के दौरान निर्माण के कूड़ा करकट और अपशिष्ट से स्वास्थ्य को खतरा होगा ? (निर्माण के दौरान जिसके अंतर्गत निर्माण श्रम और व्ययन की युक्तियां भी हैं, जनित अपशिष्टों की विभिन्न किस्मों की मात्राएं दें ।)

2. जल पर्यावरण

2.1 विभिन्न उपयोगों की अपेक्षाओं के विश्लेषण सहित प्रस्तावित परियोजना के लिए जल अपेक्षा की कुल मात्रा दें । जल अपेक्षा की पूर्ति कैसे होगी । स्रोतों और मात्राओं का कथन करें तथा एक जल अतिशेष विवरण दें ।

2.2 जल के प्रस्तावित स्रोत की क्षमता क्या है ? (बहाव या प्राप्ति के आधार पर)

2.3 अपेक्षित जल की क्वालिटी क्या है यदि पूर्ति किसी नगर पालिक स्रोत से नहीं है ? (जल की क्वालिटी के वर्ग सहित भौतिक, रासायनिक, जैव वैज्ञानिक लक्षणों को दर्शाते करें)

2.4 कितनी जल अपेक्षा की उपचारित बेकार जल के पुनः चक्रण से पूर्ति हो सकती है ? (मात्राओं, स्रोतों और उपयोगिताओं के ब्यौरे दें ।)

2.5 क्या अन्य उपयोक्ताओं से जल का उपयोजन होगा ? (कृषयां अन्य विद्यमान उपयोगों और उपभोग की मात्राओं पर परियोजना के प्रभाव का निर्धारण करें)

2.6 प्रस्तावित क्रियाकलापों से प्राप्त बेकार जल से प्रदूषण के भार में क्या वृद्धि है ? (प्रस्तावित क्रियाकलापों से प्राप्त बेकार जल की मात्राओं और संघटन के ब्यौरे दें)

2.7 जल अपेक्षाओं की जल संचयन से हुई पूर्ति के ब्यौरे दें । सृजित सुविधाओं के ब्यौरे प्रस्तुत करें ।

2.8 दीर्घकालिक आधार पर निर्माण चरण के पश्चात् क्षेत्र की प्रस्तावित परियोजना के पूरा होने के लक्षणों (मात्रात्मकता के साथ-साथ क्वालिटी भी) के कारण भूमि उपयोग में हुए परिवर्तनों का क्या प्रभाव होगा ? क्या इससे बाढ़ या जल के जमा होने की किसी रूप में समस्या में वृद्धि होगी ?

2.9 भूमिगत जल पर प्रस्ताव के क्या प्रभाव होंगे ? (क्या भूमिगत जल में नल लगाया जाएगा ; भूमिगत जल की सारणी, पुनः प्रभारण क्षमता और सक्षम प्राधिकारी से अभिप्राप्त अनुमोदन यदि कोई हों के ब्यौरे दें)

2.10 भूमि और पनिलों को प्रदूषित करने वाले निर्माण क्रियाकलाप हैं वह होने को रोकने के लिए क्या सावधानियां/कदम उठाए जाने हैं ? (प्रतिकूल प्रभावों से बचने के लिए मात्राओं और अपनारे जाने वाले उपायों के ब्यौरे दें)

2.11 स्थल के भीतर किस प्रकार तेज जल की व्यवस्था की जाएगी ? (क्षेत्र में बाढ़ से बचने के लिए किए गए उपबंध, समोच्च स्तरों के उपदर्शन के स्थल अभिन्यास सहित उपलब्ध कराई गई जल निकासी सुविधाओं के ब्यौरे का कथन करें)

2.12 क्या आवश्यक अवधि में विशेष रूप से निर्माण श्रमिकों के लगाए जाने से परियोजना स्थल के आसपास अस्वच्छता दशाएं उत्पन्न हो जाती हैं ? (उचित स्पष्टीकरण से न्यायोचित ठहराए)

2.13 स्थल सुविधाओं पर संग्रहण, उपचार और जल निकासी के सुरक्षित व्ययन के लिए क्या व्यवस्था की जाती है ? (पुनःचक्रण और व्ययन के लिए प्रौद्योगिकी और सुविधाओं सहित जनन, उपचार क्षमताओं की, चाहे जैसी हों मात्राओं के ब्यौरे दें)

2.14 दोहरी नलसाजी प्रणाली के ब्यौरे दें यदि उपयोग किए गए उपचारित अपशिष्ट का प्रसाधनों को बहाने या किसी अन्य उपयोग के लिए उपयोग किया जाता है ।

3 वनस्पति

3.1 क्या जैवविविधता पर परियोजना का कोई खतरा है ? (स्थानीय पारिस्थितिक प्रणाली का उसकी विशिष्ट बातों सहित यदि कोई हों वर्णन करें)

3.2 क्या निर्माण में वनस्पति की विस्तृत निकासी या उपांतरण अंतर्वलित है ? (परियोजना द्वारा प्रभावित वृक्षों और वनस्पति का विस्तृत लेखा जोखा दें)

3.3 महत्वपूर्ण स्थल की बातों पर प्रभावों को कम करने के लिए प्रस्तावित उपाय क्या हैं ? (किसी समुचित मापमान कि किसी अभिन्यास योजना सहित वृक्षारोपण, भूदृश्य, जल निकायों आदि के सृजन के प्रस्ताव के ब्यौरे दें)

4. जीव जन्तु

4.1 क्या जीव जन्तुओं, स्थलीय और जलीय रूप से किसी प्रकार हटाने या उनके चलने फिरने के लिए रुकावटें होने की संभावना है ? ब्यौरे दें ।

4.2 क्षेत्र के जीव जन्तुओं पर क्या कोई प्रत्यक्ष या अप्रत्यक्ष प्रभाव हैं ? ब्यौरे दें ।

4.3 जीवजन्तुओं पर प्रतिकूल प्रभावों को कम करने के लिए कारीडोर, मछली सीड़ियों आदि जैसे उपाय विहित करें ।

5. वायु पर्यावरण

5.1 क्या परियोजना से द्वीपों में गैसों के वायुमंडलीय सांद्रण में वृद्धि होगी और उसके परिणामस्वरूप ऊष्मा बढ़ेगी ? (प्रस्तावित निर्माणों के परिणामस्वरूप वर्धित यातायात बढ़ने को ध्यान में रखते हुए विक्षेपण आदर्शों पर आधारित अनुमानित मूल्यों सहित पृष्ठभूमि वायु क्वालिटी स्तरों के ब्यौरे दें)

5.2 धूल, जहरीली वाष्पों या अन्य परिसंकटमय गैसों के बनने पर क्या प्रभाव हैं ? सभी मौसम विज्ञान परिभाषों के संबंध में ब्यौरे दें ।

5.3 क्या प्रस्ताव से यानों को पार्क करने के स्थल में कमी आएगी ? परिवहन अवसंरचना और सुधार के लिए प्रस्तावित उपायों के, जिसके अंतर्गत परियोजना स्थल के प्रवेश और निर्गम पर यातायात व्यवस्था भी है, विद्यमान स्तर के ब्यौरे दें ।

5.4 प्रत्येक प्रयोग के अधीन क्षेत्रों में आंतरिक सड़कों, बाइसिकल मार्गों, पैदल यात्री मार्गों, पैदल मार्गों आदि पर चलने के पैठनों के ब्यारे दें।

5.5 क्या यातायात शोर और कंपन में महत्वपूर्ण वृद्धि होगी ? ऊपर वर्णित बातों को कम करने के लिए स्रोतों और प्रस्तावित उपायों के ब्यारे दें।

5.6 परियोजना स्थल के आसपास शोर स्तरों और कंपन तथा घिरी हुई वायु की क्वालिटी पर डीजी सेटों और अन्य उपकरणों पर क्या प्रभाव होगा ? ब्यारे दें।

6. सौन्दर्यबोद्धी

6.1 क्या प्रस्तावित निर्माणों के परिणामस्वरूप किसी दृश्य, दृश्यसुविधा या भूदृश्य में रुकावट होगी ? क्या प्रस्तावकों ने इन बातों पर विचार कर लिया है ?

6.2 क्या विद्यमान परिनिर्माणों पर नए निर्माण से कोई प्रतिकूल प्रभाव होगा ? किन बातों को ध्यान में रखा गया है ?

6.3 क्या डिजाइन मापमान को प्रभावित करने वाले शहर रूपी या शहरी डिजाइनों का कोई स्थानीय आकलन है ? उनका स्पष्ट रूप से उल्लेख किया जा सकता है।

6.4 क्या कोई मानव विज्ञान संबंधी या पुरातत्वीय स्थल या बाह्य चीजें आसपास में हैं ? कथन करें यदि कोई अन्य महत्वपूर्ण बात, जिसपर प्रस्तावित स्थल के परिक्षेत्र में होने पर विचार किया गया है।

7 सामाजिक - आर्थिक पहलू

7.1 क्या प्रस्ताव के परिणामस्वरूप स्थानीय जनता के समाज संबंधी परिनिर्माणों में कोई परिवर्तन होगा ? ब्यारे दें।

7.2 प्रस्तावित परियोजना के आसपास विद्यमान सामाजिक अवसरचना के ब्यारे दें।

7.3 क्या परियोजना से स्थानीय समुदायों पर प्रतिकूल प्रभाव, पवित्र स्थलों या अन्य सांस्कृतिक मूल्यों में विघ्न पड़ेगा ? प्रस्तावित सुरक्षापाय क्या हैं ?

8 निर्माण सामग्री

8.1 अधिक ऊर्जा संहित निर्माण सामग्री का उपयोग हो सकेगा। क्या ऊर्जा दक्ष प्रक्रियाओं सहित निर्माण सामग्री उत्पादित की जाती है ? (निर्माण सामग्री और उनकी ऊर्जा दक्षता का चयन करने में ऊर्जा संरक्षण उपायों के ब्यारे दें)

8.2 निर्माण के दौरान सामग्री का परिवहन और उठाई धराई के कारण प्रदूषण, शोर और लोक अशान्ति हो सकती है। इन प्रभावों को कम करने के लिए क्या उपाय किए जाने हैं ?

8.3 क्या सड़कों और ढाचों में पुनः चक्रीत सामग्री उपयोग की जाती है ? की गई बचतों की सीमा का कथन करें ?

8.4 परियोजना के प्रचालन संबंधी चरणों के दौरान हुए कूड़े के संग्रहण, पृथक्करण और व्ययन की पद्धति के ब्यारे दें।

9 ऊर्जा संरक्षण

9.1 विद्युत अपेक्षा प्रदाय के स्रोत, स्रोत आदि की पृष्ठभूमि आदि के ब्यौरे दें। निर्मित क्षेत्र में प्रति वर्ग फुट ऊर्जा खपत कितनी है ? ऊर्जा खपत को कम करने के लिए क्या प्रयास किए गए हैं ?

9.2 विद्युत की पृष्ठभूमि की किस्म और क्षमता, जिसको देने की आपकी योजना है, क्या है ?

9.3 उपयोग किए जाने वाले कांच के अभिलक्षण क्या हैं ? शार्ट वेव और लांग वेव विकिरण दोनों से संबंधित उसके अभिलक्षणों के निर्देश दें।

9.4 भवन में कौन से अप्रत्यक्ष सौर वास्तविक कारक उपयोग किए जा रहे हैं ? प्रस्तावित परियोजना में किए गए उपयोग को स्पष्ट करें।

9.5 क्या गलियों और भवनों के अभिन्यास सौर ऊर्जा युक्तियों की क्षमता को अधिकतम करते हैं ? क्या आपने भवन कम्प्लैक्स में उपयोग के लिए सड़क प्रकाशन आपात प्रकाशन और सौर तप्त जल प्रणालियों के उपयोग पर विचार कर लिया है ? ब्यौरों का सार दें।

9.6 क्या प्रशीतन/तापन भार को कम करने के लिए शेडिंग का प्रभावी रूप से उपयोग किया जाता है ? पूर्व और पश्चिम की दीवारों और छत पर शेडिंग को अधिकतम करने के लिए उपयोग करने के सिद्धांत क्या हैं ?

9.7 क्या परिनिर्माणों में ऊर्जा दक्ष स्थल शीतन, प्रकाशन और यांत्रिक प्रणालियों का उपयोग किया जाता है ? तकनीकी ब्यौरे दें। ट्रांसफार्मरों और मोटर दक्षता प्रकाशन तीव्रता और वायु प्रशीतन भार धारणाओं के ब्यौरे दें। क्या आप सीएफसी एचसीएफसी फ्री चिलर्स का उपयोग कर रहे हैं ? विनिर्देश दें।

9.8 सूक्ष्म जलवायु के परिवर्तन में भवन क्रियाकलापों के संभावित प्रभाव क्या हैं ? तप्त द्वीप और प्रतीपन प्रभावों के सृजन पर प्रस्तावित निर्माण के संभावित प्रभावों पर स्वतः निर्धारण का उल्लेख करें।

9.9 भवन आहाते के तापीय अभिलक्षण क्या हैं ? (क) छत ; (ख) बाह्य दीवारें ; और (ग) झरोखे ? उपयोग की गई सामग्री और व्यष्टिक संघटकों के यू मूल्यों या आर मूल्यों के ब्यौरे दें।

9.10 अग्नि संकट के लिए प्रस्तावित सावधानियां और सुरक्षा उपाय क्या हैं ? आपात योजनाओं के ब्यौरे दें।

9.11 दिवाल सामग्री के रूप में यदि कांच का उपयोग किया जाता है तो ब्यौरे और विनिर्देश जिसके अंतर्गत उत्सर्जनता और तापीय अभिलक्षण भी हैं, दें।

9.12 भवन में वायु प्रवेशन की दर क्या है ? प्रवेशन के प्रभावों को कैसे कम कर रहे हैं, उसके ब्यौरे दें।

9.13 समग्र ऊर्जा खपत में अपारंपरिक ऊर्जा प्रौद्योगिकियों का किसी सीमा तक उपयोग किया जाता है ? उपयोग की गई नवीकरणीय ऊर्जा प्रौद्योगिकियों के ब्यौरे दें।

10 पर्यावरण प्रबंध योजना

पर्यावरण प्रबंध योजना में, निर्माण, प्रचालन और परियोजना के क्रियाकलापों के परिणामस्वरूप प्रतिकूल पर्यावरणीय प्रभावों को न्यूनतम करने के लिए समस्त जीवन चक्र के दौरान किए जाने वाले क्रियाकलापों की प्रत्येक मदवार के लिए सभी न्यूनतम करने वाले उपाय अंतर्विष्ट होंगे। इसमें विभिन्न पर्यावरणीय विनियमों के अनुपालन के लिए पर्यावरणीय मानिटीरी योजना का आलेखन भी होगा। आपात की दशा में, जैसे स्थल पर दुर्घटना जिसके अंतर्गत आग लगना भी है, उड़ाए जाने वाले कदमों का कथन भी होगा।

परिशिष्ट 3
(पैरा 7 देखें)

पर्यावरणीय समाघात निर्धारण दस्तावेज की साधारण संरचना

| क्र.सं. | ईआईए संरचना | अंतर्वस्तु |
|---------|--|--|
| 1. | प्राक्कथन | <ul style="list-style-type: none"> रिपोर्ट का प्रयोजन परियोजना और परियोजना प्रस्तावक की पहचान परियोजना की प्रकृति, आकार, अवस्थान का संक्षिप्त वर्णन और देश, प्रदेश में इसका महत्व अध्ययन का विस्तार — किए गए विनियामक विस्तार के ब्यौरे (सॉपे गए कृत्यों के अनुसार) |
| 2. | परियोजना वर्णन | <ul style="list-style-type: none"> परियोजना के उन पहलुओं का संघनित वर्णन (परियोजना साध्यता अध्ययन पर आधारित) जिनकी पर्यावरणीय प्रभाव कारित करने की संभावना है। निम्नलिखित को स्पष्ट करने के लिए ब्यौरे उपबंधित किए जाने चाहिए : परियोजना के किस्म परियोजना की आवश्यकता अवस्थान (साधारण अवस्थान, विनिर्दिष्ट अवस्थान, परियोजना सीमा और परियोजना स्थल अभिन्यास को दर्शित करते हुए नक्शे) प्रचालन का आकार या विस्तार (जिसके अंतर्गत परियोजना द्वारा या उसके लिए अपेक्षित सहयोजित क्रियाकलाप) अनुमोदन और कार्यान्वयन के लिए प्रस्तावित अनुसूची प्रोद्योगिकी और प्रक्रिया वर्णन परियोजना वर्णन, जिसके अंतर्गत परियोजना अभिन्यास, परियोजना आदि के संघटकों को दर्शित करते हुए आरेखन। साध्यता आरेखनों के स्कीमबद्ध प्रतिनिधित्व जो ईआईए परियोजना के लिए महत्वपूर्ण जानकारी दें। पर्यावरणीय मानकों, पर्यावरणीय प्रचालन दशाओं या अन्य ईआईए अपेक्षाओं की पूर्ति के लिए परियोजनाओं में सम्मिलित न्यूनिकरण उपायों का वर्णन (विस्तार द्वारा यथाअपेक्षित) प्रोद्योगिकीय असफलता के जोखिम के लिए नई और अपरीक्षित प्रोद्योगिकी का निर्धारण |
| 3. | पर्यावरण का वर्णन | <ul style="list-style-type: none"> अध्ययन क्षेत्र, अवधि, संघटक और पद्धति विस्तार में पहचान किए गए मूल्यवान पर्यावरणीय संघटकों के लिए आधारिक लेखा की स्थापना सभी पर्यावरणीय संघटकों के आधार नक्शे |
| 4. | अनुमानित पर्यावरणीय समाघात और न्यूनिकरण उपाय | <ul style="list-style-type: none"> परियोजना अवस्थान, संभावित दुर्घटनाओं, परियोजना डिजाइन, परियोजना निर्माण, नियमित प्रचालनों, पूरी की गई परियोजना को अंतिम रूप से बंद करना या पुनर्स्थापन के कारण अन्वेषित पर्यावरणीय समाघातों के ब्यौरे। पहचान किए गए प्रतिकूल समाघातों न्यूनिकृत और/या दूर करने के लिए उपाय पर्यावरणीय संघटकों के असंपरिवर्तनीय और पुनः प्राप्त न किए जा सकने वाले आश्वासन। |

| | | |
|-----|---|--|
| | | <ul style="list-style-type: none"> समाघातों के महत्व का निर्धारण (महत्व महत्व निर्धारण का अवधारणा करने के लिए मानदण्ड) न्यूनीकरण उपाय |
| 5. | अनुकल्पियों का विश्लेषण (प्रौद्योगिकी और स्थल) | <ul style="list-style-type: none"> यदि विस्तारित करने के कार्य के परिणामस्वरूप अनुकल्पियों की आवश्यकता होती है : प्रत्येक अनुकल्पी का वर्णन प्रत्येक अनुकल्पी के प्रतिकूल समाघातों का सार प्रत्येक अनुकल्पी के लिए प्रस्तावित न्यूनीकरण उपाय और अनुकल्पी का चयन |
| 6. | पर्यावरणीय मानीटरी कार्यक्रम | <ul style="list-style-type: none"> न्यूनीकरण उपायों की प्रभावशीलता को मानीटर करने के तकनीकी पहलू (जिसके अंतर्गत माप, पद्धति, आवर्त, अवस्थान, आंकड़े विश्लेषण, रिपोर्ट करने की अनुसूचियां, आपात प्रक्रियाएं, विस्तृत बजट और उपापन अनुसूचियां भी हैं) |
| 7. | अतिरिक्त अध्ययन | <ul style="list-style-type: none"> लोक परामर्श जोखिम निर्धारण सामाजिक समाघात निर्धारण आर और आर अनुवर्ती योजनाएं |
| 8. | परियोजना के फायदे | <ul style="list-style-type: none"> भौतिक अवसंरचना में सुधार सामाजिक अवसंरचना में सुधार नियोजन क्षमता - कुशल ; अर्धकुशल और अकुशल अन्य मूर्त फायदे |
| 9. | पर्यावरणीय लागत फायदा विश्लेषण | यदि विस्तारण प्रक्रम पर सिफारिश की जाती है । |
| 10. | ईएमपी | <ul style="list-style-type: none"> यह सुनिश्चित करने के लिए कि न्यूनीकरण संबंधी उपाय कार्यान्वित किए गए हैं और ईआईए के अनुमोदन के पश्चात् उनकी प्रभावी मानीटरी की गई है, प्रशासनिक पहलुओं का वर्णन । |
| 11. | संक्षिप्त सार और निष्कर्ष (यह ईआईए रिपोर्ट का संक्षिप्त सार होगा) | <ul style="list-style-type: none"> परियोजना के कार्यान्वयन के लिए समग्र औचित्य । यह स्पष्टीकरण कि प्रतिकूल प्रभाव किस प्रकार कम किए जाते हैं |
| 12. | नियोजित परामर्शियों का प्रकटन | <ul style="list-style-type: none"> उनके संक्षिप्त कार्य और दिए गए परामर्श की प्रकृति सहित नियोजित किए गए परामर्शियों के नाम. |

परिशिष्ट 3क

(पैस 7 देखें)

संक्षिप्त पर्यावरणीय समाघात निर्धारण की अंतर्घरुतु

पर्यावरणीय समाघात निर्धारण का संक्षिप्त सार अधिकतम ए -4 आकार के दस पृष्ठों पर पूरी पर्यावरणीय समाघात निर्धारण का एक संक्षिप्त सार होगा । इसमें संक्षेप में अनिवार्य रूप से पूर्ण पर्यावरणीय समाघात निर्धारण रिपोर्ट के निम्नलिखित अध्याय होने चाहिए :-

- (1) परियोजना वर्णन :
- (2) पर्यावरण का वर्णन :
- (3) अनुमानित पर्यावरणीय समाघात और न्यूनीकरण उपाय :
- (4) पर्यावरणीय मानीटरी कार्यक्रम :
- (5) अतिरिक्त अध्ययन :
- (6) परियोजना के फायदे :
- (7) पर्यावरण प्रबंधन योजना :

परिशिष्ट 4

(पैरा 7 देखिए)

लोक सुनवाई को संचालित करने के लिए प्रक्रिया

1.0 लोक सुनवाई की, संबंधित राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति द्वारा परियोजना स्थल (स्थलों) में या उसके निकटस्थ परिसर में जिला वार एक प्रणालीबद्ध, समयबद्ध और पारदर्शी रीति में अधिकतम संभव लोक भागीदारी को सुनिश्चित करते हुए व्यवस्था की जाएगी।

2.0 प्रक्रिया :

2.1 आवेदक, उस राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति के सदस्य सचिव को, जिसकी अधिकारिता में परियोजना अवस्थित है, विहित कानूनी अवधि के भीतर लोक सुनवाई की व्यवस्था करने के लिए एक सादा पत्र के माध्यम से अनुरोध करेगा। यदि परियोजना स्थल का किसी राज्य या संघ राज्यक्षेत्र के परे विस्तार है तो प्रत्येक राज्य या संघ राज्यक्षेत्र में जिसमें परियोजना स्थित है, लोक सुनवाई आज्ञापक है और आवेदक, इस प्रक्रिया के अनुसार लोक सुनवाई करने के लिए प्रत्येक संबंधित राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति को पृथक अनुरोध करेगा।

2.2 आवेदक, अनुरोध पत्र के साथ प्रारूप पर्यावरणीय समाघात निर्धारण रिपोर्ट की कम से कम दस हार्ड प्रतियां और उसी के बराबर सॉफ्ट (इलैक्ट्रॉनिक) प्रतियां, परिशिष्ट 3 में दी गई सामान्य संरचना सहित (जिसके अंतर्गत विस्तार (प्रक्रम 2) के पश्चात् संसूचित किए गए सीपे गए कृत्यों के अनुसार निर्बाध रूप से अंग्रेजी और स्थानीय भाषा में तैयार की गई संक्षिप्त पर्यावरणीय समाघात निर्धारण रिपोर्ट सम्मिलित है) संलग्न की जाएगी। इसके साथ-साथ आवेदक संक्षिप्त पर्यावरणीय समाघात निर्धारण रिपोर्ट के साथ ऊपर प्रारूप पर्यावरणीय समाघात निर्धारण रिपोर्ट की एक हार्ड प्रति और एक सॉफ्ट प्रति पर्यावरण और वन मंत्रालय तथा निम्नलिखित प्राधिकारियों या कार्यालयों को निम्नकी अधिकारिता में परियोजना अवस्थित होगी, अंग्रेषित करने की व्यवस्था करेगा :

(क) जिला मजिस्ट्रेट

(ख) जिला परिषद या नगर निगम

(ग) जिला उद्योग कार्यालय

(घ) पर्यावरण और वन मंत्रालय का संबंधित प्रादेशिक कार्यालय

2.3 ऊपर उल्लिखित प्राधिकारी, पर्यावरण और वन मंत्रालय के सिवाय, प्रारूप पर्यावरणीय समाघात निर्धारण रिपोर्ट की प्राप्ति पर, अपनी अधिकारिताओं के भीतर, उसमें हितबद्ध व्यक्तियों से संबंधित विनियामक प्राधिकरणों को अपनी टीका-टिप्पणियां भेजने का अनुरोध करते हुए, विस्तृत प्रचार करने की व्यवस्था करेंगे। वे लोक सुनवाई होने तक सामान्य कार्यालय घंटों के दौरान जनता को इलैक्ट्रॉनिक रूप से या अन्यथा निरीक्षण करने के लिए प्रारूप पर्यावरणीय समाघात निर्धारण रिपोर्ट भी उपलब्ध कराएंगे। पर्यावरण और वन मंत्रालय अपनी वेबसाइट पर प्रारूप पर्यावरणीय समाघात निर्धारण रिपोर्ट का सार तत्परता से प्रदर्शित करेगा और दिल्ली स्थित मंत्रालय में सामान्य कार्यालय घंटों के दौरान किसी अधिसूचित स्थान पर निर्देश के लिए पूरे प्रारूप पर्यावरणीय समाघात निर्धारण रिपोर्ट को भी उपलब्ध करेगा।

2.4 संबंधित राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्य प्रदूषण नियंत्रण समिति भी राज्य/संघ राज्यक्षेत्र के भीतर परियोजना की बाबत प्रचार करने के लिए उसी प्रकार की व्यवस्था करेगी और चयनित कार्यालयों या लोक पुस्तकालयों या पंचायतों आदि में निरीक्षण के लिए प्रारूप पर्यावरणीय समाघात निर्धारण रिपोर्ट (परिशिष्ट 3क) का संक्षिप्त सार उपलब्ध कराएगी। वे उपर्युक्त पांच प्राधिकारियों/कार्यालयों अर्थात् पर्यावरण और वन मंत्रालय, जिला मजिस्ट्रेट आदि को प्रारूप पर्यावरणीय समाघात निर्धारण रिपोर्ट की एक प्रति अतिरिक्त रूप से भी उपलब्ध कराएंगे।

3.0 लोक सुनवाई की सूचना

3.1 संबंधित राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति का सदस्य सचिव परियोजना सलाहकार से प्रारूप पर्यावरणीय समाघात निर्धारण रिपोर्ट की प्राप्ति की तारीख से तीस दिनों के भीतर लोक सुनवाई संचालित करने के लिए तारीख, समय और निश्चित स्थान को अंतिम रूप देगा और उसको मुख्य राष्ट्रीय दैनिक में और एक प्रादेशिक भाषा के दैनिक समाचारपत्र में विज्ञापित करेगा। जनता को अपनी प्रतिक्रियाएं देने के लिए कम से कम तीस दिनों की सूचना उपलब्ध कराई जाएगी ;

3.2 विज्ञापन, जनता को उन स्थानों या कार्यालयों की बाबत भी सूचित करेगा जहां प्रारूप पर्यावरणीय समाघात निर्धारण रिपोर्ट और पर्यावरणीय समाघात निर्धारण रिपोर्ट के संक्षिप्त सार तक सुनवाई से पूर्व जनता की पहुंच हो सके ;

3.3 लोक सुनवाई की तारीख, समय और स्थान को तब तक आस्थगित नहीं किया जाएगा जब तक कोई अवांछित आपात स्थिति न आ जाए और केवल संबंधित जिला मजिस्ट्रेट की सिफारिश पर किया आस्थगन को उन्हीं राष्ट्रीय और प्रादेशिक भाषा के समाचार पत्रों के माध्यम से अधिसूचित किया जाएगा तथा संबंधित राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति द्वारा पहचान किए सभी कार्यालयों में मुख्य रूप से प्रदर्शित भी किया जाएगा ;

3.4 ऊमर आपवादिक परिस्थितियों में, कैवल जिला मजिस्ट्रेट के परामर्श से संबंधित राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति के सदस्य-सचिव द्वारा लोक परामर्श के लिए नई तारीख, समय और स्थान का विनिश्चय किया जाएगा और ऊमर 3.1 के अधीन प्रक्रिया के अनुसार नए सिरे से अधिसूचित किया जाएगा ।

4.0 पैनल

जिला मजिस्ट्रेट या किसी अपर जिला मजिस्ट्रेट से अन्यून की पक्ति का उसका प्रतिनिधि, राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति के प्रतिनिधि की सहायता से समस्त लोक सुनवाई प्रक्रिया का पर्यवेक्षण करेगा और उसकी अध्यक्षता करेगा ।

5.0 वीडियोग्राफी

राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति, समस्त कार्यवाहियों की वीडियो फिल्म तैयार करने की व्यवस्था करेगी । संबंधित विनियामक प्राधिकरण को इसे अग्रेषित करते समय वीडियो टेप की एक प्रति या एक सीडी लोक सुनवाई कार्यवाहियों के साथ संलग्न की जाएगी ।

6.0 कार्यवाहियां

6.1 उन सभी व्यक्तियों की उपस्थिति को जो स्थल पर विद्यमान हैं, अंतिम कार्यवाहियों के साथ संलग्न किया जाएगा ।

6.2 कार्यवाहियों को आरंभ करने के लिए उपस्थिति हेतु कोई गणपूर्ति अपेक्षित नहीं होगी ।

6.3 आवेदक का कोई प्रतिनिधि, परियोजना और पर्यावरण समाघात निर्धारण रिपोर्ट के संक्षिप्त सार की प्रस्तुति के साथ कार्यवाहियां आरंभ करेगा ।

6.4 स्थल पर उपस्थित प्रत्येक व्यक्ति को, आवेदक से परियोजना पर सूचना या स्पष्टीकरण मांगने का अवसर दिया जाएगा । लोक सुनवाई कार्यवाहियों का संक्षिप्त सार ठीक रूप से प्रदर्शित करते हुए अभिव्यक्त सभी विचारों और अभिव्यक्त चिंताओं को राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति के प्रतिनिधि द्वारा अभिलिखित किया जाएगा और प्रांतीय भाषा में अंतर्वस्तुओं को स्पष्ट करते हुए कार्यवाहियों के अंत में श्रोताओं को पढ़ कर सुनाया जाएगा तथा कशर पाए गए कार्यवृत्त पर उसी दिन जिला मजिस्ट्रेट या उसके प्रतिनिधि द्वारा हस्ताक्षर किए जाएंगे तथा संबंधित राज्य प्रदूषण नियंत्रण बोर्ड/संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति को अग्रेषित किया जाएगा ।

6.5 जनता द्वारा उठाए गए मुद्दों का एक विवरण और आवेदक की टीका-टिप्पणियों को भी स्थानीय भाषा में और अंग्रेजी भाषा में तैयार किया जाएगा तथा कार्यवाहियों के साथ संलग्न किया जाएगा ।

6.6 लोक सुनवाई की कार्यवाहियों को उस पंचायत घर के कार्यालय पर, जिसकी अधिकारिता में परियोजना अवस्थित है, संबंधित जिला परिषद, जिला मजिस्ट्रेट और राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति के कार्यालय में सहजदृश्य रूप से प्रदर्शित किया जाएगा। राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति साधारण जानकारी के लिए अपने वेबसाइट पर कार्यवाहियों को प्रदर्शित भी करेगी। कार्यवाहियों पर टीका-टिप्पणियों को, यदि कोई हों, संबंधित विनियामक प्राधिकरणों और संबंधित आवेदक को प्रत्यक्षतः भेजी जा सकेगी।

7.0 लोक सुनवाई को पूरा करने के लिए कालावधि :

7.1 लोक सुनवाई, आवेदक से अनुरोध पत्र की प्राप्ति की तारीख से पैंतालीस दिन की अवधि के भीतर पूरी की जाएगी। अतः संबंधित राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति लोक सुनवाई के पूरा होने के आठ दिनों के भीतर संबंधित विनियामक प्राधिकरण को लोक सुनवाई की कार्यवाहियों को भेजेगी। आवेदक, लोक सुनवाई और लोक परामर्श के पश्चात् तैयार की गई अंतिम पर्यावरणीय समाघात निर्धारण रिपोर्ट या प्रारूप पर्यावरण समाघात निर्धारण रिपोर्ट पर अनुपूरक रिपोर्ट की प्रति के साथ संबंधित विनियामक प्राधिकरण को, अनुमोदित लोक सुनवाई कार्यवाहियों की एक प्रति प्रत्यक्षतः भी अग्रेषित करेगा।

7.2 यदि राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्य क्षेत्र प्रदूषण नियंत्रण समिति, नियत पैंतालीस दिनों के भीतर लोक सुनवाई करने में असफल रहती है तो केन्द्रीय सरकार, पर्यावरण और वन मंत्रालय, प्रवर्ग 'क' परियोजना या क्रियाकलाप के लिए और प्रवर्ग ख परियोजना या क्रियाकलाप के लिए और राज्य सरकार या संघ राज्यक्षेत्र प्रशासन, राज्य पर्यावरणीय समाघात निर्धारण प्राधिकरण के अनुरोध पर, किसी अन्य अभिकरण या प्राधिकरण को इस अधिसूचना में अधिकथित प्रक्रिया के अनुसार प्रक्रिया को पूरा करने के लिए नियोजित करेगी।

परिशिष्ट 5

(पैरा 7 देखिए)

आंकलन के लिए विहित प्रक्रिया

1. आवेदक, संबंधित विनियामक प्राधिकरण को निम्नलिखित दस्तावेजों को संलग्न करते हुए, जहां लोक परामर्श आज्ञापक है, एक सादा सूचना के माध्यम से आवेदन करेगा :-

- अंतिम पर्यावरण समाघात निर्धारण रिपोर्ट की बीस हार्ड प्रतियां और एक साफ्ट प्रति
- लोक सुनवाई की कार्यवाहियों की वीडियो टेप की एक प्रति या सी.डी.
- अंतिम अभिन्यास योजना की बीस प्रतियां
- परियोजना साध्यता रिपोर्ट की एक प्रति

2. आवेदक द्वारा प्रस्तुत की गई अंतिम पर्यावरणीय समाघात निर्धारण रिपोर्ट और अन्य सुसंगत दस्तावेजों की संबंधित विनियामक प्राधिकरण द्वारा उसकी प्राप्ति की तारीख से तीस दिनों के भीतर कार्यालय में तत्परता से टीओआर के प्रतिनिर्देश से समीक्षा की जाएगी और ध्यान में रखी गई अपर्याप्तताओं को प्रत्येक अंतिम पर्यावरणीय समाघात निर्धारण रिपोर्ट की एक प्रति संलग्न करते हुए, जिसके अंतर्गत लोक सुनवाई कार्यवाहियां और प्राप्त की गई अन्य लोक प्रतिक्रियाएं भी हैं, प्ररूप 1 या प्ररूप 1क की एक प्रति और प्रस्तावों पर विचार करने के लिए पर्यावरणीय निर्धारण समिति/राज्य पर्यावरणीय निर्धारण समिति की बैठकों के लिए निश्चित तारीख सहित पर्यावरणीय निर्धारण समिति/राज्य पर्यावरणीय निर्धारण समिति के सदस्यों को एकल सेट में इलेक्ट्रॉनिक रूप से या अन्यथा संसूचित किया जाएगा।
3. जहां कोई लोक परामर्श आज्ञापक नहीं है और इसलिए कोई औपचारिक पर्यावरणीय समाघात निर्धारण अध्ययन अपेक्षित नहीं है, वहां आंकलन, विहित आवेदन प्ररूप 1 के आधार पर और अनुसूची की मद 8 से भिन्न सभी परियोजनाओं और क्रियाकलापों की दशा में किसी पूर्व साध्यता रिपोर्ट के आधार पर किया जाएगा। अनुसूची की मद 8 की दशा में, इसके विलक्षण परियोजना चक्र को ध्यान में रखते हुए, संबंधित पर्यावरणीय निर्धारण समिति या राज्य पर्यावरणीय निर्धारण समिति, प्ररूप 1, प्ररूप 1क और धारणा योजना के आधार पर सभी प्रवर्ग 'ख' परियोजनाओं या क्रियाकलापों का आंकलन करेगी और पर्यावरणीय अनापत्ति के लिए शर्तें नियत करेगी। जब कभी आवेदक सभी अन्य आवश्यक कानूनी अनुमोदनों सहित निश्चित पर्यावरणीय अनापत्ति शर्तों को पूरा करते हुए अनुमोदित स्वीम/भवन योजना प्रस्तुत करता है तो पर्यावरणीय निर्धारण समिति/राज्य पर्यावरणीय निर्धारण समिति, सक्षम प्राधिकारी को पर्यावरणीय अनापत्ति मंजूर करने की सिफारिश करेगी।
4. प्रत्येक आवेदन, पर्यावरणीय निर्धारण समिति/राज्य पर्यावरणीय निर्धारण समिति के समक्ष और इसका पूरा आंकलन, विहित रीति में अपेक्षित दस्तावेजों/ब्यौरों सहित इसकी प्राप्ति के साठ दिनों के भीतर रखा जाएगा।
5. आवेदक को परियोजना प्रस्ताव पर विचार करने के लिए पर्यावरणीय निर्धारण समिति/राज्य पर्यावरणीय निर्धारण समिति की निश्चित तारीख से कम से कम पन्द्रह दिन पूर्व सूचित किया जाएगा।
6. पर्यावरणीय निर्धारण समिति/राज्य पर्यावरणीय निर्धारण समिति की बैठक के कार्यवृत्त को बैठक के पांच कार्यकरण दिनों के भीतर अंतिम रूप दिया जाएगा और संबंधित विनियामक प्राधिकरण के वेबसाइट पर प्रदर्शित किया जाएगा। परियोजना या क्रियाकलापों को पर्यावरणीय अनापत्ति को मंजूर किए जाने के लिए सिफारिश की दशा में, कार्यवृत्त में विनिर्दिष्ट पर्यावरणीय सुरक्षापायों और शर्तों को स्पष्ट रूप से सूचीबद्ध किया जाएगा। यदि सिफारिशें नामंजूर करने के लिए हैं तो उसके कारणों को भी स्पष्ट रूप से कथित किया जाएगा।

परिशिष्ट 6

(पैरा 5 देखिए)

केन्द्रीय सरकार द्वारा गठित की जाने वाली प्रवर्ग 'क' परियोजनाओं के लिए सेक्टर/परियोजना विनिर्दिष्ट विशेषज्ञ आंकलन समिति और प्रवर्ग 'ख' परियोजनाओं के लिए राज्य/संघ राज्यक्षेत्र स्तर विशेषज्ञ आंकलन समितियों की संरचना

1. विशेषज्ञ आंकलन समितियां और राज्य/संघ राज्यक्षेत्र स्तर विशेषज्ञ आंकलन समितियां केवल निम्नलिखित पात्रता कसौटी को पूरा करने वाले वृत्तिकों और विशेषज्ञों से मिलकर बनेगी

वृत्तिक : ऐसा व्यक्ति जिसके पास कम से कम (i) एम.ए./एम.एस.सी डिग्री सहित संबंधित विद्या शाखा में पांच वर्ष का औपचारिक विश्वविद्यालय प्रशिक्षण या (ii) इंजीनियरी/प्रौद्योगिकी/वास्तुविद विद्या शाखाओं की दशा में, बी.टेक/बी.ई./बी.आर्क. डिग्री सहित क्षेत्र में विहित व्यावहारिक प्रशिक्षण सहित किसी वृत्तिक प्रशिक्षण पाठ्यक्रम में चार वर्षीय औपचारिक प्रशिक्षण या (iii) अन्य वृत्तिक डिग्री (जैसे विधि) जिसमें पांच वर्ष का औपचारिक विश्वविद्यालय प्रशिक्षण या विहित व्यावहारिक प्रशिक्षण अंतर्बलित है, या (iv) विहित शिक्षुता/काशीगारी तथा संबंधित वृत्तिक संगम द्वारा संचालित परिक्षाएं उत्तीर्ण की हो (जैसे चार्टर्ड अकाउंटेंसी) या (v) किसी विश्वविद्यालय डिग्री के पश्चात् किसी विश्वविद्यालय या सेवा अकादमी में दो वर्ष का औपचारिक प्रशिक्षण (जैसे एम.बी.ए./आई.ए.एस./आई.एफ.एस.) व्यक्ति वृत्तिकों का चयन करते समय उनके द्वारा उनके क्षेत्रों में प्राप्त अनुभव को ध्यान में रखा जाएगा ।

विशेषज्ञ : उम्र पात्रता कसौटी को पूरा करने वाला कोई वृत्तिक जिसके पास क्षेत्र में कम से कम पंद्रह वर्ष का सुसंगत अनुभव या संबंधित क्षेत्र में कोई उच्चतर डिग्री हो (जैसे पी.एच.डी. और कम से कम दस वर्ष का सुसंगत अनुभव) ।

आयु : सत्तर वर्ष से नीचे । तथापि, किसी क्षेत्र में विशेषज्ञों की अनुपलब्धता/कमी की दशा में विशेषज्ञ आंकलन समिति के सदस्यों की अधिकतम आयु को पचहतर वर्ष तक अनुज्ञात किया जा सकेगा ।

2. पर्यावरणीय निर्धारण समिति के सदस्य निम्नलिखित क्षेत्रों/विद्या शाखाओं में अपेक्षित विशेषज्ञता और अनुभव वाले विशेषज्ञ होंगे । उस दशा में कि "विशेषज्ञ" की कसौटी को पूरा करने वाले व्यक्ति उपलब्ध नहीं हैं, तो उसी क्षेत्र में पर्याप्त अनुभव रखने वाले वृत्तिकों पर भी विचार किया जा सकेगा ।

- पर्यावरण क्वालिटी विशेषज्ञ : पर्यावरणीय क्वालिटी के संबंध में माप/मानिटरी, विश्लेषण और निर्वचन में विशेषज्ञ ।

- परियोजना प्रबंधन में क्षेत्रीय विशेषज्ञ : परियोजना प्रबंधन या सुसंगत क्षेत्रों में प्रक्रिया /प्रचालन/सुविधा प्रबंधन में विशेषज्ञ ।
 - पर्यावरणीय समाघात निर्धारण प्रक्रिया विशेषज्ञ : पर्यावरणीय समाघात निर्धारण का संचालन और कार्यान्वयन तथा पर्यावरणीय प्रबंधन योजना और अन्य प्रबंधन योजना तैयार करने में विशेषज्ञ और जो पर्यावरणीय समाघात निर्धारण प्रक्रिया में उपयोग की जाने वाली भावी तकनीकों और औजारों में विस्तृत विशेषज्ञता और ज्ञान रखते हों ।
 - जोखिम निर्धारण विशेषज्ञ ।
 - पेड़ - पौधे और जीव- जन्तु प्रबंधन में प्राणी विज्ञान विशेषज्ञ ।
 - वन और वन्य जीव विशेषज्ञ ।
 - परियोजना आंकलन में अनुभव सहित पर्यावरणीय अर्थशास्त्र विशेषज्ञ ।
3. पर्यावरणीय निर्धारण समिति की सदस्यता पंद्रह नियमित सदस्यों से अधिक की नहीं होगी । तथापि, अध्यक्ष, समिति की किसी विशिष्ट बैठक के लिए किसी सुसंगत क्षेत्र में किसी विशेषज्ञ को सदस्य के रूप में सहयोजित कर सकेगा ।
 4. अध्यक्ष, सुसंगत विकास क्षेत्र में एक प्रतिष्ठित और पर्यावरणीय निति या प्रबंधन में अथवा लोक प्रशासन में अनुभव प्राप्त विशेषज्ञ होगा ।
 5. अध्यक्ष, सदस्यों में से एक सदस्य को उपाध्यक्ष के रूप में नामनिर्देशित करेगा जो अध्यक्ष की अनुपस्थिति में पर्यावरणीय निर्धारण समिति की बैठक की अध्यक्षता करेगा ।
 6. पर्यावरण और वन मंत्रालय का एक प्रतिनिधि उसके सचिव के रूप में समिति की सहायता करेगा ।
 7. किसी सदस्य की अधिकतम पदावधि, जिसके अंतर्गत अध्यक्ष भी है, प्रत्येक तीन वर्ष की दो पदावधि होगी ।
 8. अध्यक्ष/सदस्य को किसी कारण और समुचित जांच के बिना पदावधि के अवसान से पूर्व नहीं हटाया जा सकेगा ।

**MINISTRY OF ENVIRONMENT AND FORESTS
NOTIFICATION**

New Delhi, the 14th September, 2006

S.O. 1533(E).—Whereas, a draft notification under Sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986 for imposing certain restrictions and prohibitions on new projects or activities, or on the expansion or modernization of existing projects or activities based on their potential environmental impacts as indicated in the Schedule to the notification, being undertaken in any part of India¹, unless prior environmental clearance has been accorded in accordance with the objectives of National Environment Policy as approved by the Union Cabinet on 18th May, 2006 and the procedure specified in the notification, by the Central Government or the State or Union Territory Level Environment Impact Assessment Authority (SEIAA), to be constituted by the Central Government in consultation with the State Government or the Union Territory Administration concerned under Sub-section (3) of Section 3 of the Environment (Protection) Act, 1986 for the purpose of this notification, was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) vide number S.O. 1324(E), dated the 15th September, 2005 inviting objections and suggestions from all persons likely to be affected thereby within a period of sixty days from the date on which copies of Gazette containing the said notification were made available to the public;

And whereas, copies of the said notification were made available to the public on 15th September, 2005;

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

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 and in supersession of the notification number S.O. 60 (E) dated the 27th January, 1994, except in respect of things done or omitted to be done before such supersession, the Central Government hereby directs that on and from the date of its publication the required construction of new projects or activities or the expansion or modernization of existing projects or activities listed in the Schedule to this notification entailing capacity addition with change in process and or technology shall be undertaken in any part of India only after the 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 hereinafter in this notification.

¹Includes the territorial waters

2. Requirements of prior Environmental Clearance (EC):- The following projects or activities shall require prior environmental clearance from the concerned regulatory authority, which shall hereinafter referred to be as the Central Government in the Ministry of Environment and Forests for matters falling under Category 'A' in the Schedule and at State level the State Environment Impact Assessment Authority (SEIAA) for matters falling under Category 'B' in the said Schedule, before any construction work, or preparation of land by the project management except for securing the land, is started on the project or activity:

- (i) All new projects or activities listed in the Schedule to this notification;
- (ii) Expansion and modernization of existing projects or activities listed in the Schedule to this notification with addition of capacity beyond the limits specified for the concerned sector, that is, projects or activities which cross the threshold limits given in the Schedule, after expansion or modernization;

(iii) Any change in product - mix in an existing manufacturing unit included in Schedule beyond the specified range.

3. State Level Environment Impact Assessment Authority:- (1) A State Level Environment Impact Assessment Authority hereinafter referred to as the SEIAA shall be constituted by the Central Government under sub-section (3) of section 3 of the Environment (Protection) Act, 1986 comprising of three Members including a Chairman and a Member – Secretary to be nominated by the State Government or the Union territory Administration concerned.

- (2) The Member-Secretary shall be a serving officer of the concerned State Government or Union territory administration familiar with environmental laws.
- (3) The other two Members shall be either a professional or expert fulfilling the eligibility criteria given in Appendix VI to this notification.
- (4) One of the specified Members in sub-paragraph (3) above who is an expert in the Environmental Impact Assessment process shall be the Chairman of the SEIAA.
- (5) The State Government or Union territory Administration shall forward the names of the Members and the Chairman referred in sub- paragraph 3 to 4 above to the Central Government and the Central Government shall constitute the SEIAA as an authority for the purposes of this notification within thirty days of the date of receipt of the names:
- (6) The non-official Member and the Chairman shall have a fixed term of three years (from the date of the publication of the notification by the Central Government constituting the authority).
- (7) All decisions of the SEIAA shall be unanimous and taken in a meeting.

4. Categorization of projects and activities:-

(i) All projects and activities are broadly categorized in to two categories - Category A and Category B, based on the spatial extent of potential impacts and potential impacts on human health and natural and man made resources.

(ii) 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 and Forests (MoEF) on the recommendations of an Expert Appraisal Committee (EAC) to be constituted by the Central Government for the purposes of this notification;

(iii) All projects or activities included as Category 'B' in the Schedule, including expansion and modernization of existing projects or activities as specified in sub paragraph (ii) of paragraph 2, or change in product mix as specified in sub paragraph (iii) of paragraph 2, but excluding those which fulfill the General Conditions (GC) stipulated in the Schedule, *will* require prior environmental clearance from the State/Union territory Environment Impact Assessment Authority (SEIAA). The SEIAA shall base its decision on the recommendations of a State or Union territory level Expert Appraisal Committee (SEAC) as to be constituted for in this notification. In the absence of a duly constituted SEIAA or SEAC, a Category 'B' project shall be treated as a Category 'A' project;

5. Screening, Scoping and Appraisal Committees:-

The same Expert Appraisal Committees (EACs) at the Central Government and SEACs (hereinafter referred to as the (EAC) and (SEAC) at the State or the Union territory level shall screen, scope and appraise projects or activities in Category 'A' and Category 'B' respectively. EAC and SEAC's 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;
- (b) The Central Government may, with the prior concurrence of the concerned State Governments or the Union territory Administrations, 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 and SEAC, concerned, may inspect any site(s) connected with the project or activity in respect of which the prior environmental clearance is sought, for the purposes of screening or scoping or appraisal, with prior notice of at least seven days to the applicant, who shall provide necessary facilities for the inspection;
- (e) The EAC and SEACs shall function on the principle of collective responsibility. The Chairperson shall endeavour to reach a consensus in each case, and if consensus cannot be reached, the view of the majority shall prevail.

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

An application seeking prior environmental clearance in all cases shall be made in the prescribed Form I 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, before commencing any construction activity, or preparation of land, at the site by the applicant. The applicant shall furnish, along with the application, a copy of the pre-feasibility project report except that, in case of construction projects or activities (item 8 of the Schedule) in addition to Form I and the Supplementary Form 1A, a copy of the conceptual plan shall be provided, instead of the pre-feasibility report.

7. Stages in the Prior Environmental Clearance (EC) Process for New Projects:-

7(i) The environmental clearance process for new projects will comprise of a maximum of four stages, all of which may not apply to particular cases as set forth below in this notification. These four stages in sequential order are:-

- Stage (1) Screening (Only for Category 'B' projects and activities)
- Stage (2) Scoping
- Stage (3) Public Consultation
- Stage (4) Appraisal

1. Stage (1) - Screening:

In case of Category 'B' projects or activities, this stage will entail the scrutiny of an application seeking prior environmental clearance made in Form I by the concerned State level Expert Appraisal Committee (SEAC) for determining whether or not the project or activity

requires further environmental studies for preparation of an Environmental Impact Assessment (EIA) for its appraisal prior to the grant of environmental clearance depending up on the nature and location specificity of the project . The projects requiring an Environmental Impact Assessment report shall be termed Category 'B1' and remaining projects shall be termed Category 'B2' and will not require an Environment Impact Assessment report. For categorization of projects into B1 or B2 except item 8 (b), the Ministry of Environment and Forests shall issue appropriate guidelines from time to time.

II. Stage (2) - Scoping:

(i) "Scoping": refers to the process by which the Expert Appraisal Committee in the case of Category 'A' projects or activities, and State level Expert Appraisal Committee in the case of Category 'B1' projects or activities, including applications for expansion and/or modernization and/or change in product mix of existing projects or activities, determine detailed and comprehensive Terms Of Reference (TOR) addressing all relevant environmental concerns for the preparation of an Environment Impact Assessment (EIA) Report in respect of the project or activity for which prior environmental clearance is sought. The Expert Appraisal Committee or State level Expert Appraisal Committee concerned shall determine the Terms of Reference on the basis of the information furnished in the prescribed application Form I/Form 1A including Terms of Reference proposed by the applicant, a site visit by a sub- group of Expert Appraisal Committee or State level Expert Appraisal Committee concerned only if considered necessary by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, Terms of Reference suggested by the applicant if furnished and other information that may be available with the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. All projects and activities listed as Category 'B' in Item 8 of the Schedule (Construction/Township/Commercial Complexes/Housing) shall not require Scoping and will be appraised on the basis of Form I/ Form 1A and the conceptual plan.

(ii) The Terms of Reference (TOR) shall be conveyed to the applicant by the Expert Appraisal Committee or State Level Expert Appraisal Committee as concerned within sixty days of the receipt of Form I. In the case of Category A Hydroelectric projects Item 1(c) (i) of the Schedule the Terms of Reference shall be conveyed along with the clearance for pre-construction activities .If the Terms of Reference are not finalized and conveyed to the applicant within sixty days of the receipt of Form I, the Terms of Reference suggested by the applicant shall be deemed as the final Terms of Reference approved for the EIA studies. The approved Terms of Reference shall be displayed on the website of the Ministry of Environment and Forests and the concerned State Level Environment Impact Assessment Authority.

(iii) Applications for prior environmental clearance may be rejected by the regulatory authority concerned on the recommendation of the EAC or SEAC concerned at this stage itself. In case of such rejection, the decision together with reasons for the same shall be communicated to the applicant in writing within sixty days of the receipt of the application.

III. Stage (3) - Public Consultation:

(i) "Public Consultation" refers to the process by which the concerns of local affected persons and others who have plausible stake in the environmental impacts of the project or activity are ascertained with a view to taking into account all the material concerns in the project or activity design as appropriate. All Category 'A' and Category B1 projects or activities shall undertake Public Consultation, except the following:-

- (a) modernization of irrigation projects (item 1(c) (ii) of the Schedule).

- (b) all projects or activities located within industrial estates or parks (item 7(c) of the Schedule) approved by the concerned authorities, and which are not disallowed in such approvals.
 - (c) expansion of Roads and Highways (item 7 (f) of the Schedule) which do not involve any further acquisition of land.
 - (d) all Building /Construction projects/Area Development projects and Townships (item 8).
 - (e) all Category 'B2' projects and activities.
 - (f) all projects or activities concerning national defence and security or involving other strategic considerations as determined by the Central Government.
- (ii) The Public Consultation shall ordinarily have two components comprising of:-
- (a) a public hearing at the site or in its close proximity- district wise, to be carried out in the manner prescribed in Appendix IV, for ascertaining concerns of local affected persons;
 - (b) obtain responses in writing from other concerned persons having a plausible stake in the environmental aspects of the project or activity.
 - (iii) the public hearing at, or in close proximity to, the site(s) in all cases shall be conducted by the State Pollution Control Board (SPCB) or the Union territory Pollution Control Committee (UTPCC) concerned in the specified manner and forward the proceedings to the regulatory authority concerned within 45(forty five) of a request to the effect from the applicant.
 - (iv) in case the State Pollution Control Board or the Union territory Pollution Control Committee concerned does not undertake and complete the public hearing within the specified period, and/or does not convey the proceedings of the public hearing within the prescribed period directly to the regulatory authority concerned as above, the regulatory authority shall engage another public agency or authority which is not subordinate to the regulatory authority, to complete the process within a further period of forty five days..
 - (v) If the public agency or authority nominated under the sub paragraph (iii) above reports to the regulatory authority concerned that owing to the local situation, it is not possible to conduct the public hearing in a manner which will enable the views of the concerned local persons to be freely expressed, it shall report the facts in detail to the concerned regulatory authority, which may, after due consideration of the report and other reliable information that it may have, decide that the public consultation in the case need not include the public hearing.
 - (vi) For obtaining responses in writing from other concerned persons having a plausible stake in the environmental aspects of the project or activity, the concerned regulatory authority and the State Pollution Control Board (SPCB) or the Union territory Pollution Control Committee (UTPCC) shall invite responses from such concerned persons by placing on their website the Summary EIA report prepared in the format given in Appendix IIIA by the applicant along with a copy of the application in the prescribed form , within seven days of the receipt of a written request for arranging the public hearing . Confidential information including non-disclosable or legally privileged information involving Intellectual Property Right, source specified in the application shall not be placed on the web site. The regulatory authority concerned may also use

other appropriate media for ensuring wide publicity about the project or activity. The regulatory authority shall, however, make available on a written request from any concerned person the Draft EIA report for inspection at a notified place during normal office hours till the date of the public hearing. All the responses received as part of this public consultation process shall be forwarded to the applicant through the quickest available means.

(vii) After completion of the public consultation, the applicant shall address all the material environmental concerns expressed during this process, and make appropriate changes in the draft EIA and EMP. The final EIA report, so prepared, shall be submitted by the applicant to the concerned regulatory authority for appraisal. The applicant may alternatively submit a supplementary report to draft EIA and EMP addressing all the concerns expressed during the public consultation.

IV. Stage (4) - Appraisal:

(i) Appraisal means the detailed scrutiny by the Expert Appraisal Committee or State Level Expert Appraisal Committee of the application and other documents like the Final EIA report, outcome of the public consultations including public hearing proceedings, submitted by the applicant to the regulatory authority concerned for grant of environmental clearance. This appraisal shall be made by Expert Appraisal Committee or State Level Expert Appraisal Committee concerned in a transparent manner in a proceeding to which the applicant shall be invited for furnishing necessary clarifications in person or through an authorized representative. On conclusion of this proceeding, the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall make categorical recommendations to the regulatory authority concerned either for grant of prior environmental clearance on stipulated terms and conditions, or rejection of the application for prior environmental clearance, together with reasons for the same.

(ii) The appraisal of all projects or activities which are not required to undergo public consultation, or submit an Environment Impact Assessment report, shall be carried out on the basis of the prescribed application Form 1 and Form 1A as applicable, any other relevant validated information available and the site visit wherever the same is considered as necessary by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned.

(iii) The appraisal of an application shall be completed by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within sixty days of the receipt of the final Environment Impact Assessment report and other documents or the receipt of Form 1 and Form 1 A, where public consultation is not necessary and the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee shall be placed before the competent authority for a final decision within the next fifteen days. The prescribed procedure for appraisal is given in Appendix V ;

7(ii). Prior Environmental Clearance (EC) process for Expansion or Modernization or Change of product mix in existing projects:

All applications seeking prior environmental clearance for expansion with increase in the production capacity beyond the capacity for which prior environmental clearance has been granted under this notification or with increase in either lease area or production capacity in the case of mining projects or for the modernization of an existing unit with increase in the total production capacity beyond the threshold limit prescribed in the Schedule to this notification through change in process and or technology or involving a change in the product -mix shall be made in Form I and they shall be considered by the concerned Expert Appraisal Committee or State Level Expert Appraisal Committee within sixty days, who will decide on the due diligence

necessary including preparation of EIA and public consultations and the application shall be appraised accordingly for grant of environmental clearance.

8. Grant or Rejection of Prior Environmental Clearance (EC):

(i) The regulatory authority shall consider the recommendations of the EAC or SEAC concerned and convey its decision to the applicant within forty five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned or in other words within one hundred and five days of the receipt of the final Environment Impact Assessment Report, and where Environment Impact Assessment is not required, within one hundred and five days of the receipt of the complete application with requisite documents, except as provided below.

(ii) The regulatory authority shall normally accept the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. In cases where it disagrees with the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, the regulatory authority shall request reconsideration by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within forty five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned while stating the reasons for the disagreement. An intimation of this decision shall be simultaneously conveyed to the applicant. The Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, in turn, shall consider the observations of the regulatory authority and furnish its views on the same within a further period of sixty days. The decision of the regulatory authority after considering the views of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall be final and conveyed to the applicant by the regulatory authority concerned within the next thirty days.

(iii) In the event that the decision of the regulatory authority is not communicated to the applicant within the period specified in sub-paragraphs (i) or (ii) above, as applicable, the applicant may proceed as if the environment clearance sought for has been granted or denied by the regulatory authority in terms of the final recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned.

(iv) On expiry of the period specified for decision by the regulatory authority under paragraph (i) and (ii) above, as applicable, the decision of the regulatory authority, and the final recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall be public documents.

(v) Clearances from other regulatory bodies or authorities shall not be required prior to receipt of applications for prior environmental clearance of projects or activities, or screening, or scoping, or appraisal, or decision by the regulatory authority concerned, unless any of these is sequentially dependent on such clearance either due to a requirement of law, or for necessary technical reasons.

(vi) Deliberate concealment and/or submission of false or misleading information or data which is material to screening or scoping or appraisal or decision on the application shall make the application liable for rejection, and cancellation of prior environmental clearance granted on that basis. Rejection of an application or cancellation of a prior environmental clearance already granted, on such ground, shall be decided by the regulatory authority, after giving a personal hearing to the applicant, and following the principles of natural justice.

9. Validity of Environmental Clearance (EC):

The "Validity of Environmental Clearance" is meant the period from which a prior environmental clearance is granted by the regulatory authority, or may be presumed by the applicant to have been granted under sub paragraph (iv) of paragraph 7 above, to the start of production operations by the project or activity, or completion of all construction operations in case of construction projects (item 8 of the Schedule), to which the application for prior environmental clearance refers. The prior environmental clearance granted for a project or activity shall be valid for a period of ten years in the case of River Valley projects (item 1(c) of the Schedule), project life as estimated by Expert Appraisal Committee or State Level Expert Appraisal Committee subject to a maximum of thirty years for mining projects and five years in the case of all other projects and activities. However, in the case of Area Development projects and Townships [item 8(b)], the validity period shall be limited only to such activities as may be the responsibility of the applicant as a developer. This period of validity may be extended by the regulatory authority concerned by a maximum period of five years provided an application is made to the regulatory authority by the applicant - within the validity period, together with an updated Form 1, and Supplementary Form 1A, for Construction projects or activities (item 8 of the Schedule). In this regard the regulatory authority may also consult the Expert Appraisal Committee or State Level Expert Appraisal Committee as the case may be.

10. Post Environmental Clearance Monitoring:

(i) It shall be mandatory for the project management to submit half-yearly compliance reports in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.

(ii) All such compliance reports submitted by the project management shall be public documents. Copies of the same shall be given to any person on application to the concerned regulatory authority. The latest such compliance report shall also be displayed on the web site of the concerned regulatory authority.

11. Transferability of Environmental Clearance (EC):

A prior environmental clearance granted for a specific project or activity to an applicant may be transferred during its validity to another legal person entitled to undertake the project or activity on application by the transferor, or by the transferee with a written "no objection" by the transferor, to, and by the regulatory authority concerned, on the same terms and conditions under which the prior environmental clearance was initially granted, and for the same validity period. No reference to the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned is necessary in such cases.

12. Operation of EIA Notification, 1994, till disposal of pending cases:

From the date of final publication of this notification the Environment Impact Assessment (EIA) notification number S.O.60 (E) dated 27th January, 1994 is hereby superseded, except in suppression of the things done or omitted to be done before such suppression to the extent that in case of all or some types of applications made for prior environmental clearance and pending on the date of final publication of this notification, the Central Government may relax any one or all provisions of this notification except the list of the projects or activities requiring prior environmental clearance in Schedule I, or continue operation of some or all provisions of the said notification, for a period not exceeding one year from the date of issue of this notification.

SCHEDULE

(See paragraph 2 and 7)

LIST OF PROJECTS OR ACTIVITIES REQUIRING PRIOR ENVIRONMENTAL CLEARANCE

| Project or Activity | | Category with threshold limit | | Conditions if any |
|---------------------|--|--|--|---|
| | | A | B | |
| 1 | | Mining, extraction of natural resources and power generation (for a specified production capacity) | | |
| (1) | (2) | (3) | (4) | (5) |
| I(a) | Mining of minerals | <p>≥ 50 ha. of mining lease area</p> <p>Asbestos mining irrespective of mining area</p> | <p><50 ha</p> <p>≥ 5 ha .of mining lease area.</p> | <p>General Condition shall apply</p> <p><u>Note</u> Mineral prospecting (not involving drilling) are exempted provided the concession areas have got previous clearance for physical survey</p> |
| I(b) | Offshore and onshore oil and gas exploration, development & production | All projects | | <p><u>Note</u> Exploration Surveys (not involving drilling) are exempted provided the concession areas have got previous clearance for physical survey</p> |
| I(c) | River Valley projects | <p>(i) ≥ 50 MW hydroelectric power generation;</p> <p>(ii) ≥ 10,000 ha. of culturable command area</p> | <p>(i) < 50 MW ≥ 25 MW hydroelectric power generation;</p> <p>(ii) < 10,000 ha. of culturable command area</p> | General Condition shall apply |
| I(d) | Thermal Power Plants | <p>≥ 500 MW (coal/lignite/naphtha & gas based);</p> <p>≥ 50 MW (Pet coke diesel and all other fuels -)</p> | <p>< 500 MW (coal/lignite/naphtha & gas based);</p> <p><50 MW</p> <p>≥ 5MW (Pet coke ,diesel and all other fuels)</p> | General Condition shall apply |

| (1) | (2) | (3) | (4) | (5) |
|-------|---|---|---|--|
| 1(e) | Nuclear power projects and processing of nuclear fuel | All projects | | |
| 2 | | Primary Processing | | |
| 2(a) | Coal washeries | ≥ 1 million ton/annum throughput of coal | <1million ton/annum throughput of coal | General Condition shall apply (If located within mining area the proposal shall be appraised together with the mining proposal) |
| 2 (b) | Mineral beneficiation | ≥ 0.1million ton/annum mineral throughput | < 0.1million ton/annum mineral throughput | General Condition shall apply (Mining proposal with Mineral beneficiation shall be appraised together for grant of clearance) |

| 3 | | | | |
|----------------------|--|--|---|---|
| Materials Production | | | | |
| (1) | (2) | (3) | (4) | (5) |
| 3(a) | Metallurgical industries (ferrous & non ferrous) | <p>a) Primary metallurgical industry</p> <p>All projects</p> <p>b) Sponge iron manufacturing ≥ 200TPD</p> <p>c) Secondary metallurgical processing industry</p> <p>All toxic and heavy metal producing units $\geq 20,000$ tonnes/annum</p> | <p>Sponge iron manufacturing < 200TPD</p> <p>Secondary metallurgical processing industry</p> <p>i.) All toxic and heavy metal producing units $< 20,000$ tonnes/annum</p> <p>ii.) All other non-toxic secondary metallurgical processing industries > 5000 tonnes/annum</p> | General Condition shall apply for Sponge iron manufacturing |
| 3(b) | Cement plants | ≥ 1.0 million tonnes/annum production capacity | < 1.0 million tonnes/annum production capacity. All Stand alone grinding units | General Condition shall apply |

| 4 | | | | |
|----------------------------------|---|---|---|--|
| Materials Processing | | | | |
| (1) | (2) | (3) | (4) | (5) |
| 4(a) | Petroleum refining industry | All projects | - | - |
| 4(b) | Coke oven plants | ≥2,50,000 tonnes/annum | <2,50,000 & ≥25,000 tonnes/annum | - |
| 4(c) | Asbestos milling and asbestos based products | All projects | - | - |
| 4(d) | Chlor-alkali industry | ≥300 TPD production capacity or a unit located outside the notified industrial area/estate | <300 TPD production capacity and located within a notified industrial area/estate | Specific Condition shall apply No new Mercury Cell based plants will be permitted and existing units converting to membrane cell technology are exempted from this Notification |
| 4(e) | Soda ash Industry | All projects | - | - |
| 4(f) | Leather/skin/hide processing industry | New projects outside the industrial area or expansion of existing units outside the industrial area | All new or expansion of projects located within a notified industrial area/estate | Specific condition shall apply |
| 5 | | | | |
| Manufacturing/Fabrication | | | | |
| 5(a) | Chemical fertilizers | All projects | - | - |
| 5(b) | Pesticides industry and pesticide specific intermediates (excluding formulations) | All units producing technical grade pesticides | - | - |

| (1) | (2) | (3) | (4) | (5) |
|------|---|---|--|--------------------------------|
| 5(c) | Petro-chemical complexes (industries based on processing of petroleum fractions & natural gas and/or reforming to aromatics) | All projects - | - | - |
| 5(d) | Manmade fibres manufacturing | Rayon | Others | General Condition shall apply |
| 5(e) | Petrochemical based processing (processes other than cracking & reformation and not covered under the complexes) | Located out side the notified industrial area/ estate - | Located in a notified industrial area/ estate | Specific Condition shall apply |
| 5(f) | Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates) | Located out side the notified industrial area/ estate | Located in a notified industrial area/ estate | Specific Condition shall apply |
| 5(g) | Distilleries | (i) All Molasses based distilleries (ii) All Cane juice/ non-molasses based distilleries ≥ 30 KLD | All Cane juice/non-molasses based distilleries - <30 KLD | General Condition shall apply |
| 5(h) | Integrated paint industry | - | All projects | General Condition shall apply |

| (1) | (2) | (3) | (4) | (5) |
|------|---|--|---|-------------------------------|
| 5(i) | Pulp & paper industry excluding manufacturing of paper from waste paper and manufacture of paper from ready pulp with out bleaching | Pulp manufacturing and Pulp& Paper manufacturing industry | Paper manufacturing industry without pulp manufacturing | General Condition shall apply |
| 5(j) | Sugar Industry | - | ≥ 5000 tcd cane crushing capacity | General Condition shall apply |
| 5(k) | Induction/arc furnaces/cupola furnaces 5TPH or more | - | All projects | General Condition shall apply |
| 6 | Service Sectors | | | |
| 6(a) | Oil & gas transportation pipe line (crude and refinery/ petrochemical products), passing through national parks /sanctuaries/coral reefs /ecologically sensitive areas including LNG Terminal | All projects | | |

| (1) | (2) | (3) | (4) | (5) |
|------|--|--|---|---|
| 6(b) | Isolated storage & handling of hazardous chemicals (As per threshold planning quantity indicated in column 3 of schedule 2 & 3 of MSIHC Rules 1989 amended 2000) | - | All projects | General Condition shall apply |
| 7 | Physical Infrastructure including Environmental Services | | | |
| 7(a) | Air ports | All projects | - | - |
| 7(b) | All ship breaking yards including ship breaking units | All projects | - | - |
| 7(c) | Industrial estates/parks/ complexes/ areas, export processing Zones (EPZs), Special Economic Zones (SEZs), Biotech Parks, Leather Complexes. | If at least one industry in the proposed industrial estate falls under the Category A, entire industrial area shall be treated as Category A, irrespective of the area. Industrial estates with area greater than 500 ha. and housing at least one Category B industry. | -Industrial estates housing at least one Category B industry and area <500 ha. Industrial estates of area > 500 ha. and not housing any industry belonging to Category A or B. | Special condition shall apply Note: Industrial Estate of area below 500 ha. and not housing any industry of category A or B does not require clearance. |
| 7(d) | Common hazardous waste treatment, storage and disposal facilities (TSDFs) | All integrated facilities having incineration & landfill or incineration alone | All facilities having land fill only | General Condition shall apply |

| (1) | (2) | (3) | (4) | (5) |
|------|---|--|---|-------------------------------|
| 7(e) | Ports, Harbours | ≥ 5 million TPA of cargo handling capacity (excluding fishing harbours) | < 5 million TPA, of cargo handling capacity and/or ports/ harbours ≥10,000 TPA of fish handling capacity | General Condition shall apply |
| 7(f) | Highways | i) New National High ways; and ii) Expansion of National High ways greater than 30 KM, involving additional right of way greater than 20m involving land acquisition and passing through more than one State. | i) New State High ways; and ii) Expansion of National / State Highways greater than 30 km involving additional right of way greater than 20m involving land acquisition. | General Condition shall apply |
| 7(g) | Aerial ropeways | | All projects | General Condition shall apply |
| 7(h) | Common Effluent Treatment Plants (CETPs) | | All projects | General Condition shall apply |
| 7(i) | Common Municipal Solid Waste Management Facility (CMSWMF) | | All projects | General Condition shall apply |

| (1) | (2) | (3) | (4) | (5) |
|----------|--|--|---|---|
| 8 | | Building /Construction projects/Area Development projects and Townships | | |
| 8(a) | Building and Construction projects | | ≥20000 sq.mtrs and <1,50,000 sq.mtrs. of built-up area# | #(built up area for covered construction; in the case of facilities open to the sky, it will be the activity area) |
| 8(b) | Townships and Area Development projects. | | Covering an area ≥ 50 ha and or built up area ≥1,50,000 sq .mtrs ++ | **All projects under Item 8(b) shall be appraised as Category B1 |

Note:-**General Condition (GC):**

Any project or activity specified in Category 'B' will be treated as Category A, if located in whole or in part within 10 km from the boundary of: (i) Protected Areas notified under the Wild Life (Protection) Act, 1972, (ii) Critically Polluted areas as notified by the Central Pollution Control Board from time to time, (iii) Notified Eco-sensitive areas, (iv) inter-State boundaries and international boundaries.

Specific Condition (SC):

If any Industrial Estate/Complex / Export processing Zones /Special Economic Zones/Biotech Parks / Leather Complex with homogeneous type of industries such as Items 4(d), 4(f), 5(e), 5(f), or those Industrial estates with pre -defined set of activities (not necessarily homogeneous, obtains prior environmental clearance, individual industries including proposed industrial housing within such estates /complexes will not be required to take prior environmental clearance, so long as the Terms and Conditions for the industrial estate/complex are complied with (Such estates/complexes must have a clearly identified management with the legal responsibility of ensuring adherence to the Terms and Conditions of prior environmental clearance, who may be held responsible for violation of the same throughout the life of the complex/estate).

[No. J-11013/56/2004-IA-II(I)]
R. CHANDRAMOHAN, Jt. Secy.

APPENDIX I

(See paragraph - 6)

FORM 1**(I) Basic Information**

Name of the Project:

Location / site alternatives under consideration:

Size of the Project: *

Expected cost of the project:

Contact Information:

Screening Category:

- Capacity corresponding to sectoral activity (such as production capacity for manufacturing, mining lease area and production capacity for mineral production, area for mineral exploration, length for linear transport infrastructure, generation capacity for power generation etc.)

(II) Activity

- 1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)**

| S.No. | Information/Checklist confirmation | Yes/No | Details thereof (with approximate quantities /rates, wherever possible) with source of information data |
|-------|---|--------|---|
| 1.1 | Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan) | | |
| 1.2 | Clearance of existing land, vegetation and buildings? | | |
| 1.3 | Creation of new land uses? | | |
| 1.4 | Pre-construction investigations e.g. bore houses, soil testing? | | |
| 1.5 | Construction works? | | |
| 1.6 | Demolition works? | | |
| 1.7 | Temporary sites used for construction works or housing of construction workers? | | |
| 1.8 | Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations | | |
| 1.9 | Underground works including mining or tunneling? | | |
| 1.10 | Reclamation works? | | |
| 1.11 | Dredging? | | |
| 1.12 | Offshore structures? | | |
| 1.13 | Production and manufacturing processes? | | |

| | | | |
|------|---|--|--|
| 1.14 | Facilities for storage of goods or materials? | | |
| 1.15 | Facilities for treatment or disposal of solid waste or liquid effluents? | | |
| 1.16 | Facilities for long term housing of operational workers? | | |
| 1.17 | New road, rail or sea traffic during construction or operation? | | |
| 1.18 | New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc? | | |
| 1.19 | Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements? | | |
| 1.20 | New or diverted transmission lines or pipelines? | | |
| 1.21 | Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers? | | |
| 1.22 | Stream crossings? | | |
| 1.23 | Abstraction or transfers of water from ground or surface waters? | | |
| 1.24 | Changes in water bodies or the land surface affecting drainage or run-off? | | |
| 1.25 | Transport of personnel or materials for construction, operation or decommissioning? | | |
| 1.26 | Long-term dismantling or decommissioning or restoration works? | | |
| 1.27 | Ongoing activity during decommissioning which could have an impact on the environment? | | |
| 1.28 | Influx of people to an area in either temporarily or permanently? | | |
| 1.29 | Introduction of alien species? | | |
| 1.30 | Loss of native species or genetic diversity? | | |
| 1.31 | Any other actions? | | |

2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

| S.No. | Information/checklist confirmation | Yes/No | Details thereof (with approximate quantities /rates, wherever possible) with source of information data |
|-------|---|--------|---|
| 2.1 | Land especially undeveloped or agricultural land (ha) | | |

| | | | |
|-----|---|--|--|
| 2.2 | Water (expected source & competing users) unit: KLD | | |
| 2.3 | Minerals (MT) | | |
| 2.4 | Construction material – stone, aggregates, and / soil (expected source – MT) | | |
| 2.5 | Forests and timber (source – MT) | | |
| 2.6 | Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW) | | |
| 2.7 | Any other natural resources (use appropriate standard units) | | |

3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.

| S.No. | Information/Checklist confirmation | Yes/No | Details thereof (with approximate quantities/rates, wherever possible) with source of information data |
|-------|--|--------|--|
| 3.1 | Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies) | | |
| 3.2 | Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases) | | |
| 3.3 | Affect the welfare of people e.g. by changing living conditions? | | |
| 3.4 | Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc., | | |
| 3.5 | Any other causes | | |

4. Production of solid wastes during construction or operation or decommissioning (MT/month)

| S.No. | Information/Checklist confirmation | Yes/No | Details thereof (with approximate quantities/rates, wherever possible) with source of information data |
|-------|------------------------------------|--------|--|
| 4.1 | Spoil, overburden or mine wastes | | |

| | | | |
|------|--|--|--|
| 4.2 | Municipal waste (domestic and or commercial wastes) | | |
| 4.3 | Hazardous wastes (as per Hazardous Waste Management Rules) | | |
| 4.4 | Other industrial process wastes | | |
| 4.5 | Surplus product | | |
| 4.6 | Sewage sludge or other sludge from effluent treatment | | |
| 4.7 | Construction or demolition wastes | | |
| 4.8 | Redundant machinery or equipment | | |
| 4.9 | Contaminated soils or other materials | | |
| 4.10 | Agricultural wastes | | |
| 4.11 | Other solid wastes | | |

5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr)

| S.No. | Information/Checklist confirmation | Yes/No | Details thereof (with approximate quantities/rates, wherever possible) with source of information data |
|-------|--|--------|--|
| 5.1 | Emissions from combustion of fossil fuels from stationary or mobile sources | | |
| 5.2 | Emissions from production processes | | |
| 5.3 | Emissions from materials handling including storage or transport | | |
| 5.4 | Emissions from construction activities including plant and equipment | | |
| 5.5 | Dust or odours from handling of materials including construction materials, sewage and waste | | |

| | | | |
|-----|---|--|--|
| 5.6 | Emissions from incineration of waste | | |
| 5.7 | Emissions from burning of waste in open air (e.g. slash materials, construction debris) | | |
| 5.8 | Emissions from any other sources | | |

6. Generation of Noise and Vibration, and Emissions of Light and Heat:

| S.No. | Information/Checklist confirmation | Yes/No | Details thereof (with approximate quantities/rates, wherever possible) with source of information data with source of information data |
|-------|---|--------|--|
| 6.1 | From operation of equipment e.g. engines, ventilation plant, crushers | | |
| 6.2 | From industrial or similar processes | | |
| 6.3 | From construction or demolition | | |
| 6.4 | From blasting or piling | | |
| 6.5 | From construction or operational traffic | | |
| 6.6 | From lighting or cooling systems | | |
| 6.7 | From any other sources | | |

7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

| S.No. | Information/Checklist confirmation | Yes/No | Details thereof (with approximate quantities/rates, wherever possible) with source of information data |
|-------|---|--------|--|
| 7.1 | From handling, storage, use or spillage of hazardous materials | | |
| 7.2 | From discharge of sewage or other effluents to water or the land (expected mode and place of discharge) | | |
| 7.3 | By deposition of pollutants emitted to air into the land or into water | | |
| 7.4 | From any other sources | | |
| 7.5 | Is there a risk of long term build up of pollutants in the environment from these sources? | | |

8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment

| S.No. | Information/Checklist confirmation | Yes/No | Details thereof (with approximate quantities/rates, wherever possible) with source of information data |
|-------|---|--------|--|
| 8.1 | From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances | | |
| 8.2 | From any other causes | | |
| 8.3 | Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)? | | |

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

| S. No. | Information/Checklist confirmation | Yes/No | Details thereof (with approximate quantities/rates, wherever possible) with source of information data |
|--------|--|--------|--|
| 9.1 | <p>Lead to development of supporting facilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.:</p> <ul style="list-style-type: none"> • Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.) • housing development • extractive industries • supply industries • other | | |
| 9.2 | Lead to after-use of the site, which could have an impact on the environment | | |
| 9.3 | Set a precedent for later developments | | |
| 9.4 | Have cumulative effects due to proximity to other existing or planned projects with similar effects | | |

(III) Environmental Sensitivity

| S.No. | Areas | Name/ Identity | Aerial distance (within 15 km.) Proposed project location boundary |
|-------|---|----------------|---|
| 1 | Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value | | |

| | | | |
|----|---|--|--|
| 2 | Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests | | |
| 3 | Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration | | |
| 4 | Inland, coastal, marine or underground waters | | |
| 5 | State, National boundaries | | |
| 6 | Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas | | |
| 7 | Defence installations | | |
| 8 | Densely populated or built-up area | | |
| 9 | Areas occupied by sensitive man-made land uses (<i>hospitals, schools, places of worship, community facilities</i>) | | |
| 10 | Areas containing important, high quality or scarce resources (<i>ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals</i>) | | |
| 11 | Areas already subjected to pollution or environmental damage. (<i>those where existing legal environmental standards are exceeded</i>) | | |
| 12 | Areas susceptible to natural hazard which could cause the project to present environmental problems (<i>earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions</i>) | | |

(IV). Proposed Terms of Reference for EIA studies

APPENDIX II

(See paragraph 6)

FORM-1 A (only for construction projects listed under item 8 of the Schedule)**CHECK LIST OF ENVIRONMENTAL IMPACTS**

(Project proponents are required to provide full information and wherever necessary attach explanatory notes with the Form and submit along with proposed environmental management plan & monitoring programme)

1. LAND ENVIRONMENT

(Attach panoramic view of the project site and the vicinity)

1.1. Will the existing landuse get significantly altered from the project that is not consistent with the surroundings? (Proposed landuse must conform to the approved Master Plan / Development Plan of the area. Change of landuse if any and the statutory approval from the competent authority be submitted). Attach Maps of (i) site location, (ii) surrounding features of the proposed site (within 500 meters) and (iii) the site (indicating levels & contours) to appropriate scales. If not available attach only conceptual plans.

1.2. List out all the major project requirements in terms of the land area, built up area, water consumption, power requirement, connectivity, community facilities, parking needs etc.

1.3. What are the likely impacts of the proposed activity on the existing facilities adjacent to the proposed site? (Such as open spaces, community facilities, details of the existing landuse, disturbance to the local ecology).

1.4. Will there be any significant land disturbance resulting in erosion, subsidence & instability? (Details of soil type, slope analysis, vulnerability to subsidence, seismicity etc may be given).

1.5. Will the proposal involve alteration of natural drainage systems? (Give details on a contour map showing the natural drainage near the proposed project site)

1.6. What are the quantities of earthwork involved in the construction activity-cutting, filling, reclamation etc. (Give details of the quantities of earthwork involved, transport of fill materials from outside the site etc.)

1.7. Give details regarding water supply, waste handling etc during the construction period.

1.8. Will the low lying areas & wetlands get altered? (Provide details of how low lying and wetlands are getting modified from the proposed activity)

1.9. Whether construction debris & waste during construction cause health hazard? (Give quantities of various types of wastes generated during construction including the construction labour and the means of disposal)

2. WATER ENVIRONMENT

2.1. Give the total quantity of water requirement for the proposed project with the breakup of requirements for various uses. How will the water requirement met? State the sources & quantities and furnish a water balance statement.

- 2.2. What is the capacity (dependent on flow or yield) of the proposed source of water?
- 2.3. What is the quality of water required, in case, the supply is not from a municipal source? (Provide physical, chemical, biological characteristics with class of water quality)
- 2.4. How much of the water requirement can be met from the recycling of treated wastewater? (Give the details of quantities, sources and usage)
- 2.5. Will there be diversion of water from other users? (Please assess the impacts of the project on other existing uses and quantities of consumption)
- 2.6. What is the incremental pollution load from wastewater generated from the proposed activity? (Give details of the quantities and composition of wastewater generated from the proposed activity)
- 2.7. Give details of the water requirements met from water harvesting? Furnish details of the facilities created.
- 2.8. What would be the impact of the land use changes occurring due to the proposed project on the runoff characteristics (quantitative as well as qualitative) of the area in the post construction phase on a long term basis? Would it aggravate the problems of flooding or water logging in any way?
- 2.9. What are the impacts of the proposal on the ground water? (Will there be tapping of ground water; give the details of ground water table, recharging capacity, and approvals obtained from competent authority, if any)
- 2.10. What precautions/measures are taken to prevent the run-off from construction activities polluting land & aquifers? (Give details of quantities and the measures taken to avoid the adverse impacts)
- 2.11. How is the storm water from within the site managed?(State the provisions made to avoid flooding of the area, details of the drainage facilities provided along with a site layout indicating contour levels)
- 2.12. Will the deployment of construction labourers particularly in the peak period lead to unsanitary conditions around the project site (Justify with proper explanation)
- 2.13. What on-site facilities are provided for the collection, treatment & safe disposal of sewage? (Give details of the quantities of wastewater generation, treatment capacities with technology & facilities for recycling and disposal)
- 2.14. Give details of dual plumbing system if treated waste used is used for flushing of toilets or any other use.

3. VEGETATION

- 3.1. Is there any threat of the project to the biodiversity? (Give a description of the local ecosystem with its unique features, if any)

3.2. Will the construction involve extensive clearing or modification of vegetation? (Provide a detailed account of the trees & vegetation affected by the project)

3.3. What are the measures proposed to be taken to minimize the likely impacts on important site features (Give details of proposal for tree plantation, landscaping, creation of water bodies etc along with a layout plan to an appropriate scale)

4. FAUNA

4.1. Is there likely to be any displacement of fauna- both terrestrial and aquatic or creation of barriers for their movement? Provide the details.

4.2. Any direct or indirect impacts on the avifauna of the area? Provide details.

4.3. Prescribe measures such as corridors, fish ladders etc to mitigate adverse impacts on fauna

5. AIR ENVIRONMENT

5.1. Will the project increase atmospheric concentration of gases & result in heat islands? (Give details of background air quality levels with predicted values based on dispersion models taking into account the increased traffic generation as a result of the proposed constructions)

5.2. What are the impacts on generation of dust, smoke, odorous fumes or other hazardous gases? Give details in relation to all the meteorological parameters.

5.3. Will the proposal create shortage of parking space for vehicles? Furnish details of the present level of transport infrastructure and measures proposed for improvement including the traffic management at the entry & exit to the project site.

5.4. Provide details of the movement patterns with internal roads, bicycle tracks, pedestrian pathways, footpaths etc., with areas under each category.

5.5. Will there be significant increase in traffic noise & vibrations? Give details of the sources and the measures proposed for mitigation of the above.

5.6. What will be the impact of DG sets & other equipment on noise levels & vibration in & ambient air quality around the project site? Provide details.

6. AESTHETICS

6.1. Will the proposed constructions in any way result in the obstruction of a view, scenic amenity or landscapes? Are these considerations taken into account by the proponents?

6.2. Will there be any adverse impacts from new constructions on the existing structures? What are the considerations taken into account?

6.3. Whether there are any local considerations of urban form & urban design influencing the design criteria? They may be explicitly spelt out.

6.4. Are there any anthropological or archaeological sites or artefacts nearby? State if any other significant features in the vicinity of the proposed site have been considered.

7. SOCIO-ECONOMIC ASPECTS

7.1. Will the proposal result in any changes to the demographic structure of local population? Provide the details.

- 7.2. Give details of the existing social infrastructure around the proposed project.
- 7.3. Will the project cause adverse effects on local communities, disturbance to sacred sites or other cultural values? What are the safeguards proposed?

8. BUILDING MATERIALS

- 8.1. May involve the use of building materials with high-embodied energy. Are the construction materials produced with energy efficient processes? (Give details of energy conservation measures in the selection of building materials and their energy efficiency)
- 8.2. Transport and handling of materials during construction may result in pollution, noise & public nuisance. What measures are taken to minimize the impacts?
- 8.3. Are recycled materials used in roads and structures? State the extent of savings achieved?
- 8.4. Give details of the methods of collection, segregation & disposal of the garbage generated during the operation phases of the project.

9. ENERGY CONSERVATION

- 9.1. Give details of the power requirements, source of supply, backup source etc. What is the energy consumption assumed per square foot of built-up area? How have you tried to minimize energy consumption?
- 9.2. What type of, and capacity of, power back-up to you plan to provide?
- 9.3. What are the characteristics of the glass you plan to use? Provide specifications of its characteristics related to both short wave and long wave radiation?
- 9.4. What passive solar architectural features are being used in the building? Illustrate the applications made in the proposed project.
- 9.5. Does the layout of streets & buildings maximise the potential for solar energy devices? Have you considered the use of street lighting, emergency lighting and solar hot water systems for use in the building complex? Substantiate with details.
- 9.6. Is shading effectively used to reduce cooling/heating loads? What principles have been used to maximize the shading of Walls on the East and the West and the Roof? How much energy saving has been effected?
- 9.7. Do the structures use energy-efficient space conditioning, lighting and mechanical systems? Provide technical details. Provide details of the transformers and motor efficiencies, lighting intensity and air-conditioning load assumptions? Are you using CFC and HCFC free chillers? Provide specifications.
- 9.8. What are the likely effects of the building activity in altering the micro-climates? Provide a self assessment on the likely impacts of the proposed construction on creation of heat island & inversion effects?

9.9. What are the thermal characteristics of the building envelope? (a) roof; (b) external walls; and (c) fenestration? Give details of the material used and the U-values or the R values of the individual components.

9.10. What precautions & safety measures are proposed against fire hazards? Furnish details of emergency plans.

9.11. If you are using glass as wall material provides details and specifications including emissivity and thermal characteristics.

9.12. What is the rate of air infiltration into the building? Provide details of how you are mitigating the effects of infiltration.

9.13. To what extent the non-conventional energy technologies are utilised in the overall energy consumption? Provide details of the renewable energy technologies used.

10. Environment Management Plan

The Environment Management Plan would consist of all mitigation measures for each item wise activity to be undertaken during the construction, operation and the entire life cycle to minimize adverse environmental impacts as a result of the activities of the project. It would also delineate the environmental monitoring plan for compliance of various environmental regulations. It will state the steps to be taken in case of emergency such as accidents at the site including fire.

APPENDIX III

(See paragraph 7)

GENERIC STRUCTURE OF ENVIRONMENTAL IMPACT ASSESMENT DOCUMENT

| S.NO | EIA STRUCTURE | CONTENTS |
|------|---------------------|---|
| 1. | Introduction | <ul style="list-style-type: none"> • Purpose of the report • Identification of project & project proponent • Brief description of nature, size, location of the project and its importance to the country, region • Scope of the study – details of regulatory scoping carried out (As per Terms of Reference) |
| 2. | Project Description | <ul style="list-style-type: none"> • Condensed description of those aspects of the project (based on project feasibility study), likely to cause environmental effects. Details should be provided to give clear picture of the following: <ul style="list-style-type: none"> • Type of project • Need for the project • Location (maps showing general location, specific location, project boundary & project site layout) |

| | | |
|----|---|--|
| | | <ul style="list-style-type: none"> • Size or magnitude of operation (incl. Associated activities required by or for the project) • Proposed schedule for approval and implementation • Technology and process description • Project description. Including drawings showing project layout, components of project etc. Schematic representations of the feasibility drawings which give information important for EIA purpose • Description of mitigation measures incorporated into the project to meet environmental standards, environmental operating conditions, or other EIA requirements (as required by the scope) • Assessment of New & untested technology for the risk of technological failure |
| 3. | Description of the Environment | <ul style="list-style-type: none"> • Study area, period, components & methodology • Establishment of baseline for valued environmental components, as identified in the scope • Base maps of all environmental components |
| 4. | Anticipated Environmental Impacts & Mitigation Measures | <ul style="list-style-type: none"> • Details of Investigated Environmental impacts due to project location, possible accidents, project design, project construction, regular operations, final decommissioning or rehabilitation of a completed project • Measures for minimizing and / or offsetting adverse impacts identified • Irreversible and Irretrievable commitments of environmental components • Assessment of significance of impacts (Criteria for determining significance, Assigning significance) • Mitigation measures |
| 5. | Analysis of Alternatives (Technology & Site) | <ul style="list-style-type: none"> • In case, the scoping exercise results in need for alternatives: • Description of each alternative • Summary of adverse impacts of each alternative • Mitigation measures proposed for each alternative and • Selection of alternative |

| | | |
|-----|--|--|
| 6. | Environmental Monitoring Program | <ul style="list-style-type: none"> • Technical aspects of monitoring the effectiveness of mitigation measures (incl. Measurement methodologies, frequency, location, data analysis, reporting schedules, emergency procedures, detailed budget & procurement schedules) |
| 7. | Additional Studies | <ul style="list-style-type: none"> • Public Consultation • Risk assessment • Social Impact Assessment. R&R Action Plans |
| 8. | Project Benefits | <ul style="list-style-type: none"> • Improvements in the physical infrastructure • Improvements in the social infrastructure • Employment potential –skilled; semi-skilled and unskilled. • Other tangible benefits |
| 9. | Environmental Benefit Analysis | Cost If recommended at the Scoping stage |
| 10. | EMP | <ul style="list-style-type: none"> • Description of the administrative aspects of ensuring that mitigative measures are implemented and their effectiveness monitored, after approval of the EIA |
| 11. | Summary & Conclusion (This will constitute the summary of the EIA Report) | <ul style="list-style-type: none"> • Overall justification for implementation of the project • Explanation of how, adverse effects have been mitigated |
| 12. | Disclosure of Consultants engaged | <ul style="list-style-type: none"> • The names of the Consultants engaged with their brief resume and nature of Consultancy rendered |

APPENDIX III A
(See paragraph 7).

CONTENTS OF SUMMARY ENVIRONMENTAL IMPACT ASSESSMENT

The Summary EIA shall be a summary of the full EIA Report condensed to ten A-4 size pages at the maximum. It should necessarily cover in brief the following Chapters of the full EIA Report: -

1. Project Description
2. Description of the Environment
3. Anticipated Environmental impacts and mitigation measures
4. Environmental Monitoring Programme
5. Additional Studies
6. Project Benefits
7. Environment Management Plan

APPENDIX IV
(See paragraph 7)

PROCEDURE FOR CONDUCT OF PUBLIC HEARING

1.0 The Public Hearing shall be arranged in a systematic, time bound and transparent manner ensuring widest possible public participation at the project site(s) or in its close proximity District -wise, by the concerned State Pollution Control Board (SPCB) or the Union Territory Pollution Control Committee (UTPCC).

2.0 The Process:

2.1 The Applicant shall make a request through a simple letter to the Member Secretary of the SPCB or Union Territory Pollution Control Committee, in whose jurisdiction the project is located, to arrange the public hearing within the prescribed statutory period. In case the project site is extending beyond a State or Union Territory, the public hearing is mandated in each State or Union Territory in which the project is sited and the Applicant shall make separate requests to each concerned SPCB or UTPCC for holding the public hearing as per this procedure.

2.2 The Applicant shall enclose with the letter of request, at least 10 hard copies and an equivalent number of soft (electronic) copies of the draft EIA Report with the generic structure given in Appendix III including the Summary Environment Impact Assessment report in English and in the local language, prepared strictly in accordance with the Terms of Reference communicated after Scoping (Stage-2). Simultaneously the applicant shall arrange to forward copies, one hard and one soft, of the above draft EIA Report along with the Summary EIA report to the Ministry of Environment and Forests and to the following authorities or offices, within whose jurisdiction the project will be located:

- (a) District Magistrate/s
- (b) Zila Parishad or Municipal Corporation
- (c) District Industries Office
- (d) Concerned Regional Office of the Ministry of Environment and Forests

2.3 On receiving the draft Environmental Impact Assessment report, the above-mentioned authorities except the MoEF, shall arrange to widely publicize it within their respective jurisdictions requesting the interested persons to send their comments to the concerned regulatory authorities. They shall also make available the draft EIA Report for inspection electronically or otherwise to the public during normal office hours till the Public Hearing is over. The Ministry of Environment and Forests shall promptly display the Summary of the draft Environmental Impact Assessment report on its website, and also make the full draft EIA available for reference at a notified place during normal office hours in the Ministry at Delhi.

2.4 The SPCB or UTPCC concerned shall also make similar arrangements for giving publicity about the project within the State/Union Territory and make available the Summary of the draft Environmental Impact Assessment report (Appendix III A) for inspection in select offices or public libraries or panchayats etc. They shall also additionally

make available a copy of the draft Environmental Impact Assessment report to the above five authorities/offices viz, Ministry of Environment and Forests, District Magistrate etc.

3.0 Notice of Public Hearing:

3.1 The Member-Secretary of the concerned SPCB or UTPCC shall finalize the date, time and exact venue for the conduct of public hearing within 7(seven) days of the date of receipt of the draft Environmental Impact Assessment report from the project proponent, and advertise the same in one major National Daily and one Regional vernacular Daily. A minimum notice period of 30(thirty) days shall be provided to the public for furnishing their responses;

3.2 The advertisement shall also inform the public about the places or offices where the public could access the draft Environmental Impact Assessment report and the Summary Environmental Impact Assessment report before the public hearing.

3.3 No postponement of the date, time, venue of the public hearing shall be undertaken, unless some untoward emergency situation occurs and only on the recommendation of the concerned District Magistrate the postponement shall be notified to the public through the same National and Regional vernacular dailies and also prominently displayed at all the identified offices by the concerned SPCB or Union Territory Pollution Control Committee;

3.4 In the above exceptional circumstances fresh date, time and venue for the public consultation shall be decided by the Member –Secretary of the concerned SPCB or UTPCC only in consultation with the District Magistrate and notified afresh as per procedure under 3.1 above.

4.0 The Panel

4.1 The District Magistrate or his or her representative not below the rank of an Additional District Magistrate assisted by a representative of SPCB or UTPCC, shall supervise and preside over the entire public hearing process.

5.0 Videography

5.1 The SPCB or UTPCC shall arrange to video film the entire proceedings. A copy of the videotape or a CD shall be enclosed with the public hearing proceedings while forwarding it to the Regulatory Authority concerned.

6.0 Proceedings

6.1 The attendance of all those who are present at the venue shall be noted and annexed with the final proceedings.

6.2 There shall be no quorum required for attendance for starting the proceedings.

6.3 A representative of the applicant shall initiate the proceedings with a presentation on the project and the Summary EIA report.

6.4 Every person present at the venue shall be granted the opportunity to seek information or clarifications on the project from the Applicant. The summary of the public

hearing proceedings accurately reflecting all the views and concerns expressed shall be recorded by the representative of the SPCB or UTPCC and read over to the audience at the end of the proceedings explaining the contents in the vernacular language and the agreed minutes shall be signed by the District Magistrate or his or her representative on the same day and forwarded to the SPCB/UTPCC concerned.

6.5 A Statement of the issues raised by the public and the comments of the Applicant shall also be prepared in the local language and in English and annexed to the proceedings:

6.6 The proceedings of the public hearing shall be conspicuously displayed at the office of the Panchyats within whose jurisdiction the project is located, office of the concerned Zila Parishad, District Magistrate, and the SPCB or UTPCC. The SPCB or UTPCC shall also display the proceedings on its website for general information. Comments, if any, on the proceedings which may be sent directly to the concerned regulatory authorities and the Applicant concerned.

7.0 Time period for completion of public hearing

7.1 The public hearing shall be completed within a period of 45 (forty five) days from date of receipt of the request letter from the Applicant. Therefore the SPCB or UTPCC concerned shall send the public hearing proceedings to the concerned regulatory authority within 8(eight) days of the completion of the public hearing. The applicant may also directly forward a copy of the approved public hearing proceedings to the regulatory authority concerned along with the final Environmental Impact Assessment report or supplementary report to the draft EIA report prepared after the public hearing and public consultations.

7.2 If the SPCB or UTPCC fails to hold the public hearing within the stipulated 45(forty five) days, the Central Government in Ministry of Environment and Forests for Category 'A' project or activity and the State Government or Union Territory Administration for Category 'B' project or activity at the request of the SEIAA, shall engage any other agency or authority to complete the process, as per procedure laid down in this notification.

APPENDIX -V (See paragraph 7)

PROCEDURE PRESCRIBED FOR APPRAISAL

1. The applicant shall apply to the concerned regulatory authority through a simple communication enclosing the following documents where public consultations are mandatory: -

- Final Environment Impact Assessment Report [20(twenty) hard copies and 1 (one) soft copy]
- A copy of the video tape or CD of the public hearing proceedings
- A copy of final layout plan (20 copies)
- A copy of the project feasibility report (1 copy)

2. The Final EIA Report and the other relevant documents submitted by the applicant shall be scrutinized in office within 30 days from the date of its receipt by the concerned Regulatory Authority strictly with reference to the TOR and the inadequacies noted shall be communicated electronically or otherwise in a single set to the Members of the EAC

/SEAC enclosing a copy each of the Final EIA Report including the public hearing proceedings and other public responses received along with a copy of Form -I or Form 1A and scheduled date of the EAC /SEAC meeting for considering the proposal .

3. Where a public consultation is not mandatory and therefore a formal EIA study is not required, the appraisal shall be made on the basis of the prescribed application Form 1 and a pre-feasibility report in the case of all projects and activities other than Item 8 of the Schedule .In the case of Item 8 of the Schedule, considering its unique project cycle , the EAC or SEAC concerned shall appraise all Category B projects or activities on the basis of Form 1, Form 1A and the conceptual plan and stipulate the conditions for environmental clearance . As and when the applicant submits the approved scheme /building plans complying with the stipulated environmental clearance conditions with all other necessary statutory approvals, the EAC /SEAC shall recommend the grant of environmental clearance to the competent authority.

4. Every application shall be placed before the EAC /SEAC and its appraisal completed within 60 days of its receipt with requisite documents / details in the prescribed manner.

5. The applicant shall be informed at least 15 (fifteen) days prior to the scheduled date of the EAC /SEAC meeting for considering the project proposal.

6. The minutes of the EAC /SEAC meeting shall be finalised within 5 working days of the meeting and displayed on the website of the concerned regulatory authority. In case the project or activity is recommended for grant of EC, then the minutes shall clearly list out the specific environmental safeguards and conditions. In case the recommendations are for rejection, the reasons for the same shall also be explicitly stated.

APPENDIX VI

(See paragraph 5)

COMPOSITION OF THE SECTOR/ PROJECT SPECIFIC EXPERT APPRAISAL COMMITTEE (EAC) FOR CATEGORY A PROJECTS AND THE STATE/UT LEVEL EXPERT APPRAISAL COMMITTEES (SEACs) FOR CATEGORY B PROJECTS TO BE CONSTITUTED BY THE CENTRAL GOVERNMENT

1. The Expert Appraisal Committees (EAC(s) and the State/UT Level Expert Appraisal Committees (SEACs) shall consist of only professionals and experts fulfilling the following eligibility criteria:

Professional: The person should have at least (i) 5 years of formal University training in the concerned discipline leading to a MA/MSc Degree, or (ii) in case of Engineering /Technology/Architecture disciplines, 4 years formal training in a professional 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. Law) 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 association (e.g. Chartered Accountancy),or (v) a University degree , followed by 2 years of formal training in a University or Service Academy (e.g. MBA/IAS/IFS). In selecting the individual professionals, experience gained by them in their respective fields will be taken note of.

Expert: A professional fulfilling the above eligibility criteria with at least 15 years of relevant experience in the field, or with an advanced degree (e.g. Ph.D.) in a concerned field and at least 10 years of relevant experience.

Age: Below 70 years. However, in the event of the non-availability of /paucity of experts in a given field, the maximum age of a member of the Expert Appraisal Committee may be allowed up to 75 years

2. The Members of the EAC shall be Experts with the requisite expertise and experience in the following fields /disciplines. In the event that persons fulfilling the criteria of "Experts" are not available, Professionals in the same field with sufficient experience may be considered:

- **Environment Quality Experts:** Experts in measurement/monitoring, analysis and interpretation of data in relation to environmental quality
- **Sectoral Experts in Project Management:** Experts in Project Management or Management of Process/Operations/Facilities in the relevant sectors.
- **Environmental Impact Assessment Process Experts:** Experts in conducting and carrying out Environmental Impact Assessments (EIAs) and preparation of Environmental Management Plans (EMPs) and other Management plans and who have wide expertise and knowledge of predictive techniques and tools used in the EIA process
- **Risk Assessment Experts**
- **Life Science Experts in floral and faunal management**
- **Forestry and Wildlife Experts**
- **Environmental Economics Expert with experience in project appraisal**

3. The Membership of the EAC shall not exceed 15 (fifteen) regular Members. However the Chairperson may co-opt an expert as a Member in a relevant field for a particular meeting of the Committee.

4. The Chairperson shall be an outstanding and experienced environmental policy expert or expert in management or public administration with wide experience in the relevant development sector.

5. The Chairperson shall nominate one of the Members as the Vice Chairperson who shall preside over the EAC in the absence of the Chairman /Chairperson.

6. A representative of the Ministry of Environment and Forests shall assist the Committee as its Secretary.

7. The maximum tenure of a Member, including Chairperson, shall be for 2 (two) terms of 3 (three) years each.

8. The Chairman / Members may not be removed prior to expiry of the tenure without cause and proper enquiry.



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असाधारण

EXTRAORDINARY

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पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

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 निर्वन्धन 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 लाईने (कोयला लिफ्ट और अन्य अयस्क) जो राष्ट्रीय उद्यानों/अभ्यारण्यों /कोरल रीफ, पारिस्थितिकी संवेदी क्षेत्रों से गुजरती है | गेर 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 अज़ब्रेस्टो का खनन क्षेत्र | गेर 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 | 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। |
| | | | सिंचाई प्रणाली | ईसी की अपेक्षा |
| | | | (क) लघु सिंचाई प्रणाली (<2000 हे.) | छूट प्राप्त |
| | | | (ख) मध्यम सिंचाई | इएम्पी और राज्य स्तरीय |

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| | | | प्रणाली (>2000 <10,000 हे.) | (ख2 प्रवर्ग) तैयार करना अपेक्षित | |
| | | | (ग) महा सिंचाई प्रणाली (≥10000 से <50000 हे.) | डआईए/इएमपी 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, डीएमआर और अनुमोदित खनन योजना | नहीं | हां | परियोजना प्रस्तावक | परियोजना प्रस्तावक | डीईएसी/ डीआईएए | डीआईएए, एमआईएए, एपीसीवी सीपीसीवी एमओईएफसीसी एमओईएफसीसी अभिकरण द्वारा नामनिर्देशिती |
| >5 हे. और <25 हे. | 'ख2' | प्रारूप-1 पीएफआर और डीएमआर अनुमोदित खनन योजना और ईएमपी | नहीं | हां | परियोजना प्रस्तावक | परियोजना प्रस्तावक | एमईएसी/ एमआईएए | |
| >25 हे. और <100 हे. | 'ख1' | प्रारूप-1 पीएफआर और डीएमआर अनुमोदित खनन योजना और ईआईए तथा ईएमपी | हां | हां | परियोजना प्रस्तावक | परियोजना प्रस्तावक | एमईएसी/ एमआईएए | |
| >100 हे. | 'क' | प्रारूप-1 पीएफआर और डीएमआर 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, डीएमआर और अनुमोदित खनन योजना | नहीं | हां | राज्य, राज्य अभिकरण, परियोजना प्रस्तावकों का समूह, परियोजना प्रस्तावक | परियोजना प्रस्तावक | डीईएसी/ डीआईएए | डीआईएए, एमआईएए, एपीसीवी सीपीसीवी एमओईएफसीसी एंजिनी 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, डीएमआर 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 | |

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| खनन पट्टे के समूह क्षेत्र, >5 हे. के किसी व्यष्टिक पट्टे के साथ | ख 2 | 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 | एमईएसी/ एमईआईएए | |
| व्यष्टिक पट्टा आकार <100 हे. के साथ >25 के खनन पट्टों का समूह | 'ख1' | प्रारूप-1 पीएफआर, डीएसआर और अनुमोदित 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/ एमईआईएए | |
| >100 हे. से किसी व्यष्टिक पट्टे के आकार का कोई समूह | 'क' | प्रारूप-1 पीएफआर, डीएसआर और अनुमोदित 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)]

जानेश 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 I

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;

Now, therefore, 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 hereby makes the following further amendments in the Environment Impact Assessment Notification, 2006 namely:-

In the said Notification, in the SCHEDULE, for item 1(a), 1(c), and the 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, namely:

| Project or Activity | | Category with threshold limit | | Conditions if any |
|---------------------|--|---|--|--|
| | | A | B | |
| 1 | | Mining, extraction of natural resources and power generation (for a specified production capacity) | | |
| (1) | (2) | (3) | (4) | (5) |
| 1 (a) | (i) Mining of minerals (ii) Slurry pipelines (coal, lignite and other ores) passing through national parks / sanctuaries / coral reefs, ecologically sensitive areas. | > 100 ha. of mining lease area in respect of non-coal mine lease. > 150 ha of mining lease area in respect of coal mine lease Asbestos mining irrespective of mining area. All projects. | ≤ 100 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) for project or activity of mining of minor minerals of Category 'B1' in case of cluster of mining lease area; and (iii) River bed mining projects on account of inter-state boundary. Note: (1) Mineral prospecting is exempted; (2) The prescribed procedure for environmental clearance for mining of minor minerals including cluster situation is given in Appendix XI; |
| 1(c) | (i) River Valley projects (ii) Irrigation projects | (i) ≥ 50 MW hydroelectric power generation; (ii) ≥ 50,000 ha. of culturable command area | (i) ≥ 25 MW and < 50 MW hydroelectric power generation; (ii) > 2000 ha. and < 50,000 ha. of culturable command area. | General Condition shall apply. Note:- (i) Category 'B' river valley projects falling in more than one state shall be appraised at the central Government Level. (ii) Change in irrigation technology having environmental benefits (eg. From flood irrigation to Drip irrigation etc.) by an existing project, leading to increase in Culturable Command Area but without increase in dam height and submergence, will not require amendment/ revision of EC. |
| | | | Irrigation system | Requirement of EC |
| | | | (a) Minor Irrigation system (≤ 2000 Ha) | Exempted |
| | | | (b) Medium irrigation system (> 2000 and < 10,000 ha.) | Required to prepare EMP and to be dealt at State Level (B ₂ category). |

| | | | | | |
|--|--|--|---|---|--|
| | | | (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). | |
|--|--|--|---|---|--|

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 \geq 25 hectares with individual lease size \leq 100ha | '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 > 100ha | '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;

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.

F. No. L-11011/175/2018-IA-II (M)
Government of India
Ministry of Environment, Forest & Climate Change
Impact Assessment Division

3rd Floor, Vayu Wing,
Indira Paryavaran Bhawan,
Jorbagh Road, Aliganj,
New Delhi-110 003
Email: rb.lal@nic.in
Phone/Fax: 011-24695362

Dated: 12th December 2018

Office Memorandum

Sub: Order dated 04th September, 2018 & 13th September, 2018 passed by the Hon'ble National Green Tribunal, New Delhi in O.A. No. 173 of 2018 & O.A. No. 186 of 2016 in the matters titled "Sudarsan Das Vs State of West Bengal & Ors" & "Satendra Pandey Vs Ministry of Environment Forest & Climate Change & Anr." respectively- regarding.

This is with reference to the recent orders of the Hon'ble NGT dated 04th September, 2018 in the matter titled *Sudarsan Das Vs State of West Bengal & Ors* & and order dated 13th September, 2018 in the matter *Satendra Pandey Vs Ministry of Environment Forest & Climate Change & Anr.* Copies of the orders are enclosed herewith for ready reference.

2. The Hon'ble NGT *vide* order dated 13th September, 2018 in O.A. No. 186 of 2016 (*Satendra Pandey Vs Ministry of Environment Forest & Climate Change & Anr*) has inter-alia directed as follows:-

"(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/ SIEAA 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;

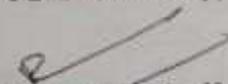
(vi) the MoEF&CC to prepare guidelines for calculation of the cost of restitution of damage caused to mined-out areas along with the Net Present Value of Ecological Services forgone because of illegal or unscientific mining."

3. In view of the above, the undersigned is directed to forward the copy of the aforementioned order for necessary compliance and inform the Ministry about the action taken.

4. This issues with the approval of the Competent Authority.

Yours faithfully,

Encl: As above


(Dr. R.B. Lal)
Scientist 'E'

To,

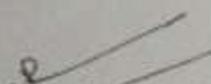
1. The Chief Secretary, 1st Block, 1st Floor A.P Secretariat Office, Andhra Pradesh, Velagapudi - 522503
2. The Chief Secretary, Government of Arunachal Pradesh, Civil Secretariat, Itanagar - 791111
3. The Chief Secretary, Government of Assam, Block-C, 3rd Floor, Assam Sachivalaya, Guwahati-781006
4. The Chief Secretary, Government of Bihar, Main Secretariat Building, Patna-800015
5. The Chief Secretary, Government of Chhattisgarh, Mahanadi Bhawan, Mantralaya, Naya Raipur-492002
6. The Chief Secretary, Government of Gujarat, Block No.1, 5th Floor, Sardar Bhawan, Sachivalaya, Gandhinagar-382010
7. The Chief Secretary, Government of Goa, Secretariat, Porviroim, Bardez, Goa - 403521
8. The Chief Secretary, 4th Floor, Haryana Civil Secretariat Sector-I, Chandigarh - 160019
9. The Chief Secretary, Government of Himachal Pradesh Secretariat, Shimla - 171002
10. The Chief Secretary, R. No. 2/7, 2nd, Floor Main Building Civil Secretariat, Jammu - 180001 R. No. 307, 3rd Floor Civil Secretariat, Srinagar - 190001
11. The Chief Secretary, Government of Jharkhand 1st Floor, Project Building, Dhurwa, Ranchi-834004
12. The Chief Secretary, Govt of Karnataka, Room No.321, Vidhana Soudha, Bengaluru- 560 001
13. The Chief Secretary, Government of Kerala Secretariat, Thiruvananthapuram - 695001
14. The Chief Secretary, Government of Madhya Pradesh MP Mantralaya, Vallabh Bhavan Bhopal - 462004

15. The Chief Secretary, Government of Maharashtra CS Office Main Building, Mantralaya 6th Floor, Madame Cama Road, Mumbai - 400032
16. The Chief Secretary, Government of Manipur South Block, Old Secretariat Imphal-795001
17. The Chief Secretary, Government of Meghalaya Main Secretariat Building Rilang Building, Room No. 321 Meghalaya Secretariat, Shillong - 793001
18. The Chief Secretary, Government of Mizoram New Secretariat Complex, Aizwal - 796001
19. The Chief Secretary, Government of Nagaland Civil Secretariat, Kohima-797004
20. The Chief Secretary, Government of Odisha General Administration Department, Odisha Secretariat, Bhubaneswar - 751001
21. The Chief Secretary, Government of Punjab, Chandigarh - 160001
22. The Chief Secretary, Government of Rajasthan Secretariat, Jaipur - 302005
23. The Chief Secretary, Government of Sikkim New Secretariat, Gangtok - 737101
24. The Chief Secretary, Government of Tamil Nadu Secretariat, Chennai - 600009
25. The Chief Secretary, Government of Telangana Block C, 3rd Floor, Telangana Secretariat Khairatabad, Hyderabad, Telangana
26. The Chief Secretary, Government of Uttar Pradesh 1st Floor, Room No. 110 LalbahadurSastri Bhawan Uttar Pradesh Secretariat, Lucknow - 226 001
27. The Chief Secretary, Government of Tripura New Secretariat Complex, Secretariat-799010, Agartala West Tripura
28. The Chief Secretary, Government of Uttarakhand 4 Subhash Road, Uttarakhand Secretariat, Dehradun - 248001
29. The Chief Secretary, Government of West Bengal Nabanna, 13th Floor, 325, Sarat Chatterjee Road, MandirtalaShibpur, Howrah - 711102
30. The Chief Secretary, Andaman and Nicobar Administration Secretariat, Port Blair - 744101
31. The Chief Secretary, Secretariat, Moti, Silvasa, Daman - 396220
32. The Chief Secretary, Secretariat, Moti, Daman - 396 220
33. The Chief Secretary, Raj Bhawan, Chandigarh-160019
34. The Chief Secretary, Lakshadweep, Kavaratti - 682555
35. The Chief Secretary, Chief Secretariat, Goubert Avenue, Puducherry - 605001
36. The Chief Secretary, Delhi Secretariat, Ip Estate, Delhi - 110002, Near Indra Gandhi Indoor Stadium

Copy to:

1. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (SZ), Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, Bangalore-560034
2. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Area Colony, Link Road-3, Ravishankar Nagar, Bhopal-462016
3. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (EZ), A/3, Chandrasekharpur, Bhubaneswar-751023

4. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 1st and 2nd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai-34
5. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (NZ), Bays No. 24-25, Sector 31 A, Dakshin Marg, Chandigarh-160030
6. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (NCZ), Pearson Road, P.P. New Forest, Forest Research Institute (FRI) Campus Dehradun-248006
7. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (CZ), Kendriya Bhawan, 5th Floor Sector "H", Aliganj, Lucknow-226020
8. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur-440001
9. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (ECZ), Bungalow No. A-2, Shyamali Colony Ranchi-834002
10. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (NEZ) Law-U-Sib, Lumbatnngen, Near MTC Workshop, Shillong, Meghalaya-793021


(Dr. R.B. Lal)
Scientist 'E'

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

**Original Application No. 44 of 2016
And
Original Application No. 517 of 2015
(M.A. No. 1247 of 2015, M.A. No. 1288 of 2015 & M.A. No. 321 of 2017)
And
Original Application No. 550 of 2015
(M.A. No. 1311 of 2015, M.A. No. 625 of 2016 & M.A. No. 1048 of 2016)
And
Original Application No. 530 of 2016
(M.A. No. 989 of 2016)
And
Original Application No. 272 of 2016
(M.A. No. 846 of 2016)
And
Original Application No. 481 of 2016
(M.A. Nos. 904/2016, 905/2016 & 1267/2016)
And
Original Application No. 540 of 2015
And
Original Application No. 90 of 2016
(M.A. No. 1223 of 2016)
And
Execution Application No. 40 of 2015
(M.A. No. 1412/2017) IN O.A. No. 517/2015**

IN THE MATTER OF:

**Mushtakeem Vs. MoEF & CC & Ors.
And
Sandeep Kumar Vs. Ministry of Environment & Forest, & CC & Ors.
And
Virender Kumar Vs. Ministry of Environment, Forests & Climate Change & Ors.
And
Sandeep Kumar Vs. Ministry of Environment, Forest and Climate Change & Ors.
And
M/s. Ganga Yamuna Mining Co. Vs. State of Haryana & Ors.
And
Joginder Singh Vs. Ministry of Environment & Forest & Ors.
And
Ved Pal Singh Vs. Ministry of Environment and Forests & Ors.
And
Chander Mohan Uppal Vs. State of U.P. & Ors.
And
Sandeep Kumar Vs. MoEF & Ors.**

**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**

Ms. Deep Shikha Bharati, Adv.
Mr. Yashraj Singh Desai, Mr. Shyam Agarwal, Adv.

Mr. Shlok Chandra and Mr. Ritesh Kumar Sharma,
Adv.

Mr. Anil Grover, AAG with Mr. Rahul Khurana, Adv.
for State of Haryana and HSPCB

Mr. Ankit Verma, adv. State of Uttar Pradesh

Ms. Savitri Pandey, Mr. Manish Tiwari, advs.

| Date and Remarks | Orders of the Tribunal |
|---|---|
| <p>Item Nos. 3 to 10</p> <p>September 05, 2018</p> <p>A + R</p> | <p>1. All the matters involve a common question about the safeguards for protection of environment in the course of mining.</p> <p>2. In Original Application No. 44/2016, the applicant claims to be an agriculturist having land adjacent to river Yamuna in District Shamli. According to the applicant, several mining leases have been granted in Districts Yamuna Nagar, Karnal, Panipat and Sonapat in the State of Haryana and in Districts Shamli, Muzaffarnagar, Saharanpur and other districts of State of Uttar Pradesh along the river Yamuna. Mechanized mining on the river beds is not permitted. One of the conditions for sustainable mining practices is that no mining is to be allowed during rainy season. Still factually, mining is being done inside the river Yamuna using heavy machinery in violation of conditions of Environmental Clearance. This Tribunal passed an order dated 23.12.2015 in <i>Original Application No. 517/2015, Virender Kumar Vs. MoEF&CC & Ors. directing</i> that no mechanical mining be permitted on the river beds in the State of Uttar Pradesh and Haryana. River</p> |

**Item Nos.
3 to 10**

**September
05, 2018**

A + R

consequences, like change of course of river, degradation of ecology in the surrounding area, impact upon the water table, etc., in course of mining of minor minerals like sand, bajri, boulders, etc. on Yamuna River by using mechanical or semi-mechanical equipments?

- b. Whether there are adverse environmental consequences, like air pollution, affect upon local flora and fauna, affect upon local agricultural land and agricultural produce, etc. in course of operation of mining by mechanical equipments on the river bed of Yamuna.?*
- c. Whether there is an imminent danger of an environmental catastrophe like the one witnessed in the State of Uttarakhand in view of the incessant sand mining on river bed of Yamuna river which is likely to have grave consequences?*
- d. Whether it is necessary to lay down strict guidelines to ensure compliance of the post-environmental clearance terms and conditions by the mining lease holders in order to safeguard the environment around the mining area and to ensure compliance of the provisions of relevant laws relating to environment in their letter and spirit.*
- e. Whether it is necessary to lay down strict guidelines to ensure accountability among the concerned statutory authorities under the laws enumerated in Schedule I to the National Green Tribunal Act, 2010 so that they perform their duties under the said law in order to safeguard the environment from aforesaid mining of minor minerals in river bed.?"*

3. The applicant has sought directions against mining in river bed by mechanized or semi mechanized method and closure of sand mining operations in the river beds of Yamuna in State of Uttar Pradesh and Haryana, closure of sand, boulder, gravel mining operations in the river beds in State of Uttar Pradesh and Haryana, strict compliance of

order of the National Green Tribunal dated 23.12.2015 in

**Item Nos.
3 to 10**

**September
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4. The application was filed before this Tribunal on 21.01.2016. On 05.04.2016, the States of Haryana and Uttar Pradesh, the Ministry of Environment, Forests and Climate Change and the Ministry of Mining were required to state the clear meaning of 'mechanical', 'semi mechanical' and 'manual mining' with reference to the mining in river beds and flood plains. The matter has been considered on about 17 dates of hearing earlier.

5. An affidavit was filed by the State of Uttar Pradesh on 17.03.2016 to the effect that Environmental Clearance is required for matters falling in the Notification dated 14.09.2006 before establishment or expansion of any project or activity mentioned in the Schedule. Compatible mining being part of category 'B' up to 50 hectares, State Environment Impact Assessment Authority deals with the matter and prior Environmental Clearance is required. The matter of grant of Environmental Clearance is governed by Notifications dated 15.06.2016 and 20.01.2016. Environmental Clearance is required for mining even for area of less than 5 hectares in view of judgment of the Hon'ble Supreme Court in *Deepak Kumar v. State of Haryana, (2012) 4 SCC 629*.

6. Notification dated 15.01.2016 provides for constitution of DEIAA to deal with Environmental Clearance of less than 5 hectares of minor mineral mining. Procedure for grant of such clearance is also laid

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Assessment Authority for category B – II project for mining of minor minerals. The DEIAA is headed by District Magistrate while the District Expert Committee is headed by senior most Executive Engineer of Irrigation Department.

7. Further Affidavit was filed by the State of Uttar Pradesh on 07.05.2016 on the issue of terms ‘mechanized’, ‘semi mechanized’ and ‘manual mining’. It is explained that these terms are not defined. However, comprehensive mining plan prepared by Directorate of Geology in the State of Uttar Pradesh has defined the term semi mechanized mining to mean method of working where some operations are also undertaken manually. Therefore, the semi mechanized mining or mechanized mining is almost the same method of working. Sometime mechanized mining with light machines are also referred as semi-mechanized mining. The term semi mechanized mining is being used in general parlance where in the very same mining area, in a part area manual mining is also undertaken, along with mechanized mining. The manual mining is undertaken by conventional tools and operations with the labour. The mechanized mining is undertaken with the help of excavator-cum-loaders.

8. The Ministry of Environment, Forest and Climate Change (MOEF&CC) in affidavit filed on 14.07.2016 states that sand and gravel are most used material after the

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alternative sources of sand and gravel which accumulate at the bottom of dams should also be targeted. Their use would address the problems of these aggregates accumulating which leads to a reduced capacity of dams to store water and could result in the dam water intakes being blocked. Dam regularly release large amounts of water to flush out aggregates. Although currently more expensive, aggregates could be extracted from the dams. It is important to protect local communities, reduce environmental degradation and facilitate long-term rational and sustainable use of the natural resources.

9. The MOEF&CC further states that environmental considerations are important to sustain quality of life and to balance the demands of economic developments and need for protection of environment. Manual mining is mining done by workers manually. If a machine is used the mining will be mechanized mining. Transportation is done by using tractors and trucks. Different mining methods mentioned of pit excavation, dry pit, wet pit, bar skinning (scalping), pit mining, Terrace mining, mechanical dredging and suction using dredgers/ pumps and scrapping.

10. According to the MOEF&CC, following steps are required for regulating the sand mining:

“(i) *Identification of river stretches and their demarcation for mining must be completed prior to mining for sustainable development*

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- meters.
- (iv) *the river flood plain mining be allowed both manual and mechanized. The excavators being used for flood plain mining should be with bucket capacity upto 1 cubic meter and maximum booth length of 3 meters.*
 - (v) *Not in-stream mining in the channel where water is flowing in the river be allowed.*
 - (vi) *In case of perennial streams and creeks only manual mining be allowed.*
 - (vii) *No sue of suction pumps be allowed for wet pit mining in rivers, coastal areas, perennial rivers and creeks.*
 - (viii) *The excavators used for river bed mining and flood plain mining should be tyre mounted only.*
 - (ix) *The mining is paleochannels/ agriculture fields can be both manual and mechanized. Use of any excavator can be permitted.*
 - (x) *The extraction of sand in coastal area by manual method be permitted but the quantification of such sand shall be set out.*
 - (xi) *No transport vehicle shall be allowed in the HTL area, transport vehicle be parked at the designated sites outside the HTL area.*
 - (xii) *Under no circumstances mining intersecting the ground water table be allowed.*
 - (xiv) *Segements of braided river system should be sued preferably falling within the lateral migration area of the river regime that enhance the feasibility of sediment replenishment. Mining at the concave side of the river channel should be allowed to prevent bank erosion. Similarly meandering segment of a river should be selected for mining such a way as to avoid natural eroding banks and to promote mining on naturally building (aggrading) meander components. Scrapping of sediment bars above the water flow level in the learn period may be preferred for sustainable mining.*
 - (xv) *In the Piedmon Zone (Bhabbar area) particularly in the Himalayan foothills, the sandy – gravelly track constitutes excellent conduits and holds the greater potential for ground water recharge. Mining in such areas should be preferred in locations selected away from the channel banks*

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riverbed material to maximum depth of 3 meters is recommended.

(xvii) *Mining of riverbed material should also take cognizance of the location of the active channel bank. It should be located sufficiently away, preferably more than 3 meters away (inwards), from such river banks to minimize effects on river bank erosion and avoid consequent channel migration.”*

11. The MOEF&CC has addressed such issues in its procedure laid down in notification dated 15.01.2016.

12. Further affidavit was filed by MOEF&CC on 16.08.2016 explaining the term semi mechanized mining, clarifying the position with respect to dry stretches and how the mining will be done in perennial streams and creeks if stream mining is not permitted.

13. According to MOEF&CC, combination of man and machines results in semi mechanized and mechanized mining. Manual mining is allowed in dry stretches of sand aggradations in river with width upto 100 meters from bank to bank.

14. In stream mining is not allowed in channel where water is flowing but in case of perennial streams and creeks in stream mining is permitted manually. It is stated that:

The Hon'ble NGT, Western Zone, Pune in application 34(THC)/2013(WZ) in matter of Awaz Foundation & others vs. State of Maharashtra and others vide order dated 29.05.2014 had directed that extraction of sand from coastal area by manual method may be permitted in case of dredging/clearing of channels in sea/creeks.

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16. The affidavit states that District Survey report is required to identify areas of aggradations or deposition where mining can be allowed. Areas of erosion and proximity of infrastructural structures and installation where mining is prohibited. Report of replenishment and time of replenishment after the mining. The affidavit further states that there is a requirement for visit to every site where environmental clearance has been applied for to see suitability of the site and the method of mining. For inter-state transportation regulation, a High Powered Committee was appointed which gave its report envisaging joint meetings and monitoring.

17. In Original Application No. 517 of 2015 prayer is to cancel Environmental Clearance for violation of terms and conditions of Environmental Clearance by M/s Jay Yamuna Developers. The main ground is that the mining activity was exceeding the depth as provided in the Environmental Clearance. It is stated that after filing of the application respondent no. 8 made a statement that no mining in the river bed has been done thereafter. It is explained by learned counsel for the parties that on the date of inspection, no mechanized mining was found in the river bed. However, according to the applicant, such mining was going on earlier which is disputed.

18. Original Application No. 550/2015, Original Application No. 517/2015 and Original Application No.

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same was wrongly given on account of mis-conception. Learned counsel for the State has submitted that the matter will be considered in light of the order which may be passed. The mining has taken place for about three months under the interim orders of the Tribunal and not thereafter.

20. In Original Application No. 481/2016, the allegation is that there is 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 the illegal mining does not place.

21. In Original Application No. 540/2015 and Original Application No. 90 /2016 it is stated that facts of these application are identical of Original Application No. 481/2016.

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

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

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Management Guidelines 2016, after extensive consultation with the States and the stake holders for about one year. The object of the guidelines is to restore and maintain ecology of rivers. The guidelines focus on preparation of District Survey Report and the Management Plan. The guidelines envisage mapping of the resources at District level, identification of appropriate sites for extraction, appraisal of the extraction process, putting in place the required environmental safeguards and rigorous monitoring of the volume of extracted material. The guidelines record that mining within or near river bed impacts physical characteristics of the stream such as channel geometry, bed elevation, substratum composition and stability, in-stream roughness of the bed, flow velocity, discharge capacity, sediment transport capacity, turbidity, temperature etc. Alteration or modification of the above attributes may cause hazardous impact on ecological equilibrium of riverine regime. This may also cause adverse impact on in-stream biota and riparian habitats. This disturbance may also cause changes in channel configuration and flow-paths. Loss of riparian habitat resulting from direct removal of vegetation along the stream bank to facilitate the use of a dragline or through the process of lowering the water table, bank undercutting, and channel incision. The physical composition and stability of substrates are altered as a result of instream mining and most of these physical effects may exacerbate sediment entrainment in the channel. Furthermore, the process of in-stream mining and gravel washing produces fine sediments under all flow conditions, resulting in a deposition of fine sediment in riffles as well as other habitats at low discharge. Excess sediment is considered the greatest pollutant in waters and constitutes one of the major environmental factors in the degradation of stream fisheries. However, in-stream mining may contribute additional sediment to downstream reaches due to the disruption of substrate stability. Once sediment enters the stream, it is best to let natural geomorphological and hydrological processes reach a dynamic equilibrium, rather than further exacerbating the situation by additional disturbance.

15. According to the guidelines, following considerations are required to be kept in mind for sustainable sand mining and gravel mining :

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the river. Sediment rating curve for the potential sites shall be developed and checked against the extracted volumes of sand and gravel.

c) Sand and gravel may be extracted across the entire active channel during the dry season.

d) Abandoned stream channels on terrace and inactive floodplains be preferred rather than active channels and their deltas and flood plains. Stream should not be diverted to form inactive channel.

e) Layers of sand and gravel which could be removed from the river bed shall depend on the width of the river and replenishment rate of the river.

f) Sand and gravel shall not be allowed to be extracted where erosion may occur, such as at the concave bank.

g) Segments of braided river system should be used preferably falling within the lateral migration area of the river regime that enhances the feasibility of sediment replenishment.

h) Sand and gravel shall not be extracted within 200 to 500 meter from any crucial hydraulic structure such as pumping station, water intakes, and bridges. The exact distance should be ascertained by the local authorities based on local situation. The cross-section survey should cover a minimum distance of 1.0 km upstream and 1.0 km downstream of the potential reach for extraction. The sediment sampling should include the bed material and bed material load before, during and after extraction period. Develop a sediment rating curve at the upstream end of the potential reach using the surveyed cross-section. Using the historical or gauged flow rating curve, determine the suitable period of high flow that can replenish the extracted volume. Calculate the extraction volume based on the sediment rating curve and high flow period after determining the allowable mining depth.

i) Sand and gravel could be extracted from the downstream of the sand bar at river bends. Retaining the upstream one to two thirds of the bar and riparian vegetation is accepted as a method to promote channel stability.

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replenish the quantity taken out during mining.

l) The Piedmont Zone (Bhabhar area) particularly in the Himalayan foothills, where riverbed material is mined, this sandy-gravelly track constitutes excellent conduits and holds the greater potential for ground water recharge. Mining in such areas should be preferred in locations selected away from the channel bank stretches.

m) Mining depth should be restricted to 3 meter and distance from the bank should be 3 meter or 10 percent of the river width whichever less.

n) The borrow area should preferably be located on the river side of the proposed embankment, because they get silted up in course of time. For low embankment less than 6 m in height, borrow area should not be selected within 25 m from the toe/heel of the embankment. In case of higher embankment the distance should not be less than 50 m. In order to obviate development of flow parallel to embankment, cross bars of width eight times the depth of borrow pits spaced 50 to 60 meters centre-to-centre should be left in the borrow pits.

o) Demarcation of mining area with pillars and geo-referencing should be done prior to start of mining”.

16. It is suggested that during survey of the area where mining should be permitted, following factors which must be kept in mind:

“i) A stable river is able to constantly transport the flow of sediments produced by watershed such that it's dimensions (width and depth) pattern and vertical profile are maintained without aggrading (building up) or degrading (scouring down).

ii) The amount of boulders, cobbles, pebbles, and sand deposited in river bed equals to the amount delivered to the river from catchment area and from bank erosion minus amount transported downstream each year.

iii) It is comparative nature of river to meander in their beds and therefore they will have to be provided with adequate corridor for meandering

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v) *River capturing is unavoidable.*

vi) *Fundamentally the lowest point of any stream is fixed by sea level.”*

17. *The Management Plan may require system of replenishment as well as preventive steps during the sand mining. Replenishment and reclamation of marine sand mining may require marine bio-diversity. Guidelines also deal with issue of depth of mining, strict regulated regime. The management of mining clusters should have a separate approach. Management of sand deposited after the floods should be treated as separate for mining. Monitoring system proposed includes safeguards during transport as well as checking of condition of mining.*

18. *As already noted, notification dated 15.01.2016 lays down the procedure for monitoring of sand mining and river bed mining. The monitoring procedure includes scanning of transport permit and uploading on server, checking en route the vehicle carrying mining material, tracking of vehicle alert, report generation and action review.*

19. *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.*

20. *We are informed that a High Powered Committee was constituted under the orders of this Tribunal, headed by Secretary, MOEF&CC, which has given its report dated September, 2016, suggesting inter alia the following:*

“(i) Project Proponent must ensure that the security features of Transport Permission viz. (a) Printed on Indian Bank Association (IBA) approved Magnetic Ink Character Recognition Code (MICR) paper; (c) Unique Barcode; (d) Unique Quick Response Code (QR); (e) Fugitive Ink Background; (f) Invisible Ink Mark; (g) Void Pantograph; (h) Watermark.

(ii) Project Proponent must ensure that the CCTV camera, Personal Computer (PC), Internet Connection, Power Back up, access control of mine

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security features enumerated at Paragraph (i) above and issue them to the mine lease holder through the District Collector. Once these Transport Permits or Receipts are issued, they would be uploaded on the server against that mine lease area. Each receipt should be preferably with pre-fixed quantity, so the total quantity gets determined for the receipts issued. When the Transport Permit or Receipt barcode gets scanned and invoice is generated, the particular barcode gets used and its validity time is recorded on the server. So all the details of transporting of mined out material can be captured on the server and the Transport Permit or Receipt cannot be reused.

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

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

(vii) The route of vehicle from source to destination should be tracked through the system using check points, Radio-frequency identification (RFID) Tags, and Global Positioning System (GPS) tracking.

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

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08.06.2018 in Execution Application No. 17 of 2016 in the case of Gurpreet Singh Bagga Vs. Ministry of Environment, Forest and Climate Change.

22. 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.

23. Since there is utter failure in the current monitoring mechanism followed by the State Boards, SEIAs and DEIAs, it is required to be revised for effective monitoring of sand and gravel mining and a dedicated monitoring mechanism be set up.

24. It has been brought to our notice that Ministry of Mines & Indian Bureau of Mines (IBM) have developed Mines Surveillance System (MSS), with assistance from Bhaskaracharya Institute for space applications and Geo-informatics (BISAG), Gandhinagar and Ministry of Electronics and Information Technology (MEITY). The Mining Surveillance System (MSS) is a satellite-based monitoring system which aims to establish a regime of responsive mineral administration by curbing instances of illegal mining activity through automatic remote sensing detection technology.”

24. The present matter will also stand covered by the said directions as far as the policy is concerned.

25. Since the present matter also involves identical issues, we direct the States of U.P. and Haryana to follow the same procedure in the present case. Compliance reports also be filed to the extent applicable to the present case before this Tribunal within three months by e-mail at filing.ngt@gmail.com.

26. A copy of this order be sent to the States of U.P and Haryana by e-mail for compliance. The applicant may also

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| | <p>Item Nos. 3 to 10</p> <p>September 05, 2018</p> <p>A + R</p> | <p>February, 2019, alongwith the case of Sudarsan Das Vs. State of West Bengal & Ors. – Original Application No. 173/2018(<i>supra</i>).</p> <p>....., CP (Adarsh Kumar Goel)</p> <p>....., JM (Dr. Jawad Rahim)</p> <p>.....,JM (S.P. Wangdi)</p> <p>.....,EM (Dr. Nagin Nanda)</p> <p>05.09.2018</p> |
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सत्यमेव जयते

SUSTAINABLE SAND MINING MANAGEMENT GUIDELINES

2016



पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय

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

Ministry of Environment, Forest and Climate Change

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

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Acknowledgment

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

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



SUSTAINABLE SAND MINING MANAGEMENT GUIDELINES

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प्रकाश जावडेकर
Prakash Javadekar



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MINISTER OF STATE (INDEPENDENT CHARGE)
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ENVIRONMENT, FOREST & CLIMATE CHANGE
भारत सरकार / GOVERNMENT OF INDIA



FOREWORD

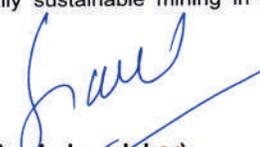
Environmental Protection and Sustainable Development have been the cornerstones of the policies and procedures governing the industrial and other developmental activities in India. The Ministry of Environment, Forest and Climate Change has taken several policy initiatives and enacted environmental and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

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

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

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

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


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अशोक लवासा
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भारत सरकार
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PREFACE

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

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

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



New Delhi
Date: 15-03-2016

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EXECUTIVE SUMMARY

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

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

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

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

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

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



INTRODUCTION

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

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

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

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

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



NEED FOR POLICY GUIDELINES

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

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

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

OBJECTIVE OF THE GUIDELINES

The Guidelines has been based on the following principles:

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

The main objectives of the Guidelines

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



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



THE EFFECT OF SAND AND GRAVEL MINING

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

The effects of sand and gravel mining are as follows:

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



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

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

The other deleterious impacts of indiscrete mining include

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

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

**All other things being equal:**

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



GENERAL APPROACH TO SUSTAINABLE SAND AND GRAVEL MINING

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

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



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



THE WORLD SCENARIO

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

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

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

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

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



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

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



INDIAN SCENARIO

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

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

In India the main sources of sand are:

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



THE PRICE ELASTICITY FOR DEMAND OF SAND

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

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

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

PROCESS OF SEDIMENT TRANSPORT

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

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

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



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

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

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

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

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

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

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



SUSTAINABLE SAND AND GRAVEL MINING GUIDELINES

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

The Processes under the Guidelines:

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

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

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



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

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

The survey shall contain:

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

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

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

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

a) Geomorphological studies

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

b) Geological studies

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

c) Climatic Factors

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



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

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

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

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

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



THE STRUCTURE OF DISTRICT SURVEY REPORT

The report can have following structure:

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

12. Drainage System with description of main rivers.

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

13. Salient Features of Important Rivers and Streams:

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

14. Methodology Adopted for Calculating of Mineral Potential

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



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

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

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

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

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

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

Present Status of Mining

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



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

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

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



MANAGEMENT PLAN

1. River Bed Mining Recommendations:

a) Permit Mining Volume Based on Measured Annual Replenishment

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

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

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

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

c) Limit River Bed Extraction Methods to Bar Skimming

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



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

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

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

e) Concentrate Activities to Minimise Disturbance:

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

f) Review Cumulative Effects of Sand and Gravel Extraction:

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

g) Maintain Flood Capacity:

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

h) Establish a Long-term Monitoring Program:

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

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

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



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

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

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

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

l) An Annual Status and Trends Report:

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

2. Off-Channel or Floodplain Extraction Recommendations

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

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

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

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



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

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

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

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

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

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

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

f) Establish a Long-term Monitoring Program

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

g) An Annual Status and Trends Report

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

3. Extraction Methods

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

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



thirds.

b) Dry-Pit Channel Mining

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

c) Wet-Pit Channel Mining

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

d) Bar Excavation

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

e) Channel-wide River bed Mining

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

4. Reclamation Plans

Reclamation plans should include:

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



MARINE SAND MINING AND IMPACT ON MARINE BIODIVERSITY

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

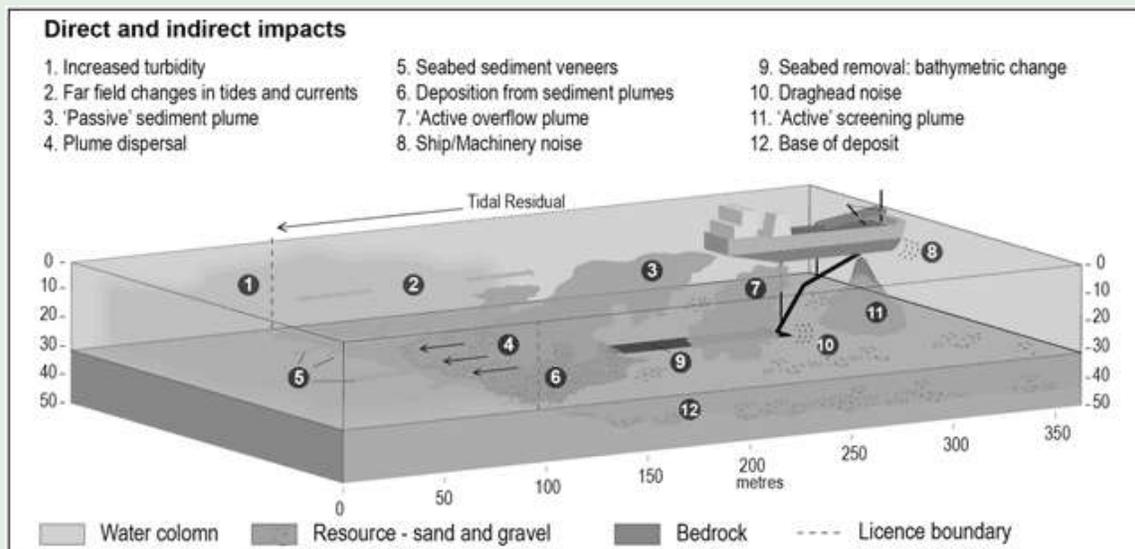


Figure: Direct and indirect consequences of aggregates dredging on the marine environment.

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



REDUCING CONSUMPTION OF SAND

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

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

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

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

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

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

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

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

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



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

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

Definition of Minor Mineral:

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

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

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

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

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



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

Size of the Mine Lease:

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

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

Period of Mine Lease:

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



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

Cluster of Mine Approach for Small Sized Mines:

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

Requirement of Mine Plan for Minor Minerals:

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

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

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

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

Depth of Mining:

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



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

Uniform Minor Mineral Concession Rules:

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

River Bed Mining:

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

Conclusion:

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



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

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



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

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

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

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

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



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

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

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

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

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

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



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

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

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

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

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



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

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



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



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



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

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

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

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



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

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



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

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



THE ISSUES AND MANAGEMENT OF MINING IN CLUSTER

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

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

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



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

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

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

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

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

"Mining of minor minerals:

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

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

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



These projects will be appraised based on the following documents:

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

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

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

About river sand mining it says that:

(iii) No river sand mining project, with mine lease area less than 5 ha, may be considered for granting EC. The river sand mining projects with lease area more than equal to 5 ha but less than 25 ha will be categorized as 'B2'. In addition to the requirement of documents, as brought out above under sub-para (ii) above for appraisal, such projects will be considered subject to the following stipulations:

- (a) The mining activity shall be done manually. The depth of mining shall be restricted to 3 m / water level, whichever is less.
- (b) For carrying out mining in proximity to any bridge and / or embankment, appropriate safety zone shall be worked out on case to case basis to the satisfaction of SEAC / SEIAA, taking into account the structural parameters, locational aspects, flow rate etc., and no mining shall be carried out in the safety zone so worked out. No in-stream mining shall be allowed.
- (c) The mining plan approved by the authorized agency of the State Government shall inter-alia include study to show that the annual replenishment of sand in the mining lease area is sufficient to sustain mining operations at levels prescribed in the mining plan and that the transport infrastructure is adequate to transport the mines material. In case of transportation by road the transport vehicles will be covered with the tarpaulin to minimize dust/ sand particle emissions.
- (d) EC will be valid for mine lease period subject to a ceiling of 5 years.

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



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

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

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

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

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

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



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

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

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

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

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

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



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

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

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



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



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

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



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



MANAGEMENT OF SAND DEPOSITED AFTER FLOOD ON AGRICULTURAL FIELD OF FARMERS

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

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

Mining of Sand

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

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

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



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



MINING OF SAND FROM AGRICULTURAL FIELD

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

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

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

CUSTOMARY RIGHT ON SAND MINING

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

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



DESILTING OF RESERVOIRS / BARRAGES / ANNECUTS / LAKES / CANALS

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

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

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

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

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

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



MINING PLAN

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

EVALUATING THE IMPACT OF SAND MINING

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

Sand Replenishment, Geomorphology and Hydrology:

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

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

Cross-sections:

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



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

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

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

Photo-documentation:

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

Groundwater Level:

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

Extent and Quality of Riparian Vegetation:

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

Riparian Vegetation Maps:

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

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



MONITORING SYSTEM FOR SUSTAINABLE SAND MINING

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

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

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



MONITORING SYSTEM FOR SUSTAINABLE SAND MINING

PROCEDURE FOR MONITORING OF SAND MINING OR RIVER BED MINING

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

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

2. Requirement at Mine Lease Site:

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

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

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



4. Proposed working of the system:

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

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

5. Checking On Route:

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

6. Breakdown of Vehicle:

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

7. Tracking of Vehicles:

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

8. Alerts or Report Generation and Action Review:

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

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



ADMINISTRATIVE STRUCTURE FOR ENVIRONMENT CLEARANCE AND ENSURING COMPLIANCE OF EC CONDITIONS

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

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

DISTRICT ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

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

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

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

The District Environment Impact Assessment Authority (DEIAA) :

The DEIAA will have following composition :

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

**DISTRICT LEVEL EXPERT APPRAISAL COMMITTEE:**

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

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

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

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



The Sub-Divisional Committee should comprise of following officers:

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

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

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

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

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



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



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

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



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

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

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



STANDARD ENVIRONMENTAL CONDITIONS FOR SAND MINING

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



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



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



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



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



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



APPENDIX: TABLE - 1

REVENUE FROM SAND MINING IN STATES / UTs

(Rs. in crores)

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

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



APPENDIX: TABLE - 2

NUMBER OF MINING LEASES IN STATE

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

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



APPENDIX: TABLE - 3

AVERAGE SIZE OF SAND MINING LEASES IN STATE / UT: 2014-15

(In Hectare)

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

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

**APPENDIX: TABLE - 4****AVERAGE PERIOD OF SAND MINING
LEASES IN STATE / UT**

(In Hectare)

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

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



APPENDIX: TABLE - 5

COMMON METHOD AND PRACTICE OF SAND MINING IN STATE / UT

| Sl.No. | STATE / U.T | COMMON METHOD AND PRACTICE OF SAND MINING |
|--------|-------------------|---|
| 01 | Andaman & Nicobar | <ol style="list-style-type: none"> 1. The Apex Court in its order dated 7.5.2002 in I.A. No. 502 in WP (C) No. 202 of 1995, had directed that extraction of sand be phased out @ minimum 20% per year on reducing balance basis to bring the sand mining to a level of 33% of the present level of mining within a maximum period of five years. 2. Since the level of extraction of sand in the territory in the year 2001-02 i.e. the base year, was 68909 cubic meter, the quantity of extractable sand is fixed at 22581 cubic meter. 3. The quantity of sea sand so allowed by MoEF is extracted from the identified and approved sites having such deposits on the sea beaches (identified accreting area) with adequate environmental safeguards so as to prevent any damage to the sensitive coastal eco-system including corals, turtle/ bird nesting sites and the protected areas. 4. The allotment of sea sand is made to the individuals by the Sand Allotment Committee constituted by the Lieutenant Governor under the Chairmanship of Chief Secretary who also heads the A&N CZMA. The quantum of sea sand allotted is fixed by the Committee on the basis of availability of sea sand and the number of applicants (local) applied for their bonafide use. |
| 02 | Arunachal Pradesh | <ol style="list-style-type: none"> 1. Mining of sand restricted to foothills only that too for a very short period. Grant of mining lease is kept in abeyance, short term mining permits are issued to various Central and State agencies for carrying out developmental works under the strict supervision of the departmental officers. |

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



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

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



APPENDIX: TABLE - 6

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

| Sl.No. | STATE / U.T | SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING |
|--------|-------------------|---|
| 01 | Andaman & Nicobar | The quantum of extractable sand fixed at 22581 cubic meter should be enhanced. This limit has been fixed by the orders of Hon'ble Supreme Court subject to study by National Institute of Oceanography. |
| 02 | Arunachal Pradesh | <ol style="list-style-type: none"> 1. For environmentally sustainable sand mining a strict and comprehensive sand mining policy need to be framed. 2. River sand is becoming a scarce commodity and hence exploring alternative to it has become imminent. Manufactured sand is a good alternative both for fine as well as coarse sand used in concrete. 3. Sand mining should be restricted to surface collection only without the use of heavy machinery. 4. Due to turbulent and inaccessible nature of rivers flowing in the hilly terrains of the state, deposition of the sand in the river bed is very negligible and except for few quarries in the foothills and plains, most of the notified quarries are boulders and mining of sand is very negligible. 5. In view of environment related issues the grant of mining lease for river bed minor mineral viz. sand, gravel, shingle, aggregate, boulder are kept in abeyance and extraction of these minerals is regulated only by grant of mining permits, that too not exceeding 3000 cubic meter in one permit. 6. For scientific mining of sand and other minor minerals Guideliness has been prepared and accordingly Geo-Technical Committee has been constituted under the chairmanship of ADC/SDO in the district level to determine the quantity of quarriable mineral that can be safely removed and also to give technical clearance for notification of quarries of smaller size, preferably within one hectare. |
| 03 | Chhattisgarh | <ol style="list-style-type: none"> 1. While attempting to prepare a model Guidelines / policy for the country, the differences that exist in different states may be taken into account. It may be tried to take all stakeholders along. |

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



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

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



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

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



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

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



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

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



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

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



| Sl.No. | STATE / U.T | SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING |
|--------|---------------|--|
| | | <p>Category B: Large deposits, where in rivers and streams having thickness of sand bed is medium to large, sand mining, shall be allowed with semi mechanized manner after obtaining Environment Clearance.</p> <p>Bikaner District: Bikaner district is a desert terrain where ground water table is very deep. Bajari is excavated above water table and it does not affect the water table. In addition to this boulder, gravel and waste generated due to bajari mining is used in reclamation of pits. Hence environment is not adversely affected due to bajari mining.</p> |
| 15 | Sikkim | <ol style="list-style-type: none"> 1. Forest department is the nodal department for sand and stone extraction from the riverbed. 2. Use of machines is prohibited. 3. Quarrying sites are allotted to village youth cooperatives. 4. For bigger companies quarry sites in forest area are allotted after FC. 5. State Government has considerations for allotment of quarries for Border Road Organization and MoD. 6. GoI can monitor mining in states through GIS. |
| 16 | Tamil Nadu | <ol style="list-style-type: none"> 1. Excess sand deposits identified in the flood plains and in-stream areas only to be mined in order to safeguard and maintain ground water table. 2. Sand mining operation has to be carried out between 6 am to 7 pm. 3. Mining operation should be carried out in a systematic manner without affecting environment and ecology of the area. |
| 17 | Uttar Pradesh | <ol style="list-style-type: none"> 1. Depth of mining cannot be more than 3 meter or water table whichever is less. 2. Mining can be done in slices forming benches where bench height cannot be more than 1 meter and bench width cannot be less than 10 meter. 3. A width of not less than 50 meter or 10% width of river can be restricted for mining activities from river bank. A condition can be imposed that mining will be done from river activities from river bank. 4. SEIAA should be decentralized to expedite EC process. It can be decentralized to district or zonal level. |

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



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

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


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

| Sl.No. | STATE / U.T | DESCRIPTION OF BEST PRACTICES |
|--------|-------------------------------------|---|
| 01 | Andaman & Nicobar | Institute of Ocean Management has been entrusted the task of identification of sand accreting sites. |
| 02 | Arunachal Pradesh | Mining of sand is restricted to foothills only that too for a very short period. |
| 03 | National Capital Territory of Delhi | In Delhi sand mining lease is granted by Revenue department. NOC from I&FC Deptt. Were issued with condition of limitation of depth, area of mining, operation timing limitation and limited period of NOC. Compliance of laid down conditions and monitoring is ensured by collector. |
| 04 | Himachal Pradesh | <ol style="list-style-type: none"> 1. The mining activities on river beds are allowed strictly as per the provisions of river / stream bed mining policy as under. 2. No river / stream bed mining shall be allowed without the recommendation of the Sub Divisional Level Committee constituted under the Chairmanship of Sub Divisional Magistrate having XEN PWD, Irrigation and Public Health, SPCB, DFO and Mining Officer as its member. 3. Nor river / stream bed mining shall be allowed within 75 meter from the periphery of soil conservation works, nursery plantations, check dams or within the distance as recommended by the Sub-Divisional Committee whichever is more. 4. No river / stream bed mining shall be allowed within 1/10th of its span or 5 meters from the banks or as specified by the Sub-Divisional Level Committee, whichever is more. 5. Nor river / stream bed mining shall be allowed within 200 meters upstream and downstream of water supply scheme or as specified by the Committee whichever is more. 6. Nor river / stream bed mining shall be allowed within 200 meters upstream and 200 to 500 meters downstream of bridges depending upon the site specific conditions. |

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



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

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



APPENDIX: TABLE - 8

STATUS OF PROMULGATION OF RULE ON SAND MINING IN THE STATE / UT

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

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



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

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



APPENDIX: TABLE -9

NORMAL DATES OF ONSET AND WITHDRAWAL OF SOUTH-WEST MONSOON

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

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



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

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

ENSURING SUSTAINABLE SAND MINING FOR SUSTAINABLE DEVELOPMENT

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

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

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

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

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



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

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

Original Application No. 360/2015

(With report dated 15.01.2021)

National Green Tribunal Bar Association Applicant

Versus

Virender Singh (State of Gujarat) Respondent

With

Original Application No. 366/2015

National Green Tribunal Bar Association Applicant

Versus

Dr. Sarvabhoun Bagali (State of Karnataka) Respondent

With

Original Application No. 368/2015

National Green Tribunal Bar Association Applicant

Versus

Dr. Sarvabhoun Bagali (State of Karnataka) Respondent

With

Original Application No. 173/2018
(Earlier O.A. No. 89/2017 (EZ))

Sudarsan Das Applicant

Versus

State of West Bengal & Ors. Respondent(s)

With

Original Application No. 874/2018

In Re: News item published in "The Tribune " Authored by Arun Sharma
Titled "Mounds of sand on Sutlej banks, mining mafia digs in"

With

Original Application No. 44/2016

Mushtakeem Applicant

Versus

MoEF & CC & Ors. Respondent(s)

With

Sandeep Kumar Original Application No. 517/2015 Applicant

Versus

Ministry of Environment, Forests and
Climate Change & Ors. Respondent(s)

With

Virender Kumar Original Application No. 550/2015 Applicant

Versus

Ministry of Environment, Forests and
Climate Change & Ors. Respondent(s)

With

Sandeep Kumar Original Application No. 530/2016 Applicant

Versus

Ministry of Environment, Forests and
Climate Change & Ors. Respondent(s)

With

M/s Ganga Yamuna Mining Co. Original Application No. 272/2016 Applicant

Versus

State of Haryana & Ors. Respondent(s)

With

Joginder Singh Original Application No. 481/2016 Applicant

Versus

Ministry of Environment & Forest Respondent

With

Ved Pal Singh Original Application No. 540/2015 Applicant

Versus

| | | |
|---|--|---------------|
| Ministry of Environment and Forests & Ors. | | Respondent(s) |
| With | | |
| Original Application No. 90/2016 | | |
| Chander Mohan Uppal | | Applicant |
| Versus | | |
| State of U.P. & Ors. | | Respondent(s) |
| With | | |
| Execution Application No. 40/2017 IN O.A. No. 517/2015 | | |
| Sandeep Kumar | | Applicant |
| Versus | | |
| Ministry of Environment, Forests and Climate Change & Ors. | | Respondent(s) |
| With | | |
| Original Application No. 671/2017 (Earlier O.A.No.123/2014) | | |
| Himmat Singh Shekhawat | | Applicant |
| Versus | | |
| State of Rajasthan & Ors. | | Respondent(s) |
| With | | |
| Original Application No. 726/2018 | | |
| Rupesh Pethe | | Applicant |
| Versus | | |
| State of M.P. & Ors. | | Respondent(s) |
| With | | |
| Original Application No. 456/2018 (Earlier O.A. No. 146/2014 (CZ)) | | |
| Nityanand Mishra | | Applicant |
| Versus | | |
| State of M.P. & Ors. | | Respondent(s) |
| With | | |
| Original Application No. 1086/2018 (Earlier O.A.No.140/2014) | | |
| Nanga Ram Dangi | | Applicant |
| Versus | | |

Secretary, Department of Environment &
Forests & Ors.

Respondent(s)

With

Original Application No. 575/2019

Yaduraj Singh Jat

Applicant

Versus

State of Rajasthan

Respondent

Date of hearing: 26.02.2021

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Applicant: Ms. Katyayni, Advocate in OA 1086/2018

Amicus Curiae: Mr. Raj Panjwani, Senior Advocate with Mr. Aagney Sail, Advocate

Respondent(s): Mr. Divya Prakash Pande, Advocate. for CPCB & MoEF & CC
Mr. Raj Kumar, Advocate for CPCB in OA 726/2018
Ms. Soni Singh, Advocate for CPCB in OA 456/2018
Mr. Attin Shankar Rastogi, Mr. Balendu Shekhar & Mr. Shlok
Chandra, Advocates for MoEF & CC
Mr. Ankit Verma, Advocate for State of UP
Mr. Rahul Khurana, Advocate for State of Haryana
Mr. Darpan KM, Advocate for State of Karnataka
Ms. Madhumita Bhattacharjee, Advocate. for State of West Bengal
Mr. Vikas Mahajan, AAG for State of HP
Mr. Maulik Nanavati, Advocate for State of Gujarat
Ms. Soumya Priyadarshinee, Advocate for State of MP
Ms. Sakshi Popli, Advocate for DPCC

ORDER

1. The issue for consideration in this group of matters relates to updation of enforcement and monitoring mechanism to control and regulate illegal sand mining (including riverbed sand mining) in the light of directions in the judgments of the Hon'ble Supreme Court, including in *Deepak Kumar v. State of Haryana & Ors.*: (2012) 4 SCC 629 and *Goa Foundation v. Union of India & Ors.* (2014) 6 SCC 590 and orders of this Tribunal.

2. Some of the matters have been pending for about seven years while others have been tagged to the pending matters later, from time to time, in view of common question. We need not refer to the individual facts and all the earlier order. It will suffice to refer to some of the significant orders passed from time to time given in a tabular form as follows:

| Sl. No. | Party name | Date of orders | Particulars |
|---------|--|----------------|--|
| 1. | OA No. 173/2018 Sudarsan Das v. State of West Bengal & Ors. | 04.09.2018 | Inter alia directing revision of monitoring mechanism by the MoEF&CC. |
| 2. | OA No. 44/2016 Mushtakeem v. MoEF&CC & Ors. | 05.09.2018 | |
| 3. | OA No. 186 of 2016 Satendra Pandey Vs. Ministry of Environment, Forest & Climate Change & Anr | 13.09.2018 | Inter alia disapproving dispensing with requirement of public hearing and requiring evaluation by DEIAA. |
| 4. | OA 606/2018, Compliance of Municipal Solid Waste Management Rules, 2016 | 16.01.2019 | Requiring the Chief Secretaries to monitor the subject of unregulated and unscientific sand mining |
| 5. | O.A. No. 360/2015, National Green Tribunal Bar Association v. Virender Singh (State of Gujarat) | 05.04.2019 | Inter alia consideration of scale of compensation and revised monitoring mechanism |
| 6. | OA No. 44/2016 Mushtakeem v. MoEF&CC & Ors. | 19.02.2020 | Inter alia modifying the mechanism for release of vehicles |
| 7. | OA No. 360/2015 National Green Tribunal Bar Association v. Virender Singh (State of Gujarat) | 17.08.2020 | Inter alia considering the scale of compensation proposed by the CPCB |
| 8. | O.A. No. 40/2020, Pawan Kumar v. State of Bihar & Ors. | 14.10.2020 | Inter alia engagement of experts from NABT/QCCI for preparation of DSR/ replenishment study |
| 9. | O.A. No. 726 of 2018 Rupesh Pethe v. State of M.P. & Ors., | 04.11.2020 | |

3. We may now refer to the developments which have taken place during pendency of the matters and then proceed to decide the surviving issues, as further discussed in para 24:

- a. **enforcement of SSMG-2016 and EMGSM-2020,**
- b. **compensation regime,**
- c. **procedure for seizure and release of vehicles,**

- d. **periodic interaction among the stakeholders as discussed in later part of the judgment,**
- e. **designing and reviewing monitoring mechanism from time to time including grievance redressal.**

‘Sustainable Sand Mining and Management Guidelines, 2016’ (SSMG-2016) and “Enforcement and Monitoring Guidelines for Sand Mining, 2020” (EMGSM-2020)

4. In the course of proceedings, the Ministry of Environment, Forest and Climate Change (MoEF&CC) issued ‘Sustainable Sand Mining and Management Guidelines, 2016’ (SSMG-2016) under the provisions of the Environment (Protection) Act, 1986 (EP Act, 1986) on 15.01.2016. Further, in the light of the September 2016 report of the High-Powered Committee (constituted by the Tribunal), headed by the Secretary, MoEF&CC and suggestions as noted in order dated 04.09.2018 in *OA 173/2018, Sudarsan Das v. State of West Bengal & Ors.*, the Tribunal directed revision of the guidelines.¹ Accordingly, the MoEF&CC has issued “Enforcement

¹ Para 25 of the said order is as follows:

“25. In view of above discussion, we are of the view that since the subject of mining is also required to be regulated for protection of environment and it is to take care of this requirement, MoEF&CC has issued directions from time to time under Section 3 and 5 of the Environment (Protection) Act, 1986. The MoEF&CC needs to revise its directions keeping in mind the following:

- i. Mining Surveillance System discussed in para 23 above be finalized in consultation with ISRO Hyderabad.
- ii. Safeguards suggested in Sustainable Sand Mining Guidelines published by the MoEF&CC in the year 2016.
- iii. Suggestions in the High Power Committee Report.
- iv. Requirement of demarcation of boundaries being published in respect of different leases in public domain.
- v. Need to issue SOP laying down mechanism to evaluate loss to the ecology and to recover the cost of restoration of such damage from the legal or illegal miners. Such evaluation must include cost of mining material as well as cost of ecological restoration and net present value of future eco system services forgone.
- vi. Need to set up a dedicated institutional mechanism for effective monitoring of sand and gravel mining which may also take care of mining done without any Environmental Clearance as well as mining done in violation of Environmental Clearance conditions.
- vii. The Mining Department may make a provision for keeping apart atleast 25% of the value of mined material for restoration of the area affected by the mining and also for compensating the inhabitants affected by the mining.
- viii. One of the conditions of every lease of mine or minerals would be that there will be independent environmental audit atleast once in a year by reputed third party entity and report of such audit be placed in public domain.
- ix. In the course of such environmental audit, a three-member committee of the local inhabitants will also be associated. Composition of three members committee may

and Monitoring Guidelines for Sand Mining, 2020” (EMGSM 2020), uploaded on the website on 27.01.2020 and communicated to all the States. Salient features thereof will be noted later.

Issue of EC procedure being handled by SEIAA instead of DEIAA, after public hearing and other necessary steps, procedure for revision of DSR preparation and enforcement mechanism in States, including compensation regime and seizure and release of vehicles

5. Vide order dated 13.09.2018 in *O.A. No. 186/2016, Satyender Pandey Vs. MoEF*, further direction was issued against dispensing with the requirement of public hearing and evaluation by SEIAA in terms of the judgment of the Hon’ble Supreme Court in *Deepak Kumar, supra* thereby the guidelines/notification dated 15.01.2016 dispensing with such requirement was held to be hit by the judgment of the Hon’ble Supreme Court in *Deepak Kumar, supra* and thus not enforceable.

6. On 05.04.2019, the Tribunal conducted comprehensive review of the matter and noted following issues required consideration. Directions were issued with reference to the said issues:

- “(a) Revision of Sustainable Sand Mining Guidelines, 2016 by the MoEF&CC in the light of directions of this Tribunal vide order dated 04.09.2018 in Sudarsan Das (supra).**
- (b) Compliance of Sustainable Sand Mining Guidelines, 2016 as may be revised by MoEF&CC as above.**
- (c) Effective monitoring mechanism for preventive and remedial measures as directed in orders of this Tribunal, including surveillance system and recovery of compensation.**
- (d) Directions in individual cases listed today.**
- (e) Scale of compensation.”**

7. Considering the extent of illegality in the process, apart from directing revision of the Guidelines as above, the Tribunal directed the

preferably include ex-servicemen, former teacher and former civil servant. The Committee will be nominated by the District Magistrate.”

States² to review their monitoring mechanism in the light of observations of this Tribunal in earlier orders, including orders dated 04.09.2018 in *Sudarsan Das v. State of West Bengal & Ors*, 05.09.2018 in *Mushtakeem v. MoEF&CC & Ors*. and 16.01.2019 in OA 606/2018, *Compliance of Municipal Solid Waste Management Rules, 2016*. **Though direction was issued to the States who were parties before the Tribunal, the directions are of general nature applicable to sand mining in all the State /UTs.** The Tribunal also considered compliance reports from different States after finding that the response of the State was not satisfactory.

Seizure and Release of vehicles involved in illegal mining

8. Another issue bearing on the enforcement mechanism is the action against the vehicles used in illegal sand mining. Seizure of such vehicles is required and release of seized vehicles lightly defeats the purpose of the coercive measures. Since the vehicles are in a way weapon of offence, the same cannot be dealt with in the manner disputed property is dealt with under section 451 Cr.PC. by releasing the same in favour of the ostensible owner by taking an entrustment/indemnity bond/*sapurdginama*. In *Sujit Kumar Rana*, (2004) 4 SCC 129 and order dated 26.03.2019 in Cr. A. 524/2019, *State of Madhya Pradesh v. Uday Singh*, it was held that special procedure for seizure and release of such vehicles prevails over the procedure under Section 451 Cr.P.C. This Tribunal earlier directed, in the case of illegal mining in Meghalaya that such vehicles should be released only on the payment of 50% of the showroom value. The same was affirmed by the Hon'ble Supreme Court in *2019 (8) SCC 177*. Similar order was passed by the Tribunal on 10.01.2019 in O.A. No. 670/2018, *Atul*

²The States of West Bengal, Gujarat, Karnataka, Maharashtra, Punjab, Uttar Pradesh, Haryana, Madhya Pradesh, Andhra Pradesh, Bihar, Uttarakhand, Jammu and Kashmir, Goa, Kerala, Telangana and Tamil Nadu and Himachal Pradesh

Chouhan v. State of U.P., which stands affirmed by the Hon'ble Supreme Court vide order dated 07.05.2019 in C.A. No. 1590/2019. **Thus, the procedure under Cr.P.C. for release of vehicles on *superdari* without stringent conditions would not apply in respect of action taken for enforcement of Sustainable Guidelines issued under the Environment (Protection) Act, 1986 (EP Act) and for enforcement of orders of this Tribunal under Section 15 of the National Green Tribunal Act, 2010 (NGT Act).** However, having regard to the difficulty expressed by the State that requirement to pay 50% of the showroom value of the vehicle was resulting in vehicles not being released at all, the earlier order was modified on 19.02.2020 to the effect that following scale of amount be recovered for release of the seized vehicles:-

| Sr. No. | Category of Vehicle | Penalty Amount |
|---|--|-----------------------|
| 1 | <i>Vehicles/Equipments/Excavators with showroom value more than Rs. 25 lacs and less than 5 years old.</i> | Rs. 4 lacs |
| 2 | <i>Vehicles/Equipments/Excavators with showroom value more than Rs. 25 lacs and more than 5 years but less than 10 years old.</i> | Rs. 3 lacs |
| 3 | <i>For the remaining Vehicles older than 10 years/Equipments/ Excavators which are otherwise legally permissible to be operated and not covered by Serial No. 1 and 2.</i> | Rs. 2 lacs |
| Note - I: <i>On repetition of the offence by the same vehicle/ equipment, Order dated 05.04.2019 will be applicable.</i> | | |
| Note - II: <i>The option of release may be available for a period of one month from the date of seizure and thereafter, the vehicles may be confiscated and auctioned.</i> | | |

9. Following further directions were issued :-

“6. The State may issue an appropriate Office Order/Rule to the above effect and publish the same. Needless to say that any private contract between a financier and a debtor cannot affect the States’ sovereign power to protect the environment and take incidental coercive measure for enforcement of rule of law. Lien of the State will override any private interest. The above compensation regime will be over and above any existing Rules or provisions. The amount collected may be

remitted to the State PCBs/PCCs for being utilized for restoration of the environment.

7. *The above course of action will be permissible to all the States at their option.*”

Scale of compensation for violations on polluter pays principle

10. Vide order dated 17.08.2020, the Tribunal considered the CPCB report dated 30.01.2020, in pursuance of earlier orders on scale of compensation to be recovered for violation of norms for mining on polluter pays principle and the matter was deferred for further consideration of such scale and further orders in the light of the EMGSM 2020. **On the issue of scale of compensation for violations, the Tribunal held that the same has to be calculated having regard to the polluter pays principle and not mere loss of royalty. This requires taking into account value of the illegally mined material and cost of restoration of the environment.** CPCB did the exercise by constituting an expert Committee. The Tribunal considered the report as follows:-

“8. *The Committee considered two approaches:*

- (I) Approach 1: Direct Compensation based on the market value of extraction, adjusted for ecological damages.**
- (II) Approach 2: Computing a Simplified NPV for ecological damages.**

9. *In the first approach, the criteria adopted is:*

- *Exceedance Factor (EF).*
- *Risk Factor (RF).*
- *Deterrence Factor (DF).*

10. *Approach 1 is demonstrated by Table 1 as follows:*

“

| Table No. 01: Approach 1 | | | | |
|--|--|---|----------------------------------|--|
| Permitted Quantity (in MT or m³) | Total Extraction (in MT or m³) | Excess Extraction (in MT or m³) | Exceedance in Extraction: | Compensation Charge (in Rs.) |
| X | Y | Z = Y-X | Z/ X | D * (1+RF + DF) Where D = Z x Market Value-of-the-material-per-MT-or-m ³ |

| | | | | |
|--|--|--|--|---|
| | | | | DF = 0.3 if Z/X = 0.11 to 0.40 DF = 0.6 if Z/X = 0.41 to 0.70 DF = 1 if Z/X >= 0.71 |
| | | | | RF = 0.25, 0.50, 0.75, 1.00 (as per table 2) |

11. Approach 2 is demonstrated by following formula:

*“Till such time as data and information for a comprehensive NPV is worked out in a site specific manner to account for all (or atleast the major) ecological damages, a simplified NPV, proxied on the market value of the illegally extracted amount may be computed. In this case the NPV approach would imply that **the total benefits from the activity of sand mining (as represented by the market value of the extracted amount) be deducted from the total ecological costs** imposed by the activity. In the absence of data on benefits and costs separately, we recommend a modification of the formula as shown below:*

*Total Benefits(B) = Market Value of illegal extraction : D
(refer Table 1)*

*Total Ecological Costs = Market Value Adjusted for risk factor: D * RF (refer Table1).*

For present purposes, it is assumed that the Benefits would accrue only in the first year (in which the extraction of the illegally mined material takes place), while the ecological costs would continue to be felt over a period of time. NPV is to be calculated for a period of 5 years on the net value, $\Sigma (C-B)$, at a discount rate ranging from 8%-5%, varying in inverse with the risk factor. Thus, where the highest risk factor (say 1) is applicable, the discount rate applicable would be the lowest (say 5% in this case).”

12. Final recommendation is as follows:

*“Thus, it is recommended that the annual net present value (NPV) of the amount arrived at after taking the difference between the costs and the benefits through the use of the above approach, maybe calculated for a period of 5 years at a discount rate of 5% for mining which is in a severe ecological damage risk zone. The rationale for levying this NPV is based on expert opinion that reversal and/or restoration of the ecological damages is usually not possible within a short period of time and rarely is it feasible to achieve 100% restoration, even if the sand deposition in the river basin is restored through flooding in subsequent years. The negative externalities of the mining activity are therefore to be accounted for in this manner. Ideally, the worth of all such damages, including costs of those which can be restored should be charged. **However, till data on site-specific assessments becomes available, this approach may be***

adopted in the interim. In situations where the risk categorization charged. However, till data on site-specific assessments becomes available, this approach may be adopted in the interim. In situations where the risk categorisation is unavailable or pending calculation, the following Discount Rates may be considered:

| | | | | |
|--------------------|------|----------|-------------|--------|
| Severity | Mild | Moderate | Significant | Severe |
| Risk Level | 1 | 2 | 3 | 4 |
| Risk Factor | 0.25 | 0.50 | 0.75 | 1.0 |
| Discount | 8% | 7% | 6% | 5% |

11. Annexure-A appended to the report gives the calculation as follows:

“Compensation Charge (Scenario II - explicit accounting of NPV)

Market Value of Illegally Mined Material (D) 5000*400 = 2000000/-

Annual Value of Foregone Ecological Values D*RF = 2000000/-

- **Present Value of Foregone Ecological Values (@ 5% discount rate and over 5 years)**

$$PV = \sum_{t=1}^5 \frac{(D+RT)}{(1+r)^t}$$

$$= \frac{(2000000)}{(1+0.05)^1} + \frac{(2000000)}{(1+0.05)^2} + \frac{(2000000)}{(1+0.05)^3} + \frac{(2000000)}{(1+0.05)^4} + \frac{(2000000)}{(1+0.05)^5}$$

$$= \text{Rs. } 86,58,953/-$$

- *Net Present Value (after netting out market value of illegally mined material) - i.e., Total Compensation to be levied*

$$= NPV - D$$

$$= \text{Rs. } 66,58,953/-$$

Compensation Charge in above case:

| | |
|---|--|
| Approach 1 (no explicit accounting of NPV) | Approach 2 (explicit accounting of NPV) |
| D*(1+RF+DF) | @ 5% discount rate and over 5 years |
| Rs. 46,00,000/- | Rs. 66,58,953/- |

12. The Tribunal directed undertaking of scenario analysis, as suggested on behalf of the applicant and to furnish a further report accordingly. Further report dated 12.10.2020 has been filed by the CPCB reiterating its earlier report. **We propose to approve approach-2 in the report.** Apart from the above, a report dated 15.01.2021 has been filed by

the Oversight Committee for the State of UP³ to which reference will be made later.

Procedure for DSR/EC

13. Vide order dated 14.10.2020 in O.A. No. 40/2020, *Pawan Kumar v. State of Bihar & Ors.*, the issue of preparation of District Survey Report (DSR) by Experts was considered. Vide Notification dated 25.07.2018 issued by the MoEF&CC, under Section 3(2)(v) of the EP Act, 1986 amending EIA Notification dated 14.09.2006, procedure for preparation of DSR for sand mining/riverbed mining was laid down. **The DSR is crucial as it contains Environment Management plan, including the replenishment study and other safeguards and is the basis to consider the environment impact of mining based on which decision to grant the Environmental Clearance is taken.** The Tribunal held that for such crucial exercise, the **Experts should be out of those accredited by the National Accreditation Board of Education and Training/ Quality Control Council of India (NABT/QCCI) in terms of O.M. of MoEF&CC dated 16.03.2010.** Verification by the District Magistrate and evaluation by the SEAC was also necessary. Accordingly, following directions were issued in relation to a matter arising from the State of Bihar:-

*“(ii) As the DEIAA is not functioning as a consequence of the decision of the Tribunal in Satendra Pandey (supra), **the DSR shall be prepared through a consultant(s) accredited by the National Accreditation Board of Education and Training/ Quality Control Council of India in terms of O.M. of MoEF&CC dated 16.03.2010.***

*“(iii) **The DSR so prepared shall be submitted to the District Magistrate who shall verify the DSR only in respect of the relevant facts pertaining to the physical and geographical features of the district which shall be distinct from the scientific findings based on the parameters prescribed in the SSMMG-2016. After such verification, the District Magistrate shall forward the DSR for examination and evaluation by the State Expert Appraisal Committee (SEAC) having regarding to the fact***

³ constituted by this Tribunal to oversee compliance of environmental issues, on suggestions of the State Government.

that the SEIAA comprises of technical/scientific experts. The SEAC after appraisal of the report shall forward it to the SEIAA for consideration and approval if it meets all scientific/technical requirements.

(iv) While preparing the DSR, the MoEF&CC Accredited Agency/Consultant shall scrupulously follow the procedure and the parameters laid down under the SSMMG-2016 and EMGSM-2020 read in sync with each other.”

14. Considering the above, vide order dated 04.11.2020 in O.A. No. 726 of 2018, *Rupesh Pethe v. State of M.P. & Ors.*, the Tribunal directed that the above direction ought to be followed pan India, as follows:-

“5. The above direction may be followed by the State of MP also for the sake of uniformity. Further information required to be furnished is about the extent of illegal mining, extent of action taken, including the compensation recovered, vehicles seized and other coercive measures and impact of such action. The State of M.P. may compile relevant directions on the subject including the binding order of any Courts or Tribunal. This exercise may be undertaken jointly by the Secretary Geology and Mining, Member Secretary State PCB and Member Secretary SEIAA. In light of above, the State may further revise its policy and exercise. Let further compliance status be furnished before the next date by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF.

6. We are of the view that the above directions need to be followed by all other States where the issue of mining is relevant.

7. A copy of this order be forwarded to the Chief Secretaries of all the States and UTs by e-mail for compliance.”

Adverse impact of unscientific/unregulated Sand Mining

15. It is undisputed that there is huge degradation of environment on account of unregulated sand mining remains which is otherwise lucrative activity. It poses threat to bio-diversity, could destroy riverine vegetation, cause erosion, pollute water sources, badly affecting riparian ecology, damaging ecosystem of rivers, safety of bridges, weakening of riverbeds, destruction of natural habitats of organisms living on the riverbeds, affects fish breeding and migration, spell disaster for the conservation bird

species, increase saline water in the rivers. It has direct impact on the physical habitat characteristics of the rivers such as bed elevation, substrate composition and stability, in-stream roughness elements, depth, velocity, turbidity, sediment transport, stream discharge and temperature. Increase in demand of sand has placed immense pressure in the supply of sand resource and mining activities were going on illegally as well as legally without requisite restrictions. Lack of proper planning and sand management disturbs marine ecosystem and upset the ability of natural marine processes to replenish the sand. The Hon'ble Supreme Court (in Deepak Kumar, supra) noted that core group was constituted by the MoEF&CC to examine the impact of minor minerals on riverbeds and ground waters. A draft report was prepared recommending mandatory preparation of mining plan on the pattern of mining plans for major minerals. Further recommendations are reclamation and rehabilitation of abandoned mines, proportion of hydro geo-logical balance for minerals below ground water table limiting depth of mining to 3 meter and identification on locations where mining should be permitted was required. There is need for identifying safety zones in the proximity of intendments. Thus, strict regulatory parameters were required for regulating mining of minor minerals. It was noted that in-stream mining lowers the stream bottom of rivers which may lead to bank erosion. Depletion of sand in the stream bed causes deepening of rivers which may result in destruction of aquatic and riparian habitats. It has impact on stream's physical habitat characteristics.

16. *In State (NCT of Delhi) v. Sanjay, (2014) 9 SCC 772*, at page 790, it was observed :

“32. *The policy and object of the Mines and Minerals Act and Rules have a long history and are the result of an increasing awareness of*

*the compelling need to restore the serious ecological imbalance and to stop the damages being caused to the nature. The Court cannot lose sight of the fact that **adverse and destructive environmental impact of sand mining has been discussed in the UNEP Global Environmental Alert Service Report. As per the contents of the Report, lack of proper scientific methodology for river sand mining has led to indiscriminate sand mining, while weak governance and corruption have led to widespread illegal mining. While referring to the proposition in India, it was stated that sand trading is a lucrative business, and there is evidence of illegal trading such as the case of the influential mafias in our country.***

33. The mining of aggregates in rivers has led to severe damage to rivers, including pollution and changes in levels of pH. Removing sediment from rivers causes the river to cut its channel through the bed of the valley floor, or channel incision, both upstream and downstream of the extraction site. This leads to coarsening of bed material and lateral channel instability. It can change the riverbed itself. The removal of more than 12 million tonnes of sand a year from Vembanad Lake catchment in India has led to the lowering of the riverbed by 7 to 15 cm a year. Incision can also cause the alluvial aquifer to drain to a lower level, resulting in a loss of aquifer storage. It can also increase flood frequency and intensity by reducing flood regulation capacity. However, lowering the water table is most threatening to water supply exacerbating drought occurrence and severity as tributaries of major rivers dry up when sand mining reaches certain thresholds. Illegal sand mining also causes erosion. Damming and mining have reduced sediment delivery from rivers to many coastal areas, leading to accelerated beach erosion.

34. The Report also dealt with the astonishing impact of sand mining on the economy. It states that tourism may be affected through beach erosion. Fishing, both traditional and commercial, can be affected through destruction of benthic fauna. Agriculture could be affected through loss of agricultural land from river erosion and the lowering of the water table. The insurance sector is affected through exacerbation of the impact of extreme events such as floods, droughts and storm surges through decreased protection of beach fronts. The erosion of coastal areas and beaches affects houses and infrastructure. A decrease in bed load or channel shortening can cause downstream erosion including bank erosion and the undercutting or undermining of engineering structures such as bridges, side protection walls and structures for water supply.

35. Sand is often removed from beaches to build hotels, roads and other tourism-related infrastructure. In some locations, continued construction is likely to lead to an unsustainable situation and destruction of the main natural attraction for visitors—beaches themselves. Mining from, within or near a riverbed has a direct impact on the stream's physical characteristics, such as channel geometry, bed elevation, substratum composition and stability, instream roughness of the bed, flow velocity, discharge capacity, sediment transportation capacity, turbidity, temperature, etc. Alteration or

modification of the above attributes may cause hazardous impact on ecological equilibrium of riverine regime. This may also cause adverse impact on instream biota and riparian habitats. This disturbance may also cause changes in channel configuration and flow paths

.....Today, demand for sand and gravel continues to increase. Mining operators, instead of working in conjunction with cognizant resource agencies to ensure that sand mining is conducted in a responsible manner, are engaged in full-time profiteering. Excessive in-stream sand and gravel mining from riverbeds and like resources causes the degradation of rivers. In-stream mining lowers the stream bottom, which leads to bank erosion. Depletion of sand in the stream-bed and along coastal areas causes the deepening of rivers and estuaries and enlargement of river mouths and coastal inlets. It also leads to saline water intrusion from the nearby sea. The effect of mining is compounded by the effect of sea level rise. Any volume of sand exported from stream-beds and coastal areas is a loss to the system. Excessive in-stream sand mining is a threat to bridges, river banks and nearby structures. Sand mining also affects the adjoining groundwater system and the uses that local people make of the river. Further, according to researches, in-stream sand mining results in the destruction of aquatic and riparian habitat through wholesale changes in the channel morphology. The ill effects include bed degradation, bed coarsening, lowered water tables near the stream-bed and channel instability. These physical impacts cause degradation of riparian and aquatic biota and may lead to the undermining of bridges and other structures. Continued extraction of sand from riverbeds may also cause the entire stream-bed to degrade to the depth of excavation.”

Need for regulation under the Water, Air and EP Acts by PCBs, apart from the Mining authorities under the Mining law

17. Again, in Goa Foundation, supra (prs 74-76) it was observed that **mining was required to be regulated not only by the Mining department but also by the PCBs under the Water and Air Act and by the MoEF under the EP Act. It is made clear that the environment laws override other laws and any provision to the contrary in the Mines Act will not stay in the way of enforcing the environment norms. In this regard reference may also be made to report of the Ministry of Mines entitled “Sand Mining Framework” which will not stand in the way of modified mechanism in accordance with this order.**

Salient features of the EMGSM-2020

18. We may note the salient features of the EMGSM-2020, which are supplemental to existing SSMG-2016 and seek to provide effective enforcement and monitoring from the stage of identification of source to its dispatch and end use which requires involvement of all stakeholders viz. Central Government, State Government, Leaseholders/Mine Owners, Distributors, Dealers, Transporters and Consumers (bulk & retail). EMGSM refer to the judgment of the Hon'ble Supreme Court in *Deepak Kumar Vs. State of Haryana & Ors. (2012) 4 SCC 629* making EC mandatory irrespective of the area of mining lease, followed by monitoring in terms of the Environment Management Plan, using IT and IT enabled services. **Monitoring has to be with reference to quantity of mined material, transportation with a view to promote environmental protection, limit negative physiological, hydrogeological and social impacts underpinning sustainable economic growth.** Observations in the order of this Tribunal dated 04.09.2018 in O.A. 173/2018 in Sudarsan Das vs. State of West Bengal & Ors. has also been referred to as follows:

“There can be no two views that an effective institutional monitoring mechanism is required not only at the stage when Environmental Clearance is granted but also at subsequent stages”.

“The guidelines focus on the preparation of District Survey Report and the Management Plan” ...

We are of the view that all the safeguards which are suggested in sustainable sand mining guidelines as well as notification dated 15.01.2016 ought to be scrupulously followed.” ...

It is a known fact that in spite of the above-suggested guidelines being in existence, on the ground level, illegal mining is still going on. The existing mechanism has not been successful and effective in remedying the situation.” ...

Since there is an utter failure in the current monitoring mechanism followed by the State Boards, SEIAAs and DEIAAs, it is required to be revised for effective monitoring of sand and gravel mining and a dedicated monitoring mechanism be set up.”

Further reference has been made to the directions in the order dated 05.04.2019 requiring the 17 States, which were party before the Tribunal

viz. West Bengal, Gujarat, Karnataka, Maharashtra, Punjab, Uttar Pradesh, Haryana, Madhya Pradesh, Andhra Pradesh, Bihar, Uttarakhand, Jammu and Kashmir, Goa, Kerala, Telangana and Tamil Nadu and Himachal Pradesh, to follow the revised Guidelines and to review their respective monitoring mechanism. It is then stated that with the object of regulating the mining, the sources of sand and steps required are mentioned which provide for District Survey Report (DSR), Mining Plan, replenishment study, consideration of environment impact while granting EC, laying down conditions for EC, monitoring of transportation to the end user to ensure that only legally mined material is transported. There is need to balance between deposition and extraction of sand as per replenishment study, maintaining surveillance, using Unmanned Artificial Vehicles (UAVs)/Drone for reserves estimation, quantity estimation, land use monitoring. Details about all these aspects have been mentioned in the said Guidelines. With regard to post EC monitoring, there is a provision for environment audit, monitoring of sale and purchase by developing online portal and laying down the levels of monitoring i.e. Level 1- Reach/ Stockyard level monitoring, Level 2 - Transportation monitoring, Level 3 - End consumer monitoring/ bulk consumer, Level 4 - Indirect monitoring. Reference has then been made to the High-Powered Committee incorporating safeguards to be adopted by the project proponents. There is also provision for assessment of compensation for the ecological damage by the State/ PCB/ any other Authority. Inter District and Inter State boundaries are separately dealt with. The uniform monitoring mechanism stipulates:

“ 9.4. **Monitoring Mechanism**

xxxxxx.....xxx.....

1. *All precaution shall be taken to ensure that the water stream flows unhindered and process of Natural river meandering doesn't get affected due to mining activity.*
2. *River mining from outside shall not affect rivers, no mining shall be permitted in an area up to a width of 100 meters from the active edge of embankments or distance prescribed by the Irrigation department.*
3. *The mining from the area outside river bed shall be permitted subject to the condition that a safety margin of two meters (2 m) shall be maintained above the groundwater table while undertaking mining and no mining operation shall be permissible below this level unless specific permission is obtained from the Competent Authority. Further, the mining should not exceed nine-meter (9 m) at any point in time.*
4. *Survey shall be carried out for identifying the stretches having habitation of freshwater turtles or turtle nesting zones. Similarly, stretches shall be identified for other species of significant importance to the river ecosystem. Such stretch with adequate buffer distance shall be declared as no-mining zone and no mining shall be permitted. The regulatory authority as defined for granting Environmental Clearance, while considering the application of issuance of ToR and/or EC for the adjacent block (to non-mining zone) of mining shall take due precaution and impose requisite conditions to safeguard the interest of such species of importance.*
5. *District administration shall provide detailed information on its website about the sand mines in its district for public information, with an objective to extend all information in public domain so that the citizens are aware of the mining activities and can also report to the district administration on any deviation observed. Appropriate feedback and its redressal mechanism shall also be made operational. The details shall include, but not limited to, lease area, geo-coordinates of lease area and mineable area, transport routes, permitted capacity, regulatory conditions for operation including mining, environmental and social commitments etc.*
6. *A website needs to be maintain to track the movement of centralised sand mining and a Centralised server system should be made to manage the data related to sand mining across India.*
7. *The mineral concession holders shall maintain electronic weighbridges at the appropriate location identified by the district mining officer, in order to ensure that all mined minerals from that particular mine are accounted for before the material is dispatched from the mine. The weighing bridge shall have the provision of CCTV camera and all dispatch from the mine shall be accounted for.*

8. *The mineral movement shall be monitored and controlled through the use of transit permit with security features like printing on IBA approved MICR papers, Unique bar/QR, fugitive ink background, invisible ink mark, void pantographs and watermarks papers or through use of RFID tagged transit permits and IT /IT-enabled services. Such monitoring system shall be created and made operationalised by State Mining department and district level mining officer shall be responsible for ensuring that all legal and operational mines are connected and providing the requisite information on the system. Regular check and associated report shall be submitted to DLTF and uploaded on the website.*
9. **State Government shall constitute a District Level Task Force (DLTF) under the Chairmanship of Deputy Commissioner/District Magistrate/Collector with Superintendents of Police and other related senior functionaries (District Forest Officer, District transport officer, Regional officer- SPCBs, Senior Officer of Irrigation Department, District Mining Officer) with one/two independent member nominated by the Commissioner concerned. The independent member shall be retired government officials/teacher or ex-serviceman or ex-judiciary member.**

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

10. *The area not identified for mining due to restriction or otherwise are also to be monitored on a regular basis by the DLTF. Any observations of mining activity from the restricted area shall be reported and corrective measures shall be initiated on an urgent basis by the DLTF.*
11. *The dispatch routes shall be defined in the Environmental Clearance and shall be avoided through densely habituated area and the increase in the number of vehicle movement on the road shall be in agreement with the IRC guidelines / carrying capacity of the road. The alternate and dedicated route shall be explored and preferred for movement of mining to avoid inconvenience to the local habitat. The mining production capacity, by volume/weight, shall be governed by total permissible dispatch calculated based on*

the carrying capacity of dispatch link roads and accordingly, the production should be regulated.

12. *The movement of minerals shall be reconciled with the data collected from the mines and various Naka/check posts. Other measures may also include a general survey of the potential mineable area in the district which has not been leased/auctioned or permitted for mining due to regulatory or other reasons.*
13. *The location and number of check post requirement shall be reviewed by DLTF on a regular basis so that appropriate changes in location/number could be made as per the requirement. Such review shall be carried out on a regular basis for the district on inter-state boundary or district providing multiple passages between two districts of different states.*
14. ***The district administration shall compile the information from their district of the permitted and legal mined out minerals and other details and share such information and intelligence with the officials of the adjoining district (Inter or/and Intra State) for reconciliation. The information shall include the area of operation, permissible quantity, mined out minerals (production) the permitted route etc., and other observations, especially where the mine lease boundary is congruent with the district boundary. Such coordination meeting shall be held on a quarterly basis, alternatively in two district headquarters or any other site in two districts decided mutually by the District Magistrate.***
15. ***The mining department shall include submission of an annual environmental audit report as one of the conditions in the mining lease agreement. The annual audit for each river bed mining lease shall be carried out and the audit report shall be uploaded on the website of district administration. The audit shall be carried out by an independent team of 3 members nominated by District Collector/Magistrate/Commissioner comprising of Ex-Serviceman, Ex-Government officials of repute, Professor or Person having experience of mining/environment. The guidelines and method of the audit shall reflect adequately the monitor-able parameters and output and reflect the compliance status with respect to the conditions imposed by the regulatory authorities including conditions of Environmental clearance.***
16. *The in-situ and ex-situ environmental mitigative measures stipulated as EMP, CER, CSR and other environmental and safety conditions in mines including the welfare of labours shall properly reflect in the audit report.*

9.5 Suggestive additional requirements are

i. The requirement at the Mine Lease Site:

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

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

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

iii. Proposed working of the system:

The State Mining Department should print the Transport Permit or Receipt with security features and issue them to the mining leaseholder through the District Collector. Once these Transport Permits or Receipts are issued, they would be uploaded on the server against that mine lease area. Each receipt should be preferable with pre-fixed quantity, so the total quantity gets determined for the receipts issued. When the Transport Permit or Receipt barcode gets scanned and invoice is generated, that particular barcode gets used and its validity time is recorded on the server. So all the details of transporting of mined out material can be captured on the server and the Transport Permit or Receipt cannot be reused.

iv. Checking On Route:

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

v. Breakdown of Vehicle:

In case the vehicle break-down, the validity of Transport Permit or Receipt shall be extended by sending SMS by the driver in specific format to report the breakdown of the vehicle. The server will register this information and register the breakdown. The State can also establish a call center, which can register breakdowns of such vehicles and extend

the validity period. The subsequent restart of the vehicle also should be similarly reported to the server or call center.

vi. Tracking of Vehicles:

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

vii. Alerts or Report Generation and Action Review:

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

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

*Some of the State has followed the SSMMG-2016 and has also improvised or customized on the provisions given therein, and are successfully in operation. Salient provision adopted at different stages of sand mining in the state of Tamil Nadu is given as **Annexure VIII**.*

9.6 Actions against illegal excavation and transport

Solapur district administration in Maharashtra had adopted a multi-pronged strategy to penalize the persons involved in illegal excavation and transport which resulted in a significant increase in revenue earned by the state. Following rules and procedures as mentioned in these guidelines will add to the costs of PP. Those involved in illegal activities are not required to bear these costs and this will make their supply in the market cheaper (though illegal). This will put the players running their business by following rules and procedures laid down by the government to disadvantage as far as the selling price is considered. Therefore, it is necessary to come down heavily on those involved in illegal excavation/transport, so that there is no incentive for players to abide by the rules.

The following action may be taken to achieve this deterrence against illegal business:

- 1. The action should be taken under all legal options available simultaneously. Thus, after identifying the case of illegal excavation, storage and/or transport of minor minerals (including sand), fine should be levied as per the land revenue laws/code(s) of the state. In addition, FIR should be lodged in the police station under relevant sections of law including sec 379 IPC. In addition, action under the Motor Vehicle Act, 1989 and relevant rules should initiate to cancel/suspend the driving license of the driver and permit of the vehicle. Further, action should be initiated under provisions in the Income Tax Act, 1961 for unaccounted income and under the Central Goods and Services Act, 2017 for nonpayment of GST. (Earlier this was done under the state act pertaining to Value Added Tax/Sales Tax). Habitual offenders should also be taken up under local state laws for externment and/or preventive action. It is clarified that as per law, it is possible to take all actions under various laws simultaneously for one offence. What is prohibited in law is an action under the same law for the same act more than once.*
- 2. The action should be taken against all persons responsible. Often, there is a tendency to penalize only the drivers of the vehicles. The mafia of illegal mining and transport is much bigger and drivers are only one part of the system. It is necessary to identify all those involved in the offence. It is usually not possible to reach the place of excavation without creating a motorable pathway up to the same through land which may be private land. Such role of such landowners needs to be looked into for each offence and proceeded against simultaneously. Further, the role of vehicle owners needs to be probed. Role of the person who allowed his land to be used for illegal excavation and storage should also be examined. Lastly, the person who purchases such sand should also be probed. The legal proceedings stated above needs to be initiated against all of these together. An attempt should be made to fix the financial responsibility in joint and several ways so that recovery is easier.*
- 3. There may be discretion available in law about the extent of the penalty to be levied. If such discretion is very wide, then it is advisable that guidelines may be laid down to reduce such discretion in law for levying penalties. For example, in Maharashtra, Land Revenue Code, fine of any amount of penalty up to thrice the value of the sand can be levied. Solapur district administration had instructed Tahsildars and SDMs not to use discretion and levy the fine of three times the value. Availability of discretion makes junior level functionaries susceptible to pressures and it may also lead to corrupt practices.*

4. *It is emphasized that actions, as stated above, are most important to ensure that the IT-based system works. If these exemplary actions are not taken against everyone, it shall create a strong disincentive to those involved in legal excavation and transportation. For IT-based (or any other) legal system to work, it is necessary to ensure that illegal system stops working altogether.”*

19. Several formats have been suggested in the Annexures, apart from salient provisions in the State of Tamil Nadu before execution of the mining lease and after execution of such lease including **judicious mined closure plan, reclamation, removal of sheds and maintaining of record for future reference.**

Compliance Status in States – Context of UP

20. We now refer to the Oversight Committee report dated 15.01.2021 for the State of UP with regard to status of compliance of Sustainable Guidelines as follows:-

| S. No. | Directions by Hon’ble NGT | Compliance Status (Yes/No) | Compliance Status |
|--------|--|----------------------------|--|
| 1. | Status of the progress in ensuring issues related to illegal sand mining in the State of Uttar Pradesh | Partially Complied | For effective control of illegal mining and transportation of minerals, a seven-member District level Task Force has been constituted under the chairmanship of District Magistrate vide Govt. Order no. 616/86-2018-371/2005 dated 20.03.2018. Under the Integrated Mines Surveillance System (IMSS), all the mine areas have been geo fenced. PTZ cameras at the mines have been installed. Weigh Bridges fitted with cameras have been installed at all mines and have been integrated with the Control Centre at Head Quarters. At present, there are 36000 registered vehicles and 310 Weigh Bridges have been established. |
| 2. | Demarcation of boundaries for regulating grant of sand mining lease | Partially Complied | Rule-23 of the Uttar Pradesh Sub-Divisional (Avoidance) Rules, 1963 as amended, provides for the advertisement of an area with Geo-coordinates and Rule-17 mentions the Geo-coordinates of all boundaries of the area sanctioned. These are being followed by all the District Magistrates. |

| | | | |
|----|---|---------------------------|---|
| 3. | Environmental Compensation imposed on leasing of minor minerals in any area to cover the restoration cost of environment and to compensate the victims | Partially Complied | There is provision for execution of mining lease deed only after demarcation under rule-17 of the Mining lease Approval Rules, 1963. |
| 4. | Status of the constitution of a team to carry out demarcation by the Chief Secretary | Partially Complied | Under Rule-17 of the Uttar Pradesh Sub-Divisional (Avoidance) Rules, 1963, there is a provision for survey/demarcation of the area by an authorized officer/employee of the Directorate of Geology and Mining. A separate team is not justified at the level of Chief Secretary |
| 5. | Mining in all blocks is undertaken as per provisions of EIA Notification, 2006; MOEF Notification dated 15.1.2016 and the Sustainable Sand Mining Management Guidelines, 2016 | Partially Complied | i. Rule 34(4) of Rules-1963 contains the provision for obtaining Environmental Clearance before commencement of mining in the sequence of notification dated 14.09.2006 and the notification as amended from time to time. ii. According to the Sustainable Sand Mining Management Guidelines, 2016 issued by MOEF&CC, mining work is restricted from the riverbed during the monsoon season. Thus, mining work is restricted in the month of July, August and September in the State. |
| 6. | No sand mining is permitted without due compliance of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 as well as regulations governing clearances by the Central Ground Water Authority | Partially Complied | Rule- 41(J)(1) of the 1963 Rules envisages that no mining operations in the leveled river bed shall be carried out beyond the depth of 3 meters or water level whichever is less/lower. The conditions mentioned in the Environmental Cleanliness Certificate issued by the State Level Environmental Impact Authority (SEIAA), are being followed. |
| 7. | District authorities shall seize all sump pumps, other machinery, tools, vehicles, etc. used for carrying out illegal sand mining. | Partially Complied | Report awaited |
| 8. | Any penalty imposed or not by concerned Department to cover the restoration cost of environment and to compensate the victims. | Partially Complied | The orders of Hon'ble NGT dated 18.02.2016 in OA No. 184/2013 Gurpreet Singh Baggha vs. MOEF, regarding recovery of penalty/ environmental damage from the concerned lease holders are being complied at district level. |
| 9. | Status of a detailed restoration plan for the concerned river and its river beds | Partially Complied | Mining work is being done on the basis of approved mining scheme by including the restoration plan in the mining plan. |

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| 10 | Status of the assessment done through Indian Council of Forestry Research and Education, Dehradun of the ecological damage on account of illegal mining by incorporating the given components: a) Cost of river bed material b) Cost of ecological restoration c) Net present value of the future ecosystem services. | Partially Complied | In OA No. 184/2013 Gurpreet Singh Bagga vs. MOEF, the action is being taken by conducting assessment of environmental damage in compliance with Indian Council of Forestry Research and Education, Dehradun. |
| 11 | Action against the polluters and the erring officers | Not Complied | Report awaited |
| 12 | Status of CCTV Cameras installation at mining points to verify the amount of sand extracted | Partially Complied | Rule-35(2) of Uttar Pradesh Minor Mineral Regulations, 1963 provides that the mining lease holder whose mining lease area is more than 5 hectares, shall constructs checkpost/gate and install 4 CCTV cameras capable of recording at 360° visibility at his own expense for monitoring. Under the supervision of the DMs. |
| 13 | Status of regular patrolling by the police to inspect the mining operations | Partially Complied | For effective control over illegal mining and transportation of minerals, a seven-member district level task force has been set up under the chairmanship of DM vide order no. 616/86-2018-371/2005 dated 20.03.2018. Deputy Superintendent of Police level officers of Police department are members of this task force. The mining areas are constantly monitored by this task force. |
| 14 | Status of daily reports regarding mining to be filed by SHO/ Mining officer to be sent to District Magistrate. | Partially Complied | According to the information received from the DM, Prayagraj in compliance of the order of Hon'ble NGT passed in OA No. 670/2018 in re: Atul Singh Chauhan vs. MOEF&CC and Ors., regular checking of illegal mining transportation is being done by the Task force constituted at the district level. The District Collector/ Senior Superintendent of Police, Prayagraj are regularly informed. |
| 15 | Status of vehicles confiscation | Partially Complied | In compliance of orders of Hon'ble NGT in OA No. 670/2018 in re: Atul Singh Chauhan vs. MOEF&CC and Ors., in district Prayagraj 06 chargesheets were filed in the financial year 2018- 19; 80 chargesheets filed in 2019-20 and in the year 2020-21 till the month of November, 2020, 150 FIRs and 214 cases have been filed in the competent Courts, including the order passed by Hon'ble NGT. Similar instructions have also been issued to the other districts regarding the above. |

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| 16 | Status of EC imposed and realized by the CPCB till date in this regard | Partially Complied | <p>In compliance of Order dated 05.04.2019 of Hon'ble NGT, Principal Bench in O.A. 360 of 2015 (13 clubbed cases), CPCB in NGT on 06.01.2020 the "Recommendations on Scale of Compensation to deal with the cases of illegal sand mining" were made by the Committee of Experts constituted by Hon'ble NGT. The Committee of Expert recommended two approaches regarding the scale of compensation to deal with the cases of illegal sand mining:</p> <ol style="list-style-type: none"> 1. Direct Compensation based on the market value of extraction, adjusted for ecological damages 2. Computing a Simplified NPV for ecological damages. <p>The above referred recommendations were initially taken up by Hon'ble NGT during the hearing on 08.01.2020 wherein Hon'ble NGT expressed prima facie deficiencies in the recommendations and directed for rectification of the deficiencies before the next date. Accordingly, the Committee of Experts reviewed and revised its recommendations, and CPCB filed in NGT on 30.01.2020 the revised "Recommendations on Scale of Compensation to deal with the cases of illegal sand mining" of the Committee of Experts constituted by Hon'ble NGT. The scale of compensation was calculated by adopting two approaches. For details of approach, I & II refer Appendix- VI. It was also suggested by the Hon'ble NGT vide its order dated 17/08/2020 to consider the suggestions of Shri Panjwani which were noted at point no 13 needs to be looked into by the same Committee and thereafter the Scale of Compensation finalized (Refer Appendix- VII).</p> <p>In compliance of the Hon'ble NGT direction, the matter was examined by the same expert Committee at CPCB, Delhi & found that more or less the formula suggested by committee and the methodology suggested by Shri Panjwani is similar except some of the factors. The details of same are noted at point no. 3 of the affidavits is submitted before the Hon'ble NGT by CPCB on 12.10.2020. Copy of same is enclosed as Appendix-VIII.</p> |
| 17 | Status of EC imposed and realized by the UPPCB till date in this regard | Partially Complied | <p>In compliance of Order dated 08.01.2020 of Hon'ble NGT in O.A. 360 of 2015 are given at Appendix -IX of the report</p> |

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| 18 | Status of setting up of dedicated institutional mechanism for monitoring of conditions of Environmental Clearance as granted under EIA Notification, 2006 in respect of sand and gravel mining. | Partially Complied | Under the supervision of the DMs in the districts, the conditions of the Environmental Clearance Certificate are complied with by the PCBs/ Departmental officers. A separate institutional mechanism has been established for the same. |
| 19 | Safeguards based on High Powered Committee report and observations into the Sustainable Sand Mining and Management Guidelines, 2016. | Partially Complied | MOEF& CC is following the Sustainable Sand Mining Management Guidelines, 2016. (Refer Appendix- X) |
| 20 | Necessary steps have been taken by District Administration for the effective monitoring mechanisms for preventive and remedial measures including surveillance system for recovery of compensation. | Not Complied | Action will be taken after necessary amendments in environmental regulations. As per information given by the Mr. A.K. Tiwari, UPPCB on 07.01.2021 that: Comments: In compliance of Hon'ble NGT order dated 17.08.2020 in OA No. 360/2015 and as per provision of 'Enforcement & Monitoring Guidelines for Sand Mining' Jan., 2020 issued by MOEF&CC, Govt. of India, action is to be taken by concerned District Administration. (Refer Appendix- XI) |
| 21 | Necessary steps have been taken by MOEF & CC to restore effective impact assessment and safeguards; any action taken against the erring officers | Not Complied | Report awaited |
| 22 | Status of Chief Secretary filed the report regarding recovery of compensation (i.e. damage to environment) | Not Complied | Report awaited |

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| 23 | Whether there is any progress towards amendments of the Act/Rules so that the Courts can order for the fine as ordered by Hon'ble NGT. | Not Complied | As per information given by the Mr. A.K. Tiwari, UPPCB on 07.01.2021 that: Comments: In compliance of Hon'ble Supreme Court Judgement dated the 27.02.2012 in I.A. No. 12-13 in Special Leave Petition (C) No. 19628-19629 of 2009, in the matter of Deepak Kumar etc. Vs. State of Haryana and Others and in compliance of Hon'ble NGT directions dated 04.09.2018 in O.A. No. 173/2018 in the matter of Sudarsan Das Vs. State of West Bengal, MOEF&CC, Govt. of India has issued 'Enforcement & Monitoring Guidelines for Sand Mining' Jan., 2020 which has the following provisions regarding illegal mining: "As per the provision of 23 (C) of MMDR Act, the State Government is empowered to make rules for preventing illegal mining, and transportation & storage of illegal minerals. All such mining which qualifies under illegal shall be dealt with in the provision of MMDR Act the concern authorities". In the above circumstance the necessary amendments in Mining Regulation/ The Uttar Pradesh SubDivisional (Avoidance) Rules, 1963 is to be initiated by the Mines & Geology Department, Govt. of U.P. (Refer Appendix- XI). |
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Additional Information provided by Mines Department

1. **The Mines Department has established a Command Centre at the Directorate of Geology and Mines at Lucknow from where they operate the Integrated Mines Surveillance System for the entire State. They are using Artificial Intelligence based Software and taking the help of Drones and Cloud Services for monitoring mining activity in the State. Drone Videography has been done in sensitive districts- Fatehpur, Banda, Prayagraj and Saharanpur. Besides the CCTV Cameras, they are using RFID tags to monitor the movement of vehicles.**
2. They have made a provision in the Rules to blacklist a person for upto 2 years if found guilty of illegal mining/ illegal transportation. So far 125 persons/firms have been blacklisted.
3. They have amended the Rules to allow storage of minerals beyond 5Km radius from the riverbed. This has been done to prevent illegal mining from river bed under the alibi of storage.
4. **They have established a Vehicle Tracking System to check the misuse of Transport Pass and Overloading. To begin with, this system has been introduced in the most sensitive districts of Hamirpur, Banda, Fatehpur, Jalaun and Jhansi.**

5. *New areas have been identified based on survey conducted according to Sustainable Mining Guidelines and they are being included in the DSR.*
6. *Instead of the printed MM-11, online royalty payment has been introduced through E- MM- 11.*
7. *Security features have been introduced in E-MM 11 to check its misuse.*
8. *Transport of minerals even from stores is being regulated through electronic E- forms.*

Observation of the Oversight Committee: *The Committee felt that the compliance of the Mining Department needs to be verified by independent sources. CPCB and UPPCB are being directed by the Committee to jointly verify the compliance. The report would be submitted in three months time.*

VI. RECOMMENDATIONS

1. *There have been a number of complaints regarding illegal mining specially in Districts of Hamirpur, Banda, Fatehpur, Jalaun, Prayagraj, Saharanpur and Jhansi. The Oversight Committee, while enclosing the newspaper cuttings has asked for a status report from the Directorate of Mining, which so far has not been received. **Illegal Mining is mining done without a Mining Plan in utter violation of environmental norms and is a grave threat to ecology and environment.** The State Government should have a zero tolerance on illegal mining and the Directorate of Mining and District Administration should immediately enquire into all such cases and if found correct take stringent legal action against the guilty.*
2. *Environmental Clearance takes into account all the environmental concerns. Mining plan is the instrument through which it is enforced. However, for mining activity going on illegally, there is neither any EC nor any mining plan. Illegal mining invariably leads to reckless damage to environment. Hence, utmost efforts are required in surveillance, patrolling and enforcement. **Electronic surveillance through UAVs/Remote Sensing is a good surveillance option especially in areas where sand mafias are active. Night vision drones could be used for checking mining activity at night. Sensitive spots need to be identified and police presence- both static presence and dynamic patrolling needs to be beefed up there. DMs / SSPs be made directly responsible for checking illegal mining.***
3. *DSRs need to be prepared very carefully. They should be based on Physical surveys and replenishment studies. **Since sand deposition is a dynamic issue, they need to be regularly updated. While awarding lease deeds, important environmental parameters like deposition and replenishment of sand, areas of erosion, distance from infrastructural structures need be considered.***

4. ***In the absence of replenishment studies and physical inspection before award, many times sites are awarded where there is no sand. The lease holder per force indulges in mining adjoining areas, some of which may be environmentally not very suitable. Before award of LOI, physical inspection should be mandatory.***
5. ***Areas where only few leases are operative and the rest are not settled/surrendered need to be carefully analyzed. There could be a chance of cartel formation and mining of sand illegally from other vacant mining plots under the garb of the operative lease. (In district Prayagraj, there is only one operative lease out of 51 leases).***
6. ***Storage Godowns should be at least 5 kms away from the river bank. Otherwise, illegal mining can be carried on under the garb of storage by the leaseholder himself.***
7. ***Geo-fencing of sites, their physical demarcation, allotment of geo-coordinates to all the pillars and their constant physical inspection and electronic surveillance is a must to ensure that the mining activity is as per the approved mining plan and no illegal mining, detrimental to environment, is going on.***
8. ***There has to be a mechanism to ensure that the actual mining activity conforms to the approved Mining Plan and the approved Environment Management Plan (EMP). Besides the statutory system of Departmental inspections, there has to be a system of annual mandatory Environmental Audit by experts. Environment Department can empanel some experts/expert institutions with standard TORs and Remuneration terms which could be utilized by the Mines Department on a regular basis. This way the District Administrations can access good technical experts with standard conditions in a transparent way without bothering about tedious time-consuming tender formalities.***
9. ***There has to be an effective mechanism for restoration of environment in case of its degradation due to mining. A portion of the royalty could be reserved for it as Environment Restoration Fund. The Environment Department can empanel some reputed institutions with standard terms for preparing environmental restoration plans which could be used directly by the Mining Department without the arduous formalities. These plans could be funded by the Environment Fund as mentioned above. Already a number of mineral rich districts like Sonbhadra have a sizeable District Mineral Fund at the disposal of the District Collector. However, since there is no mechanism available at the level of District Collector for preparation of Environment Restoration Plans, this fund is normally used for works other than environmental restoration.***

10. *All the mining activity should strictly comply with Provisions of EIA Notification 2006, Sustainable Sand Mining Guidelines, 2016; The Environmental Protection Act, 1986; The Water (Prevention and Control of Pollution) Act, 1974; The Air (Prevention and Control of Pollution) Act, 1981 and Regulations of Central Ground Water Authority.*
11. ***Direction may be issued to the Principal Secretary, Mining to take immediate steps for amendment of rules so that the Courts may order the fine as ordered by the Hon'ble NGT."***

Stand of State of MP

21. The State of MP has filed an affidavit on 13.01.2021 that necessary changes have been made in accordance with the directions of this Tribunal dated for procedure for granting EC in accordance with the directions of this Tribunal in the order dated 13.9.2018 in Satendra Pande, by constituting a Committee. Order dated 12.10.2020 was issued by the State of Madhya Pradesh on the subject. There is a proposal to amend the Minor Minerals Rules and also to introduce technology to prevent illegal mining using QR Code for transit passes, pool SMS facility to ascertain validity of electronic passes, google distance matrix to avoid multiple usage of single transit pass, web portal and mobile App to verify validity of electronic transit pass. It is not necessary to refer to the affidavits of other individual States in view of the fact that final and updated directions are now being issued in the light of which all the States/UTs are expected to take further steps in the matter.

Stand of State of Rajasthan

22. In the status report, filed by the State of Rajasthan on 16.10.2020, it is stated that the Chief Secretary Environment Cell has been established. It holds regular meetings with the District Magistrates. Meeting was also held with the Director General of Police (law and order), Secretary Home, Director Mines, all District Collectors, Dy. Conservators of Forest and other concerned officers. Directions have been issued for formation of SITs,

monitoring cases of illegal mining, setting up of special check posts on the routes used for illegal mining, ensuring CCTV surveillance, strict recovery of environmental compensation fee, etc. Directions have issued to District Magistrates to create awareness at Panchayat level. The Chief Secretary proposes proposed to issue comprehensive guidelines. Mining Department has also taken up a project for creating redressal portal and mobile app for reporting illegal mining.

Today's Consideration

23. The extent of challenge posed by illegal sand mining was noted by the Tribunal in the order dated 05.04.2019 in OA 360/2015 as follows:-

*“8. Despite this, the menace of illegal sand mining in India continues unabated. **As per reports, the sand business in India employs over 35 million people and is valued at well over \$126 billion per annum. In the year 2015-2016, there were over 19,000 cases of illegal minor minerals including sand in the country.**⁴ In Uttarakhand, a 115 years old bridge collapsed due to overloaded sand trucks. In Maharashtra, 26,628 cases of illegal sand mining were recorded in the year 2017. The State of Maharashtra has the highest number of cases of non-compliance of Sustainable Sand Mining Management Guidelines, 2016. The State of Kerala suffered hugely in 2004 Tsunami and 2018 floods which several report explain were aggravated by illegal sand extraction.⁵ The issue of illegal sand mining is also rampant in the states of Goa⁶, Bihar⁷, Tamil Nadu⁸, Uttarakhand⁹, Telangana¹⁰, Jammu and Kashmir¹¹ amidst others.”*

24. In view of resume of above orders and responses, the issue which survives for consideration is enforcement of the 2016 and 2020 guidelines, read with orders dated 19.2.2020, 14.10.2020, 4.11.2020 and observations herein, by evolving appropriate comprehensive monitoring

⁴<http://www.legalserviceindia.com/legal/article-73-why-is-illegal-sand-mining-harmful-.html>

⁵<https://sandrp.in/2019/03/01/sand-mining-2018-is-it-a-national-menace/>

⁶<https://timesofindia.indiatimes.com/city/goa/govt-is-ignoring-illegal-sand-mining/articleshow/67908428.cms>

⁷<https://www.firstpost.com/india/illegal-sand-mining-part-3-bihar-govts-attempted-crackdown-has-sent-prices-soaring-officials-face-axe-as-rivers-in-ruin-6008351.html>

⁸https://en.wikipedia.org/wiki/Sand_mining_in_Tamil_Nadu

⁹<https://sandrp.in/tag/uttarakhand-sand-mining/>

¹⁰<https://sandrp.in/2019/02/26/sand-mining-2018-telangana-and-andhra-pradesh/>

¹¹https://greaterkashmir.com/article/news.aspx?story_id=309365&catid=2&mid=53&AspxAutoDetectCookieSupport=1

mechanism, with designated accountable officers, grievance redressal mechanism, envisaging strict action against violators, including assessment and recovery of compensation for the violations, seizure of vehicles and review at higher levels in the State.

Compensation

25. In the light of discussion in para 12 above, having regard to the totality of the situation, **we accept the report of the CPCB and direct that the scale of compensation calculated with reference to approach II be adopted by all the States/UTs.** Though compensation assessment for damage to the environment is a dynamic concept, depending on variables, floor level formula can be worked out to avoid arbitrariness inherent in unguided discretion. **The CPCB may issue an appropriate statutory direction for the facility of monitoring and compliance to the Environment Secretaries of all the States/UTs who may forthwith evolve an appropriate mechanism for assessment and recovery of compensation in all Districts of the State. The recovered compensation may be kept in a separate account and utilized for restoration of environment by preparing an appropriate action plan under the directions of the Environment Secretary with the assistance of such individual/ institutions as may be considered necessary.**

Interaction for Effective enforcement

26. The above discussion shows that the problem has defied solution and unless tackled seriously, damage to the environment will continue. Clear road map is thus required with effective monitoring mechanism. Report of the Oversight Committee for UP and affidavit of the State of MP, the report from Rajasthan and some other States also show that effective

mechanism is lacking. For clarity on all issues, periodic interaction of stake holders, particularly the enforcement authorities is required. This will also facilitate engagement of accredited agencies/experts for preparing DSRs/replenishment studies. In the Central Government, the concerned authorities include Mining Ministry, Environment Ministry, Jalshakti Ministry and CPCB. In States, Departments of Mining, Environment, SEIAA, PCB and District Magistrates.

Enforcement of Monitoring Mechanism and review by the Chief Secretary at State level and Secretary MoEF&CC at National level

27. **We direct all the States/UTs to strictly follow the SSMG-2016 read with EMGSM-2020 reinforced by mechanism for preparation of DSRs (in terms of directions of this Tribunal dated 14.10.2020 in Pawan Kumar, supra and 04.11.2020 in Rupesh Pethe, supra), Environment Management Plans, replenishment studies, mine closure plans, grant of EC (in terms of direction dated 13.09.2018 in Satendra Pandey, supra), assessment and recovery of compensation (as per discussion in Para 25), seizure and release of vehicles involved in illegal mining (in terms of order dated 19.02.2020 in Mushtakeem, supra), other safeguards against violations, grievance redressal, accountability of the designated officers and periodical review at higher levels. As already noted, EMGSM-2020 contemplates extensive use of digital technology, including remote sensing.**

28. **We further direct that periodic inspection be conducted by a five-members Committee, headed and coordinated by the SEIAA and comprising CPCB (wherever it has regional office), State PCB and two expert members of SEAC dealing with the subject. Where CPCB regional office is not available, if MoEF&CC regional office is available, its Regional Officer will be included in the Committee.**

Where neither CPCB nor MoEF&CC regional office exists, Chairman, SEIAA will tie up with the nearest institution of repute such as IIT to nominate an expert for being included in the Committee. Such inspection must be conducted at least thrice for each lease i.e. after expiry of 25% the lease period, then after 50% of the period and finally six months before expiry of the lease period for midway correction and assessment of damage, if any. The reports of such inspections be acted upon and placed on website of the SEIAA. Every lessee, undertaking mining, must have an environment professional to facilitate sustainable mining in terms of the mining plan and environmental norms. This be overseen by the SEIAA. Environment Departments may also develop an appropriate mobile App for receiving and redressing the grievances against the sand mining, including connivance of the authorities and also a mechanism to fix accountability of the concerned officers. Recommendations of the Oversight Committee for the State of UP quoted earlier may be duly taken into account.

The mechanism must provide for review at the level of the Chief Secretary at least once in every quarter, in a meeting with all concerned Departments in the State. The Chief Secretary UP may ensure further action in the light of the report of the Oversight Committee.

Similarly, at National level, such review needs to be conducted atleast once in a year by the Secretary, Environment in coordination with the Secretaries Mining and Jalshakti Ministries the CPCB.

Publication of Annual Reports

29. We further direct all the States/UTs to publish their annual reports on the subject and such annual reports may be furnished to

MoEF&CC by 30th April every year giving status till 31st March. First such report as on 31.03.2022 may be filed with the MoEF&CC by all the States/UTs on or before 30.04.2022. The report may also be simultaneously posted on the website of the Environment Department of the States/UTs. Based on such reports, MoEF&CC may consider supplementing its Guidelines from time to time. The MoEF&CC may prepare a consolidated report considering the reports from the States/UTs and publish its own report on the subject, preferably by 31st May every year.

Interaction at National Level

30. We direct the Secretary MoEF to convene a meeting in coordination with the CPCB and Mining and Jalshakti Ministries of Central Government and such other experts/individuals at National level and representatives of States within three months for interaction on the subject which may be followed by such meetings being convened by the Chief Secretaries in all States in next three months. Holding of such meetings will provide clarity on enforcement strategies and help protection of environment.

All the applications are disposed of. Individual issues may be gone into in accordance with the mechanism to be involved as above.

A copy of this order be forwarded to the MoEF&CC, CPCB, Secretaries, Ministries of Jalshakti and Mining, GoI, Chief Secretaries, Environment Secretaries, SEIAA and State PCBs/PCCs and District Magistrates of all the States/UTs by e-mail for compliance.

Adarsh Kumar Goel, CP

S.K. Singh, JM

Dr. Nagin Nanda, EM

February 26, 2021
Original Application No. 360/2015
and other connected matters
DV & A



भारत का राजपत्र

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असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)

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पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय अधिसूचना

नई दिल्ली, 20 अप्रैल, 2022

का.आ. 1886(अ).—केंद्रीय सरकार पर्यावरण और वन विभाग के पूर्ववर्ती मंत्रालय में पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा (3) की उप-धारा (1) और उप-धारा (2) के खंड (v) के अधीन प्रदत्त शक्तियों का प्रयोग करते हुए, पर्यावरण समाघात निर्धारण अधिसूचना, 2006 (जिसे इसमें इसके पश्चात ईआईए अधिसूचना, 2006 कहा गया है), परियोजनाओं की कतिपय प्रवर्ग के लिए पूर्व पर्यावरणीय मंजूरी आज्ञापक बनाने के लिए, संख्या का.आ.1533(अ), तारीख 14 सितंबर, 2006 द्वारा प्रकाशित की है।

और राज्य पर्यावरण समाघात निर्धारण प्राधिकरण (एसईआईए) का गठन प्रवर्ग ख के अधीन सभी प्रस्तावों के लिए पर्यावरण मंजूरी (ईसी) पर विचार और अनुदान के लिए प्रत्यायोजित शक्तियों का प्रयोग करने हेतु राज्य स्तर पर ईआईए अधिसूचना, 2006 के कार्यान्वयन के लिए पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 3 की उप-धारा (3) के अधीन किया गया है;

और राज्य पर्यावरण समाघात निर्धारण प्राधिकरण ने पर्यावरण मंजूरी मूल्यांकन प्रक्रिया में पिछले पंद्रह वर्षों में पर्याप्त अनुभव प्राप्त किया है और राज्य स्तर पर पर्यावरण मंजूरी प्रस्तावों के कुशल और पारदर्शी निपटान के लिए परिवेश पोर्टल के माध्यम से पूरी तरह से ऑनलाइन कर दिया गया है;

और केंद्रीय सरकार राज्य स्तर पर मंजूरी की प्रसुविधा के लिए पर्यावरण मंजूरी प्रक्रिया को और विकेंद्रीकृत करना आवश्यक समझती है;

और आज की तारीख में, सुरक्षा भागीदारी के महत्वपूर्ण तत्वों के साथ राष्ट्रीय रक्षा और सामरिक महत्व से संबंधित प्रवर्ग ख की परियोजनाओं का राज्य स्तर पर भी मूल्यांकन किया जा रहा है, जिसे केंद्रीय सरकार राष्ट्रीय सुरक्षा चिंताओं को ध्यान में रखते हुए केंद्रीय रूप से मूल्यांकन करना आवश्यक समझती है;

अतः अब, केंद्रीय सरकार, पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उप-नियम (4) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उप-धारा (1) और उप-धारा (2) के खंड (v) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए उक्त नियमों के नियम 5 के उप-नियम (3) के खंड (क) के अधीन नोटिस की अपेक्षा को समाप्त करने के पश्चात्, लोकहित में भारत सरकार की तत्कालीन पर्यावरण एवं वन मंत्रालय की अधिसूचना संख्यांक का.आ. 1533(अ), तारीख 14 सितम्बर, 2006, की अधिसूचना में निम्नलिखित और संशोधन करती है अर्थात्:-

उक्त अधिसूचना में-

(1) पैरा 4 में, उप-पैरा (iii) क) के स्थान पर, निम्नलिखित रखा जाएगा, अर्थात्: -

(iii) क) राष्ट्रीय रक्षा या सामरिक या सुरक्षा महत्व से संबंधित हैं या जिन्हें केंद्रीय सरकार द्वारा संकटकाल जैसे महामारी, प्राकृतिक आपदाओं जैसी अत्यावश्यकताओं के कारण ऐसी प्रवर्ग 'ख' परियोजनाओं को अधिसूचित किया गया है या राष्ट्रीय कार्यक्रमों या स्कीमों या मिशन या ऐसी परियोजनाओं के अधीन पर्यावरण के अनुकूल क्रियाकलापों का संवर्धन करने के लिए जो इस अधिसूचना में यथा अधिकथित समय-सीमा से अधिक विलंबित हैं और समय-समय पर इस संबंध में यथा-अधिकथित मानदंडों को पूरा करती हैं, उन्हें केंद्रीय स्तर पर प्रवर्ग 'ख' परियोजनाओं के रूप में विचार किया जाएगा;

(2) अनुसूची में, -

(i) मद 1(क) के सामने, -

(क) स्तंभ (3) में, -

(क) गैर-कोयला खनन पट्टे के संबंध में "> 100 हेक्टेयर खनन पट्टा क्षेत्र" के स्थान पर, निम्नलिखित रखा जाएगा, अर्थात्: -

"कोयले के अलावा अन्य प्रमुख खनिज खनन पट्टे के संबंध में >250 हेक्टेयर खनन पट्टा क्षेत्र";

(ख) ">150 हेक्टेयर" प्रतीक, अंक और अक्षर के स्थान पर, "> 500 हेक्टेयर" प्रतीक, आंकड़े और अक्षर रखे जाएंगे;

(ख) स्तंभ (4) में, -

(क) गैर-कोयला खनन के संबंध में <100 हेक्टेयर खनन पट्टा क्षेत्र के स्थान पर,

पट्टा", निम्नलिखित रखा जाएगा, अर्थात्: -

"लघु खनिज खनन पट्टों के संबंध में सभी खनन पट्टा क्षेत्र और कोयले के अलावा अन्य प्रमुख खनिज खनन पट्टे के संबंध में <250 हेक्टेयर खनन पट्टा क्षेत्र";

(ख) "<150 हेक्टेयर" के प्रतीकों, अंकों और अक्षरों के स्थान पर "<500 हेक्टेयर" के प्रतीक, अंक और अक्षर रखे जाएंगे;

(ii) मद 1(ग) के सामने, -

(क) स्तंभ (3) में, -

(क) क्रम संख्या (i) में, "> 50 मेगावाट, प्रतीकों, अंकों और अक्षरों के स्थान पर "> 100 मेगावाट" प्रतीक, आंकड़े और अक्षर रखे जाएंगे;

(ख) क्रम संख्या (ii) और उससे संबंधित प्रविष्टियों का लोप किया जाएगा;

(ख) स्तंभ (4) में, -

(क) क्रम संख्या (i) में, "<50 मेगावाट" प्रतीक, अंक और अक्षर के स्थान पर, "<100 मेगावाट" प्रतीक, आंकड़े और अक्षर रखे जाएंगे;

(ख) क्रम संख्या (ii) में, -

(I) "और <50,000 हेक्टेयर" शब्द, प्रतीक और अंक का लोप किया जाएगा;

(II) बिंदु (ग) में सारणी में, "से <50,000" शब्द, प्रतीक और अंक का लोप किया जाएगा; ।

(ग) स्तंभ (5) में, क्रम संख्या (ii) के पश्चात, निम्नलिखित क्रम संख्या अंतःस्थापित किया जाएगा, अर्थात् :-

"(iii) अंतर-राज्यीय मुद्दों से संबंधित सिंचाई परियोजनाओं का मूल्यांकन केंद्रीय स्तर पर श्रेणी में परिवर्तन के बिना किया जाएगा";

(iii) मद 1(घ) के सामने,-

(क) स्तंभ (3) में, "> 50 मेगावाट" प्रतीकों, अंकों और अक्षरों के स्थान पर, "> 100 मेगावाट" प्रतीकों, अंकों और अक्षरों को रखा जाएगा;

(ख) स्तंभ (4) में, "<50 मेगावाट" प्रतीक, अंक और अक्षर के स्थान पर, "<100 मेगावाट" प्रतीक, आंकड़े और अक्षर रखे जाएंगे;

(iv) मद 2(क) के सामने, -

(क) स्तंभ (3) में, ">1" प्रतीकों और अंक के स्थान पर, ">2.5" प्रतीकों और अंक को रखा जाएगा;

(ख) स्तंभ (4) में, "<1" प्रतीकों और अंक के स्थान पर, "< 2.5" प्रतीक और अंक रखे जाएंगे;

(ग) स्तंभ (5) में, विद्यमान पैरा के पश्चात, निम्नलिखित पैरा अंतःस्थापित किया जाएगा, अर्थात्: -

"खनन पट्टा क्षेत्र के भीतर स्थित धुलाई मशीनों के साथ एकीकृत कोयला खनन परियोजनाओं को कोयला खनन परियोजनाओं के लिए विद्यमान सीमा के अनुसार केंद्रीय स्तर या राज्य स्तर पर, यथास्थिति, विचार किया जाना जारी रहेगा";

(v) मद 2 (ख) के सामने, -

(क) स्तंभ (3) में, विद्यमान प्रविष्टियों का लोप किया जाएगा;

(ख) स्तंभ (4) में, "<0.5 मिलियन टीपीए का उत्पादन" प्रतीक, अंक, शब्द और अक्षर के स्थान पर, "सभी खनिज परिष्करण परियोजना, परिष्करण की प्रक्रिया पर ध्यान दिए बिना" शब्द रखे जाएंगे;

(ग) स्तंभ (5) में, विद्यमान पैरा के पश्चात, निम्नलिखित पैरा रखा जाएगा,

अर्थात्: -

"भीतर स्थित लाभकारी संयंत्रों के साथ एकीकृत खनन परियोजनाएं खनन पट्टा क्षेत्र पर केन्द्रीय स्तर पर विचार किया जाता रहेगा या यथास्थिति, राज्य स्तर, खनन परियोजनाओं के लिए विद्यमान सीमा के अनुसार।";

(vi) मद 7 (क) के सामने,-

(क) स्तंभ (3) में, "सभी परियोजनाओं" शब्दों के स्थान पर "सभी नई परियोजनाएं" शब्द रखे जाएंगे;

(ख) स्तंभ (4) में, निम्नलिखित अंतःस्थापित किया जाएगा, अर्थात्: -

"सभी विस्तार परियोजनाएं, जिनमें हवाई पट्टियां भी सम्मिलित हैं, जो वाणिज्यिक उपयोग के लिए हैं।"

[फा. सं. आईए 3-22/10/2022-आईए. III]

डॉ. सुजीत कुमार बाजपेयी, संयुक्त सचिव

टिप्पण : मूल अधिसूचना भारत के राजपत्र, असाधारण, भाग II, खंड III, उप-खंड (ii), संख्या का.आ. 1533(अ), तारीख 14 सितंबर, 2006 द्वारा प्रकाशित की गई थी और अधिसूचना संख्या का.आ. 1807(अ), तारीख 12 अप्रैल, 2022 द्वारा अंतिम संशोधन किया गया था।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 20th April, 2022

S.O. 1886(E).—WHEREAS, the Central Government in the erstwhile Ministry of Environment and Forests, in exercise of its powers under sub-section (1) and clause (v) of sub-section (2) of section (3) of the Environment (Protection) Act, 1986 has published the Environment Impact Assessment Notification, 2006 (hereinafter referred to as the EIA Notification, 2006), vide number S.O.1533 (E), dated the 14th September, 2006 for mandating prior environmental clearance for certain category of projects;

And whereas, the State Environment Impact Assessment Authorities (SEIAAs) have been constituted under sub-section (3) of section 3 of the Environment (Protection) Act, 1986 for implementation of the EIA Notification, 2006 at State level for exercising delegated powers to consider and grant Environmental Clearance (EC) for all proposals under Category B;

And whereas, the SEIAAs have gained substantial experience over the past fifteen years in the EC appraisal process and the process at the State level has also been made completely online through the PARIVESH portal for efficient and transparent disposal of EC proposals;

And whereas, the Central Government deems it necessary to further decentralise the EC process for facilitating clearances at State level;

And whereas, as on date, category 'B' projects, relating to national defence and strategic importance with significant element of security involvement are also being appraised at the State level which, the Central Government deems it necessary to be appraised centrally taking into account national security concerns;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986), read with sub-rule(4) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government, after having dispensed with the requirement of notice under clause (a) of sub-rule (3) of rule 5 of the said rules, in public interest, hereby makes the following further amendments in the notification of the Government of India, in the erstwhile Ministry of Environment and Forests, number S.O. 1533 (E), dated the 14th September, 2006, namely:-

In the said notification,-

(1) in paragraph 4, for sub-paragraph (iii a), the following shall be substituted, namely:-

(iii a) Such Category 'B' projects, relating to the National defence or strategic or security importance or those as notified by the Central Government on account of exigencies such as pandemics, natural disasters or to promote environmentally friendly activities under National Programmes or Schemes or Missions or such projects which are inordinately delayed beyond the stipulated timeline as laid down in this notification and also meet the criteria as laid down in this regard from time to time, shall be considered at the Central level as Category 'B' projects;

(2) in the Schedule,-

(i) against item 1(a),-

(a) in column (3),-

(A) for ">100 ha. of mining lease area in respect of non-coal mining lease", the following shall be substituted, namely:-

">250 ha mining lease area in respect of major mineral mining lease other than coal";

(B) for the symbol, figures and letters "> 150 ha", the symbol, figures and letters "> 500 ha" shall be substituted;

(b) in column (4),-

(A) for "≤ 100 ha of mining lease area in respect of non-coal mine lease", the following shall be substituted, namely:-

"All mining lease area in respect of minor mineral mining leases and ≤ 250 ha mining lease area in respect of major mineral mining lease other than coal";

- (B) for the symbols, figures and letters “ ≤ 150 ha”, the symbols, figures and letters “ ≤ 500 ha” shall be substituted;
- (ii) against item 1(c),—
- (a) in column (3),—
- (A) in serial number (i), for the symbols, figures and letters “ ≥ 50 MW”, the symbols, figures and letters “ ≥ 100 MW” shall be substituted;
- (B) serial number (ii) and the entries relating thereto shall be omitted;
- (b) in column (4),—
- (A) in serial number (i), for the symbol, figures and letters “ < 50 MW”, the symbol, figures and letters “ < 100 MW” shall be substituted;
- (B) in serial number (ii),—
- (I) the word, symbol and figures “and $< 50,000$ ha.” shall be omitted;
- (II) in point (c) in the table, the word, symbol and figures “to $< 50,000$ ” shall be omitted;
- (c) in column (5), after serial number (ii), the following serial number shall be inserted, namely:—
- “(iii) Irrigation projects involving Inter-State issues shall be appraised at Central level without change in category.”;
- (iii) against item 1(d),—
- (a) in column (3), for the symbols, figures and letters “ ≥ 50 MW”, the symbols, figures and letters “ ≥ 100 MW” shall be substituted;
- (b) in column (4), for the symbol, figures and letters “ < 50 MW”, the symbol, figures and letters “ < 100 MW” shall be substituted;
- (iv) against item 2(a),—
- (a) in column (3), for the symbols and figure “ ≥ 1 ”, the symbols and figures “ ≥ 2.5 ” shall be substituted;
- (b) in column (4), for the symbols and figure “ < 1 ”, the symbols and figures “ < 2.5 ” shall be substituted;
- (c) in column (5), after the existing paragraph, the following paragraph shall be inserted, namely:—
- “Integrated coal mining projects with washeries located within mining lease area shall continue to be considered at Central level or State level, as the case may be, as per the extant threshold for coal mining projects.”;
- (v) against item 2 (b),—
- (a) in column (3), the existing entries shall be omitted;
- (b) in column (4), for the symbol, figures, words and letters “ < 0.5 million TPA throughput”, the words “All mineral beneficiation projects irrespective of the procedure for beneficiation” shall be substituted;
- (c) in column (5), after the existing paragraph, the following paragraph shall be inserted, namely:—
- “Integrated mining projects with beneficiation plants located within mining lease area shall continue to be considered at Central level or State level, as the case may be, as per the extant threshold for mining projects.”;
- (vi) against item 7 (a),—
- (a) in column (3), for the words “All projects”, the words “All new projects” shall be substituted;

(b) in column (4), the following shall be inserted, namely:—

“All expansions projects, including airstrips, which are for commercial use.”.

[F. No. IA3-22/10/2022-IA.III]

Dr. SUJIT KUMAR BAJPAYEE, Jt. Secy.

Note : The principal notification was published in the Gazette of India, Extraordinary, Part II, Section III, sub-section (ii), vide, number S.O. 1533(E), dated the 14th September, 2006 and was last amended, vide, the notification number S.O. 1807(E), dated the 12th April, 2022.