

**PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL
COMMITTEE, ODISHA HELD ON 02ND November, 2022**

The SEAC met on 02ND November, 2022 at 10:30 AM in the Conference Hall of Odisha State Pollution Control Board, Bhubaneswar under the Chairmanship of Sri Sashi Paul. The following members were present in the meeting.

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| 1. Sri Sashi Paul | - | Chairman |
| 2. Dr. K. Murugesan | - | Member Secretary |
| 3. Dr. Rabi Narayan Patra | - | Member (through VC) |
| 4. Dr. Chittaranjan Panda | - | Member |
| 5. Prof. (Dr.) H.B. Sahu | - | Member (through VC) |
| 6. Prof. (Dr.) Abanti Sahoo | - | Member (through VC) |
| 7. Dr. Ashok Kumar Sahu | - | Member |
| 8. Er. Fakir Mohan Panigrahi | - | Member |
| 9. Prof. (Dr.) B.K. Satpathy | - | Member |
| 10. Dr. K.C.S Panigrahi | - | Member (through VC) |
| 11. Shri Jayant Kumar Das | - | Member |

Draft proceeding of the meeting was finalized by the members through e-mail and also final proceeding of the meeting was confirmed by the members through e-mail. The agenda-wise proceedings and recommendations of the committee are detailed below.

ITEM NO. 01

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S. TATA STEEL MINING LIMITED FOR KAMARDA CHROMITE BLOCK (ML AREA: 107.240 HA) FOR PRODUCTION OF 0.30 MTPA CHROMITE ORE (ROM) WITH MAXIMUM EXCAVATION OF 2.50 MILLION CUM PER ANNUM THROUGH OPENCAST MINING LOCATED AT VILLAGE - TALANGI, KAMARDA & BALIPADA TAHASIL - SUKINDA, DISTRICT - JAJPUR OF SRI BIBHU DUTTA NANDA – EC

1. This proposal is for Environment Clearance of M/s. Tata Steel Mining Limited for Kamarda Chromite Block (ML Area: 107.240 Ha) for Production of 0.30 MTPA Chromite Ore (ROM) with Maximum Excavation of 2.50 Million Cum Per Annum Through Opencast Mining located at Village - Talangi, Kamarda & Balipada Tahasil - Sukinda, District Jajpur of Sri Bibhu Dutta Nanda.
2. The project falls under Category 'B' of schedule 1(a) of EIA notification 2006 and amendments thereof as per the MoEF&CC, Govt. of India notification vide SO 1886(E), dated 20th April 2022.
3. The Kamarda Chromite Block Mining lease comprising of 107.24 Hectare area was originally granted and executed in favour of Sri B. C. Mohanty for a period of 20 years with effect from 22.02.1968.
4. The e-auction process was conducted in accordance with the tender document for the Kamarda Chromite Block and M/s Tata Steel Mining Limited (Formerly known as M/s T.S. Alloys Limited).

5. Clearances held by Sri B C Mohanty has been vested to M/s Tata Steel Mining Limited as per Vesting Order issued vide Letter No 4129/SM dated 28th May 2020.
6. Mining Plan has been approved by IBM, Bhubaneswar dated 25.09.2018. Mining Plan of TSML was approved on 28.09.2020.
7. Environmental Clearance has been obtained from MoEF&CC, Govt. of India on dated 08.05.2008 for production of 0.088 MTPA Chromite Ore and 0.036 MTPA Chrome Concentrate production.
8. Forest Diversion has been obtained from MoEF&CC, Govt. of India, dated 28.03.2008 over an area of 87.44 Ha of entire forest land involved. The previous lessee has paid ` 7,89,68,200 towards NPV (Net Present Value) for the total forest area of 105.78 Ha. Tata Steel Mining Limited has also paid the NPV of ` 7,93,35,000/- over entire forest land of 105.78 Ha.
9. Consent to Establish has been obtained from SPCB, Odisha on dated 31.03.2020 & Consent to Operate from SPCB, Odisha on dated 31.03.2021.
10. Surface right from District Collector, Jajpur over 108.92 Ha. has been obtained.
11. Ground water drawl permission has been obtained from CGWA, (Gol) dated 16.07.201 & fresh applied vide Application Number: 21-4/4185/OR/MIN/2022 on 31.08.2022.
12. Deep hole blasting & use of HEMM permission has been obtained from DGMS, (Gol) dated 04.01.2019 (TSML has also obtained the fresh 106 (2) (B) on 25.08.2021)
13. The proponent has applied for state road diversion passed through mining lease.
14. The MOEF & CC, Govt. of India had issued the Terms of Reference for the Project vide letter no. F. No. J1 1015/56/2021-IA.II Dated 5th February, 2021. Public hearing for the proposal was conducted on 22.12.2021 at 2.00PM.
15. **Location and Connectivity** - The Kamarda Chromite Block is located in three villages – Tailangi, Kamarda & Balipada, Tehsil- Sukinda, District- Jajpur, Odisha over an area of 107.240 ha in which 101.850 ha land is forest land and rest 5.390 ha land is non forest land as per HAL Settlement and 105.780 Ha is Forest Land and 1.460 Ha is non forest land as per Sabik Settlement. The Kamarda Chromite Block is spread over an area of 107.240 Ha, and it falls in Survey of India Topo Sheet/Open Series Map No. F45N16 (73G/16). The lease area represents undulating topography marked by linearly disposed mounds of low relief. The area is bounded by latitude 21°03'06.11316" - 21°03'50.88708" and longitude 85°49'22.45836" - 85°50'11.31576" and covered by survey of India Toposheet no 73 G/16. The maximum elevation of the area is 180 m RL on the southern side while the minimum elevation is 160 m RL on the western portion of the area. The gradient of the area is 150. The mine is well connected by NH-200, which is about 11 km in S. Nearest Railway Station is Daitari Railway Station which is about 9.50 km, in NE direction. Biju Patnaik International Airport, Bhubaneswar is about 140 km in SE direction from the project site.
16. Mining plan details: The method of mining will be open cast fully mechanized mining. Fully mechanized Opencast mining is proposed to be carried out during the plan period. The operations like digging, excavation and removal of ore will be done with the help of heavy earth

moving machineries. Keeping in view the production of 0.3 Million Ton of Chromite ore (ROM) per annum, life of the mine will be about 8½ years. Life of the mine may be increase after future exploration and Slope Steepening.

17. **Water Requirement:** About 330 KLD water will be required for dust suppression, plantation, wheel wash, drinking & domestic activities, etc. Mine pit water will be used for dust suppression and plantation activities. Ground water from borewell will be used for drinking and domestic use.
18. **Power Requirement:** The use of electricity will be for lighting/illumination purpose in mining operations and will be obtained from TPCODL. A total of 450 KVA will be required.
19. **Manpower Requirement:** A total of about 440 persons will be required to carry out the opencast mining operation.
20. **Rehabilitation & Resettlement:** Rehabilitation & resettlement plan for 68 housing projects have been proposed in the SIA report. Total cost of R&R is proposed to be Rs. 0.77 Crores.
21. **Baseline details:**

Period	October – December 2020
AAQ Parameter at 8 locations	PM ₁₀ = 29 to 64.1 µg/m ³ PM _{2.5} = 17 to 38.5 µg/m ³ SO ₂ = <4 to 8.1 µg/m ³ NO _x = <9 to 13.6 µg/m ³
Noise quality at 8 locations	Ambient noise ranges from 36.7 dBA to 60.4 dBA
Surface water at 8 locations	pH ranges from 7.21 to 7.84, DO ranges from 4.4 to 6.3 mg/l, COD ranges from 6.0 to 20 mg/l
Ground water at 8 locations	pH ranges from 5.06 to 7.78, total hardness varies from 14 to 180 mg/l, chloride ranges from 3.8 to 38 mg/l, TDS ranges from 20 to 316 mg/l
Soil at 12 locations	pH ranges from 7.03 to 7.24, SAR ranges from 2.6 to 4.4 %, clay percent ranges from 59.8 to 73, all the metals are below detectable level

22. The cost of the project has been estimated to be Rs. 83.50 Crore.

Considering the information furnished and the presentation made by the consultant, **M/s Visiontek Consultancy Services Pvt Ltd, Bhubaneswar**, the SEAC decided to take decision on the proposal after receipt of the following from the proponent:

- a) Detailed Water balance showing input, effluent output, and augmentation made, capacity of ETP and effluent quality.
- b) Status of Forest Clearance for the forest land involved in the lease area.

- c) Brief note on alternative methods tried earlier for augmentation of water quality.
- d) Slope study made on dump with its back-up calculation to be submitted.
- e) Layout showing garland drain, ETP and dump site.
- f) Detailed note on process of storage and usage of low grade ore.
- g) Report regarding hexavalent chromium present within surrounding areas.
- h) Brief note on treatment and monitoring of hexavalent chromium and mitigation measures taken for prevention of its impact to surroundings.
- i) Brief process to be followed on water treatment & monitoring device with photographs.
- j) Detailed surface run-off management plan.
- k) Report on process of stabilization of overburden.
- l) Short note on process of storage of sludge and its end use.
- m) Submit detailed map showing State Highway passing within lease area. Status of permission applied for diversion of SH.
- n) Attach salient points of public hearing and traffic study data.
- o) Undertaking for facilitation of displacement of small encroachments in the lease area.
- p) Plantation activity to be carried out with consultation forest department. Detailed proposal to be submitted.
- q) Layout showing garland drain, ETP and dump site etc.
- r) Detailed note on process of storage, area and usage of low-grade ore if any including OB.
- s) Report regarding hexavalent chromium present within surrounding areas vs norms.

ITEM NO. 02

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S A-3 MINERALS & METAL EXPORTS PVT. LTD FOR CHROME ORE BENEFICIATION UNIT OF THROUGHPUT CAPACITY 18,500 TPA OVER AN AREA OF 2.54 ACRE AT VILLAGE- BYREE, PO- BYREE, DIST- JAJPUR FOR OF SRI AKSHAYA KUMAR SAMAL- EC

1. This proposal is for Environment Clearance of M/s A-3 Minerals & Metal Exports Pvt. Ltd for Chrome Ore Beneficiation unit of throughput capacity 18,500 TPA over an area of 2.54 acre at village- Byree, Po- Byree, Dist- Jajpur of Sri Akshaya Kumar Samal.
2. The project is coming under category 'B2' as the throughput capacity of the beneficiation plant is 18500 TPA (<20,000 TPA) as per MOEF&CC, Govt. of India OM vide no. J/13012/12/2013-IA-II(I), dated 24.12.2013.
3. M/s A3 Minerals and Metal Export Pvt Ltd proposes for establishment of Chrome ore Beneficiation plant over an area of 2.545 Acres with throughput capacity of 18,500 TPA within the existing Chrome monolithic unit. The promoter of the project is M/s A3 Minerals and Export Pvt Ltd, and Proprietor of the project is Sri. Akshaya Kumar Samal.

4. The existing chrome monolithic unit obtained consent to establish vide letter no. 1198/IND-41 on dated 10.07.2020.
5. The existing Chrome monolithic unit was operating under the ownership of M/s R.C. Metals Industries. The consent to operate was transferred in the name of M/s A3 Minerals on 23.10.2019 for production of 625 TPM monolithics and other refractories.
6. Further M/s R.C Metal Industries obtained consent to operate for production of 30 TPM chrome concentrate which was also transferred in the name of M/s A3 Mineral.
7. **Location and Connectivity** - The project is located at Byre village over an area of 2.545 Acres in Plot No- 4149/4683, 4146, 4157/4872, 4156/4871, 4152, 4158, 4149 and 4159 bearing Khata No: 1268/439, 1268/433, 1268/432, 1268/432, 1268/431, 1268/436, 1268/437, 1268/438. The project can be identified in Survey of India Toposheet No.: F45 T14/ F45U2, Latitude: 20°38'25.0" N; Longitude: 20°38'25.0" N. The mining lease area is also accessible NH-5 through Kalkala Chatia road which pass near the project site. Bairi railway station is nearest at a distance of 1.2 km from the M.L area. Nearest airport is Biju Pattnaik Bhubaneswar Airport 50 Kms from project site. Nearest river/Jor is Bansi Jor at 2.5km, Mendhakhai river at 8 km & Birupa River at 10 km and. Nearest town is Chatia at 5 km. Nearest forest Dalijoda Reserve forest at 0.3km. Nearest habitation is within 3km from project site. Kapilash wild life sanctuary – 11km. There is no wild life sanctuary, corridor, National park, biosphere reserve located within 10 Km buffer zone of the project site
8. The Terms of Reference (TOR) was issued by SEIAA, Odisha vide no. 4181/ SEIAA, dated 03.03.2022. Public Hearing was exempted as project comes under B2 category with throughput <20,000TPA as per MOEF&CC, Govt. of India OM No. J/13012/12/2013-IA-II(I), dated 24.12.2013.
9. Baseline study was conducted from October – December 2020.
10. The raw material i.e. low grade chrome ore will be sourced from mines of Odisha Mining Corporation, Sukinda which is located at a distance of 35Km from the project site. The transportation of ore from the mines to the project site will be done through covered trucks.
11. **Process** - The beneficiation process of chrome ore involves up-gradation of low grade chrome ore (<40% Cr₂O₃) to semi high grade ore (50-65% of Cr₂O₃). The beneficiation process of chrome ore include dispersal of the ferruginous coating and removal of the gangue material from the ore. Before the low grade feed to the beneficiation plant the chromites ore lumps were screened and oversized material i.e -20 to 100 mm size material will sent to the grinding unit.
12. **Solid waste generation** - The major solid waste will be the tailings generated from the beneficiation process. The quantity of tailings to be 4700 TPA having <10% Cr₂O₃. The tailings will be collected and dried through a filter press. Further, the tailing will be stored in the tailing dump. After drying the tailing will be blended in the chrome refractory mortar as per the demand of the customer. An area has been demarcated for storage of tailing within the plant premises.
13. **Water Requirement** - Total water requirement for the proposed project will be 150 KLD and make up water requirement will be 10 KLD. Makeup water requirement will be sourced from

borewell and rain water harvesting pond. The plant has obtained permission from CGWA for with drawl of 20 KLD ground water.

14. **Rain water harvesting system** - Two rain water **harvesting** pond will be constructed within the plant premises over an area of 2165 Sq.m. with a depth of 4 m. The rain water harvesting pond is connected to surface water drains and collect all the surface runoff from the project site. Water storage capacity of RWH pond = 8660 Cu.m.
15. The plant will operate with Zero Liquid Discharge (ZLD) technology as the entire process water will be recirculated after treatment through ETP.
16. **Power Requirement:** The total power requirement is estimated as 100KVA. It is proposed to draw the power from the NESCO.
17. **Manpower:** The project generates employment opportunities for 12 personnel which includes operator -2, supervisor 2, 4 no of semi-skilled labor and 4 no. of unskilled labour.
18. The project proponent submitted that no R&R plan is required as no displacement of people is proposed for the expansion of the project.
19. **Green Belt** - There is plantation of 200 trees within the plant boundary and with the EC proposal there is the planning for three tier plantations along the boundary along with open space plantation. An area of 3400 Sq.m has been allocated for green belt development with about 600 saplings plantation proposal as mentioned in table.

(a)Total Area of Green Belt (in hectare)	0.33994
(b)Percentage of Total Project Area	33.00
(c)No. of Plants to be Planted	3400
(d)Funds Allocated for Plantation	200000

20. The cost of the project has been estimated to be Rs. 175.00 Lakhs. For implementation for EMP for the project the allocated capital budget will be Rs.32 lakhs and recurring budget will be Rs.5 lakhs.
21. As per the social need assessment and suggestion of village committee a CSR plan has been prepared with a proposed cost estimate of Rs.9.5 Lakhs which will be utilized within a period of 3 years.
22. The proponent along with the consultant **M/s Kalyani Laboratories Pvt. Ltd., Bhubaneswar** made a detailed presentation before the SEAC.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Kalyani Laboratories Pvt Ltd., Bhubaneswar**, the SEAC decided to take decision on the proposal after receipt of the following from the proponent:

- a) Layout map of the plant (both monolithic & beneficiation).
- b) Operating procedure for monolithic unit.
- c) Monitoring procedure followed to prevent hexavalent chromium contamination.
- d) Plan for rainy season water management.
- e) Procedure for workers safety management.

- f) Study on hexavalent chromium intake by the fruit plants of the orchard.
- g) Regular monitoring and evaluation of the soil, surface water and groundwater for presence of hexavalent chromium in different time intervals and at different locations.
- h) Layout map showing location of monitoring stations.
- i) Copy of Consent to Operate obtained from the Board for production of 30 TPM chrome concentrate. Consent to Operate and Env. Clearance status of the unit for production of 30 TPM chrome concentrate and justification as to why this will be not treated as a violation case.

ITEM NO. 03

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S “SIKSHA ‘O’ ANUSANDHAN DEEMED UNIVERSITY” FOR IMS & SUM HOSPITAL (CAMPUS-2) BUILDING (2B+G+9) ON KHATA NO - 626/1 AND PLOT NO. 416,297,417,419,296, 298, 418, 299,420,287, 415/4195 OVER AN BUILT-UP AREA 89712.23 M² LOCATED AT MOUZA – PHULNAKHARA, BHUBANESWAR OF SRI BIBEKANANDA PRADHAN – EC

1. This proposal is for Environmental Clearance of M/S "Siksha 'O' Anusandhan Deemed University" for IMS & SUM Hospital (Campus-2) building (2B+G+9) on Khata No - 626/1 and Plot no. 416,297,417,419,296, 298, 418,299,420,287,415/4195 over a built-up area 89712.23m² located at Mouza — Phulnakhara, Bhubaneswar of Sri Bibekananda Pradhan.
2. This proposal falls under Category B, 8(a) – Building Construction in the schedule of EIA Notification dated 14.09.06 and its subsequent amendments.
3. **Location and Connectivity** - The project will be developed on the land measuring 15063 m² or 3.722 Ac. over Plot no.416, 297, 417, 419, 296, 298, 418,299, 420,287,415/4195 Khata No: -626/1, Mouza – Phulnakhara, Bhubaneswar. The project is located at Latitude :20°21'32.97"N, Longitude: 85°53'17.77"E. This project site is well connected to a network of existing road running all the way from in S & W direction and NH-16 at E direction. The proposed hospital has two gates that serve the dual purpose of entry and exit. The same service road acts as connecting link between one part of the city with the other which is will be used by the patients and public. Bhubaneswar Railway Station – 11.7 km –SSW, Vani Vihar P.H – 8.53km –SSW, Patia Road P.H – 5.11 km – W, Biju Patnaik International Airport –14.47 km – SSW, NH-16- near to the project 0.56 km –SE.
4. The site falls under the Zone III as per the Seismic Zone Map of India and is thus Moderate to lower damage risk zone.
5. The proposed area details of the project -
 Total Plot Area: 15063 sqm /3.722 Ac. or 1.5063 Ha.
 Total Built –Up Area: 89,712.23 Sqm
 Total FAR Area= 73,829.27 Sqm
 Ground Coverage - 7883.06 Sqm (52.33 % of the Plot Area)
 Maximum Height of Building = 36 mt [LB+UB+G+9]
 Parking Area Required-22150 sqm (30 % of total FAR Area as per ODA planning standards)
 Parking Area Provided – 23823 sqm (32.2 % of total FAR Area)

Internal Roads = 2393.95 sqm (15.89 % of Plot Area)

Paved Area = 630.51 sqm (4.19 % of Plot Area)

Green belt Area = 3119.5 (20.71 % of the Plot Area)

Open space, Other Services (Water tanker, STP, RWH, Waste Storage etc.) = 1025.98 m² (6.8 % of Plot Area).

6. **Water requirement:** The total water requirement is approx. 484 KLD, out of which total domestic/Fresh water requirement is 230 KLD. And recycled water 254 KLD. Waste Water generated 285 KLD, (waste water flows to STP-253 KLD & flows to ETP 32 KLD), Treated Waste Water Recovered & to be reused - 228 KLD (Zero Discharge).
7. **STP/ETP:** Capacity of Sewerage Treatment Plant for Clinical Area - 200 KL (MBBR Type), Capacity of Effluent Treatment Plant - 50 KL.
8. **Operational Solid Waste Generation and Disposal:** Total quantity of Municipal Solid Waste: 400 kg/day (Bio-degradable waste = 160 kg/day, Non- bio degradable waste = 240 kg/day- Hand Over to Authorized Agencies), Hospital/Biomedical waste = 900 kg/day, General Waste = 765 kg/day, Biomedical waste = 135 kg/day, Segregation, Storage & Disposal as per Bio-medical Waste Management Rules 2016.
9. **Green Belt:** The plantation matrix adopted for the green belt development includes pit of 2m x 3m size with a spacing of 2 m x 2 m. Multi-layered plantation comprising of medium height trees (7 m to 10 m) and shrubs (5 m height) are proposed for the green belt.
10. **Power requirement:** The power supply shall be supplied by TPCODL. The connected load for the Hospital project will be approx. 1200 KWH. For 30% Of The Total Load, 120 KVA Central On-grid Solar Power Plant Without Battery Storage To Cater, Back Up DG Set : 2X630 KVA 415 Volt, Radiator Cooled DG Set with stack height as per CPCB norms.
11. **Cost of the project:** Estimated Cost of Project is 1505 Cr.
12. **Environment Consultant:** The proponent along with the consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar** made a detailed presentation before the SEAC.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar**, the SEAC recommended for grant of Environmental Clearance valid for a period of 10 years with following specific conditions in addition to the conditions as per **Annexure-A**.

- i) All the land kism shall be converted to "Gharabari" before going for construction activity for the project by appropriate revenue authority including that of " SABAK/ HAAL" records as well.
- ii) The sabik RoR shall be compared with the hal RoR for each plot of land involved in the project to ensure that there is no involvement of Forest land or DLC land there after the record of right's kism of land for each and every plot of land should be Gharabari before starting any permanent construction activity of the project.
- iii) Plantation and solar facilities to be implemented as proposed at appropriate time.

- iv) Parking in terms of ECS (4-wheeler, 2-wheeler and bicycles) shall be provided compatible with patients and attending visitors, OPD patients and visitors with them, Doctor's and staffs, nursing sisters and at least 10% floating population in confirmative building by- law/NBC norm/ applicable laws and rules for this kind of project.
- v) The proponent shall operate STP and ETP should not be located under the same housing and should be operated separately as standalone systems and both shall not be inter-connected. ETP outlet effluent shall not be discharged to outside the project premises i.e. "Zero Liquid Discharge" from ETP to outside the premises shall be maintained.
- vi) Under no circumstances, treated waste water discharge from ETP shall be used for dual plumbing for flushing purpose.
- vii) Under no circumstances, treated waste water discharge from ETP shall be used for agricultural cultivation purpose also. The discharge and out let of ETP (after treatment) to be checked for its safe quality periodically.
- viii) The Decongestion plan as given by the proponent in the traffic density study report shall be implemented for compliance with a definite time frame.
- ix) **The Proponent shall obtain permission/NOC from Executive Engg (PHD) and / or from the appropriate authority for disposal of excess STP treated water to the nearest drain without which the Proponent will not start construction work. Also, in case of the connecting drain passing through others land (Govt. or Private land), the Proponent shall obtain the permission and possession as the case may be.**
- x) Permanent Environment Management Cell with environment professionals shall be in place, within a definite time frame.
- xi) This EC may be granted subject to strict compliance by the Authority concerned on the conditions and commitments made by PP.
- xii) This EC granted without prejudice to any order or direction from any court of competent jurisdiction or competent authority under applicable laws including that of any litigation or legal dispute on land (if any).
- xiii) **The proponent shall make agreement with authorized parties for lifting / handling of Bio-Medical Waste.**
- xiv) **A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the Municipal Solid Waste generated from project shall be obtained.**
- xv) **The proponent shall comply to the recommendations of fire safety authority.**
- xvi) The PP and/ or the appropriate authority for the purpose shall comply with all the conditions of EC and if anything is found/ noticed otherwise at any point of time, the EC so granted shall be deemed to have withdrawn/revoked with immediate effect besides levy of penalty or actions as deem fit under applicable laws.
- xvii) The provisions of Energy Conservation Act, 2002 with its amendments shall be implemented by Project Proponent while deciding the installation of all types of Electrical, Electronic & any

other Energy Consuming Equipments in hospital entire project area with the philosophy of Energy Conserved is Energy produced and thus protect environment.

- xviii) The Campus of the project area shall be provided with Pucca Boundary Wall with an intention to protect the Green Belt, treatment Plants, Energy Conservation Equipments and Biodiversity of the project.

However, EC may be issued after receipt of following documents from the proponent:

- a) **An undertaking that no construction work has been initiated at the site and the land is having connectivity with existing drain. If any private or Govt. land is used for such drain connections, ROR or permission from the concerned authority shall be submitted before going for construction activity.**
- b) **Copy of traffic study vetting letter vetted by a reputed institute.**

ITEM NO. 04

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR GUNUPUR STONE QUARRY (I & II) OVER AN AREA OF 8.497 HA. IN VILLAGE - GUNUPUR, TAHASIL – GUNUPUR, DISTRICT- RAYAGADA OF TAHASILDAR GUNUPUR – EC

1. This proposal is for environmental clearance for Gunupur stone quarry (I & II) over an area of 8.497 ha. in Village - Gunupur, Tahasil – Gunupur, District- Rayagada of Tahasildar Gunupur. The project is proposed by Tehsildar Gunupur (on behalf of successful bidder).
2. The proposed project is in cluster of 2 mines within 500 m radius & total lease area greater than 5 ha. So, as per the EIA notification 2006 and its subsequent amendment, proposed project fall in category B1.
3. The Terms of Reference (TOR) was granted by SEIAA vide letter no 2306/SEIAA dated 26.03.2021 for Gunupur Stone Quarry (I & II).
4. The public hearing was conducted on 02th April, 2022 at 11.00A.M in At Townhall, Gunupur under Gunupur Municipality in Rayagada District.
5. **Location and Connectivity::** The Gunupur stone quarry lease located at Village-Gunupur, Tahasil- Gunupur, District - Rayagada, Odisha. The geo coordinates of the cluster are Latitude 19° 05' 19.81" N to 19° 05' 29.57" N, and Longitude 83° 49' 54.28" E to 83° 50' 06.75" E. The area falls in Survey of India Topo sheet No. E44F16. It is under seismic zones II as per the 2002 Bureau of Indian Standards (BIS) map, Odisha. The nearest town is Gunupur, approx. 2.0 km, nearest railway station is Gunupur Railway station, approx. 3.0 km & nearest Airport is Biju Patnaik International Airport, Bhubaneswar is approx. 245 km. Nearest State Highway is SH 4, approx. 1.5 km & nearest state boundary is Andhra Pradesh approx. 10 km. Water Bodies present nearby is Vamsadhara river, approx.4.0 km.

There is no National Park or Biosphere Reserve within 10 km distance from the lease area. Dense mixed jungle, approx. 1.5 km in East direction.

6. **Total Reserves** - The total mineral resources and reserves have been calculated and found to be Geological Reserve – 867581cum and Mineable Reserve – 630930cum.
7. **Method of mining** - Mining will be done by opencast semi-mechanized method with adoption of drilling & blasting. Mining will be done by deploying machines like jackhammer, drill compressor, rock breaker, excavator and tractors/trucks. Tippers/ trucks will be used for transporting stone and waste. Gunupur stone quarry lease is presently spanning over an area of 8.497 ha (cluster). Proposed rate of production is 4,838 cum/year of stone and total production is 24,190cum for the plan period.
8. **Water Requirement** – A total 7.0 KLD water will be required for cluster (I & II). The water will be supplied from available sources from nearby village.
9. **Power requirement** - Power Requirement for mining operations and transportation will be met through diesel. Site services in the mining lease area will be electrified by power supply from Orissa Electricity board.
10. **Employment generation** - The total manpower requirement is 46 persons.
11. **Greenbelt:** Green Belt in the lease area shall be developed over an area of 0.370 Ha and 1380 saplings will be planted during the plan period.
12. **Project Cost:** The total cost of the project is 50 lakh, cost for EMP- [Capital cost –7.70 Lakhs and Recurring cost – 8.77 Lakhs/annum], Cost of CER 2 % of proposed project cost.
13. **Environment Consultant:** The proponent along with the consultant **P & M Solution, Noida** made a detailed presentation before the SEAC.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s P & M Solution, C-88, Sector 65, Noida** on behalf of the proponent, the SEAC approved the EIA/EMP report in cluster approach and recommended the following:

- a) The SEIAA, Odisha may consider to grant Environmental Clearance to individual lease for Gunupur stone quarry (I & II) in cluster without referring to SEAC with specific conditions as per **Annexure – B** after receipt of individual applications from the lessee in cluster along with following documents.
 - i) Filled in form-I of individual lease
 - ii) Prefeasibility report of individual lease
 - iii) EMP of individual lease.
 - iv) Approved Mining Plan of individual lease
 - v) DLC status of the lease area from concerned DFO as certified by the concerned Tahasildar.
 - vi) An Undertaking by the lessee not to use wagon drilling blasting to be submitted. Accordingly, specific condition to be stipulated in EC of individual lease.
 - vii) No storage and usage of blasting materials/explosives inside the lease area without license/permission/authorization from competent Authority as per Indian Explosives Rules, 1983 shall be ensured by the lessee. An undertaking to this effect shall be

submitted by the lessee. Accordingly, specific condition to be stipulated in EC of individual lease.

- viii) An undertaking to obtain NOC from CGWA and permission from WR department, Govt. Of Odisha for use of water. Accordingly, specific condition to be stipulated in EC of individual lease.

ITEM NO. 05

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR DHANARASI SAND QUARRY PROJECT ON BAHUDA RIVER OVER AN AREA 5.162 HA. ON KHATA NO - 276, PLOT NO - 01 & 28 LOCATED VILLAGE - DHANARASI, TAHASIL - DIGAPAHANDI, DISTRICT - GANJAM OF SMT LAXMI SETHI - EC

1. This proposal is for environmental clearance for Dhanarasi Sand Quarry on Bahuda River over an area 5.162 ha. on Khata No - 276, Plot No - 01 & 28 located in village - Dhanarasi, Tahasil - Digapahandi, District - Ganjam of Smt Laxmi Sethi.
2. This proposal falls under category B1 as per EIA notification 2006 and its subsequent amendments.
3. The LOI for mining has been issued for 5 years vide letter no 3916 (2019), dated 10.07.2019.
4. Mining plan has been approved vide letter no 3118/DM on 15.05.2020.
5. The Terms of Reference (TOR) prescribed by SEIAA, Odisha, vide letter no. 1807/SEIAA dated 26th July 2021.
6. Public Hearing has been conducted on 22-04-2022 at Batya Ashrayasthali of Village-Dhanarasi (Over Plot No 370 & 371 in Khata No. 192/79) Mouza Dhanarasi Under Digapahandi Tehsil of Ganjam District. Major issues raised at Public Hearing are - Lease was settled without consent of Gram Panchayat, Protection of Environment and Plantation, Dust Pollution due to Transportation, Damage of house and crop due to blasting, Village will be affected by flood due to excavation of sand and Mining shall be carried out with mutual discussion of local villagers.
7. **Location and connectivity** - The mining area is located at Khata No-276, Plot No-01 & 28, Village- Dhanarasi, Tehsil-Digapahandi, District- Ganjam, Odisha. The geo coordinates of the quarry is Latitude 19° 13' 58.20" N to 19° 14' 3.50" N, and Longitude 84° 31'10.30" E to 84° 31' 20.10" E. The area falls in Survey of India Topo sheet No. 74A/7, 74A/8, 74A/11 & 74A/12. Nearest road is SH – 29, at 3.45km. Nearest Airport Utkela Airport (Bhawanipatna), approx 170 km, nearest Railway Station is Ichchapuram Railway Station, approx 21.50 km. Nearest habitation is Naupada at 450m. Nearest town is Dhanarasi at 1.15km.
8. **Total Reserves** - The total mineral resources and reserves have been calculated and found to be Geological Reserve – 90224cum and Mineable Reserve – 73858cum.
9. **Method of mining** - Mining will be done by opencast manual method. The maximum depth of mining will not be more than 1.0m. The proposed production is 5,000 cum/annum of sand by

opencast manual mining method up to 1.0m. All the activities will be carried out manually i.e., loading the trucks/trolley/carrying vehicles manually by the working people.

10. There is no power requirement for the project.
11. The total water requirement will be around 1.72KLD. This water will be supplied from the nearby tube well.
12. Baseline study has been conducted for Winter Season i.e, from December, 2019 to Feb., 2020.
13. **Manpower** - The total direct manpower requirement for the proposed mining operation will be around 16.
14. **Traffic study Analysis:** From the traffic analysis it is observed that the V/C ratio will change from 0.146 to 0.208 to 0.155 & 0.209 for Village road & SH with LOS remain "A" & "B" i.e "Excellent" & Very Good So the additional load on the carrying capacity will be affected to a minimum level.
15. **Project cost:** Estimated cost of the project is 50 Lakhs and cost of EMP budget is Rs 1.75lakhs (capital cost) and 3.995 Lakhs/annum (Recurring cost).
16. **Environment Consultant:** The proponent along with the consultant **Cognizance research India Pvt Ltd, Noida** made a detailed presentation before the SEAC.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Cognizance research India Pvt Ltd, Noida**, the SEAC recommended for grant of Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – C** in addition to the following specific conditions.

- i) Revised mining plan shall be prepared based on essential physical criteria as per Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India enclosed as **Annexure - D**.
- ii) Regular replenishment study to be conducted and report to be submitted.
- iii) Provision of Bio-toilet shall be made at the site.
- iv) Avenue plantation and plantation on both sides of the haulage road in consultation with/ on the advice of concerned Forest Department, Government of Odisha & W.R. Department Government of Odisha as well.
- v) Stone patching with plantation in between along the stretch of the bank associated with sand mining and necessary ramp construction shall be made.

ITEM NO. 06

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR BADARO DEVI NADI SAND QUARRY OVER AN AREA OF 12.60 ACRE OR 5.10 HA. IN VILLAGE BADARO UNDER JAGATSINGHPUR TAHASIL OF JAGATSINGHPUR DISTRICT OF SRI UTTAM ROUT - EC

1. This proposal is for environmental clearance for Badaro Devi Nadi Sand Quarry over an area of 12.60 acre or 5.10 ha. in village Badaro under Jagatsinghpur Tahasil of Jagatsinghpur District of Sri Uttam Rout.

2. This proposal falls under category B1 (Lease area >5.0 Ha< 100 Ha) ss per EIA notification 2006 and subsequent amendment.
3. The proposed mining project is the river bed sand mining on Badaro Devi River at village Badaro under Jagatsinghpur Tahasil of Jagatsinghpur district, Odisha, over an area of 12.60 acre or 5.10 hectare.
4. Mining in favor of Sri Uttam Charan Rout the successful bidder of the lease vide Letter of Intent No. 3814/2019 dated 19-10-2019 for a period of five years.
5. **Location and Connectivity** - The lease area is located in Khata no.88, Plot no-1/p, Kisam : Nadi. The geo coordinates of the quarry is Latitude: 20^o10'31.20" N to 20^o10'37.30" N Longitude: 86^o09'09.20" to 86^o09'19.70" E. The area falls in Survey of India Topo sheet No. 73 L/4. Nearest Railway station is Gorakhnath at 18.20 Km, nearest other road is Mahira Road at 2.3 Km, NH at 14.30 Km, SH 55 at 7.90 Km. Nearest Major District Road at 7.90 Km, nearest airport is Biju Patnaik International Airport, Bhubaneswar at 35.70 Km. Nearest Road Bridge over Devi river known as Galadari bridge - 1.9 Km. The project location falls under the seismic zone -III.
6. The Terms of Reference (ToR) has been issued by SEIAA, Odisha vide Letter No. 2323/SEIAA on dated 31.08.2021 for the preparation of EIA/EMP report.
7. Public hearing for the mines was conducted on dated 03/06/2022 at 11.30 A.M. at Ground near Sainito Primary School, Sainito village in Jagatsinghpur, Odisha. Main issues raised during Public Hearing are Traffic congestion in village road due to sand transportation, air pollution control, road repair & Plantation. Budget proposed for addressing issues raised is 5.7 Lakhs.
8. Baseline data collection was done in post monsoon i.e. 1st November to January 2022.
9. **Total Reserves** - The total mineral resources and reserves have been calculated and found to be Geological Reserve – 39077 cum and Mineable Reserve – 32751cum.
10. **Method of Mining:** The mode of mining is open cast manual method of mining. The proposed production is 6500cum/annum of Sand and total production is 32500cum during the plan period.
11. **Replenishment study** has been done by field survey (volumetric survey) method. As per the study, the area is not operational till now due to non grant of Environmental Clearance, hence replenishment rate is absolutely 100% during the year 2021 -22, which will sufficient for the production capacity of 6500 m³/annum. Since, the total mineable area has been divided into five parts for excavation during plan period as per approved Mining Plan and also the area demarcated for five years mining. Once one part will excavate for one year, will not come further during next year plan period. So, rest part of mineable area will be excavated as per approved mining.
12. **Water Requirement:** The total water required for the project is 3KLD; Drinking & Domestic purpose -1 KLD; Green belt & dust suppression-2 KLD. The source of water is private water tankers.

13. **Power Requirement:** There will be no power requirement for mining activity however the required electricity for operation of site office of project shall be drawn from CESU.
14. **Fuel Requirement:** Tipper & Dumper will be used for transportation. So the approximate quantity of the fuel/Diesel used per day is 100Lit/day.
15. **Manpower Requirement:** Total man power required is 15Nos i.e., (Supervisory-02nos.) & (Non-Supervisory - Out of which 02 nos. are skilled, 04 nos. are semi-skilled and 07nos are unskilled).
16. **Green belt/plantation:** As this is a river bed mining the plantation/ green belt development is not possible within the lease area. So the plantation will be carried out along the river bank to protect the bank erosion. 500nos of saplings will be planted over an area 0.15Ha. Budget for green plant & plantation is 0.50lakhs.
17. **Cost of the project:** Estimated cost of the project is Rs.10lakhs. The budget allocated for EMP is Rs. 3.00lakhs
18. **Environment Consultant:** The proponent along with the consultant **M/s Kalyani Laboratories Pvt. Ltd., Bhubaneswar** made a detailed presentation before the SEAC.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Kalyani Laboratories Pvt. Ltd., Bhubaneswar**, the SEAC recommended for grant of Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – C** in addition to the following specific conditions.

- i) Revised mining plan shall be prepared based on essential physical criteria as per Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India enclosed as **Annexure - D**.
- ii) Regular replenishment study to be conducted and report to be submitted.
- iii) Provision of Bio-toilet shall be made at the site.
- iv) Avenue plantation and plantation on both sides of the haulage road in consultation with/ on the advice of concerned Forest Department, Government of Odisha & W.R. Department Government of Odisha as well.
- v) Stone patching with plantation in between along the stretch of the bank associated with sand mining and necessary ramp construction shall be made.


Member Secretary, SEAC


Chairman, SEAC

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S “SIKSHA ‘O’ ANUSANDHAN DEEMED UNIVERSITY” FOR IMS & SUM HOSPITAL (CAMPUS-2) BUILDING (2B+G+9) ON KHATA NO - 626/1 AND PLOT NO. 416,297,417,419,296, 298, 418, 299,420,287, 415/4195 OVER AN BUILT-UP AREA 89712.23 M² LOCATED AT MOUZA – PHULNAKHARA, BHUBANESWAR OF SRI BIBEKANANDA PRADHAN – EC.

PART A - SPECIFIC CONDITIONS:

1. Consent to Establish / Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
2. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of fire fighting equipment etc. as per National Building Code including protection measures from lightening etc.
3. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
4. The project proponent shall ensure that the guidelines for building and construction projects issued vide this Ministry's OM NO.19-2/2013-IA.III dated 9th June, 2015, are followed to ensure sustainable environmental management.
5. Provision for electric point at each and every parking location for e- vehicle charging etc. shall be provided.

TOPOGRAPHY AND NATURAL DRAINAGE

6. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape and other Sustainable Urban Drainage Systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
7. NOC from drainage department for discharge of treated water to readymade municipality drain shall be obtained.

WATER REQUIREMENT, CONSERVATION, RAIN WATER HARVESTING, AND GROUND WATER RECHARGE

8. As proposed, fresh water requirement from Ground water / Bore well shall not exceed 230 KLD.
9. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
10. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC and

SEIAA, Odisha along with six monthly Monitoring reports.

11. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
12. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc.) for water conservation shall be incorporated in the building plan.
13. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
14. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
15. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed 33 (thirty-three) nos. of rain water harvesting recharge pits shall be provided.
16. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering. The proponent shall also obtain permission from Water Resources Department, Govt. of Odisha for drawal of water.

SOLID WASTE MANAGEMENT

17. The provisions of the Solid Waste (Management) Rules, 2016, E-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
18. Bio-medical waste shall be collected, treated and disposed in accordance with Bio-medical Waste Management Rules, 2016.
19. Bio-Medical waste shall be disposed off through common bio-medical waste facility as per the agreement made with the nearby Common Bio-medical waste facility.
20. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
21. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.
22. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

23. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the Municipal Solid Waste generated from project shall be obtained.

SEWAGE TREATMENT PLANT

24. Sewage shall be treated in STP of capacities 200 KLD. The treated effluent from STP shall be recycled/re-used for flushing, gardening and washing purpose. Surplus treated waste water shall be discharged to the drain provided by BMC for this project.
25. Clinical waste water shall be treated in ETP of capacity 50 KLD.
26. A certificate from the competent authority shall be obtained for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point.
27. No sewage or untreated effluent water would be discharged through storm water drains.
28. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the SEIAA, Odisha before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
29. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

ENERGY

30. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
31. Energy conservation measures like installation of CFLs / LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
32. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 2-5% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.
33. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and

institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

34. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
35. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project shall be submitted.

AIR QUALITY AND NOISE

36. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
37. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
38. **Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.**
39. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
40. For indoor air quality the ventilation provisions as per National Building Code of India shall be provided.
41. Ambient noise levels shall conform to residential standard both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

GREEN COVER

42. No tree cutting/transplantation of existing trees has been proposed in the instant project. A minimum of 1 tree for every 80 m² of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 3119.5 (20.71 %) of the plot area shall be provided for green area development.

TOP SOIL PRESERVATION AND REUSE

43. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

TRANSPORT

44. A comprehensive mobility plan, as per Ministry of Urban Development best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - Traffic calming measures
 - Proper design of entry and exit points.
 - Parking norms as per local regulation
45. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project.
46. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
47. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

ENVIRONMENT MANAGEMENT PLAN

48. An Environmental Management Plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste

management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

OTHERS

49. Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
50. A First Aid Room shall be provided in the project both during construction and operations of the project.
51. The company shall draw up and implement corporate social Responsibility plan as per the Company's Act of 2013.
52. As per the MoEF&CC, Govt. of India Office Memorandum F.No.22-65/2017-IA.III dated 1st May 2018, the project proponent is required to prepare and implement Corporate Environment Responsibility (CER) Plan. As per para 6(II) of the said O.M. appropriate funds shall be earmarked for the activities such as infrastructure creation for drinking water supply, sanitation, health, education, skill development, roads, cross drains, electrification including solar power, solid waste management facilities, scientific support and awareness to local farmers to increase yield of crop and fodder, rain water harvesting, soil moisture conservation works, avenue plantation, plantation in community areas etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

PART B – GENERAL CONDITIONS

1. A copy of the Environmental Clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.
2. The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to the SEIAA, Odisha and MoEF&CC, Govt. of India and its concerned Regional Office.
3. Officials from the Regional Office of MoEF&CC, Bhubaneswar who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection.
4. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEIAA, Odisha.
5. The SEIAA, Odisha reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act,

1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

6. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
7. These stipulations would be enforced among others under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and the EIA Notification, 2006.
8. The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the SEIAA, Odisha. The advertisement shall be made within Seven days from the date of receipt of the Clearance letter and a copy of the same shall be forwarded to the Regional Office of MoEF&CC, Bhubaneswar.
9. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
10. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.
11. The proponent shall submit/upload six monthly reports on the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
12. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC by E-mail.

**CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR
DECORATIVE STONE / GRANITE MINES**

A. Specific conditions

1. The Project Proponent shall obtain consent from the State Pollution Control Board, Odisha and effectively implement all the conditions stipulated therein.
2. 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; All the old age people of the surrounding villages may be provided medical facilities.
3. Transport of minerals shall be done either by dedicated road or it should be ensured that the trucks/dumpers carrying the mineral should not be allowed to pass through the villages. The 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 Guidelines with respect to complying with traffic congestion and density.
4. Project Proponent shall ensure the safeguard and wellbeing of villagers and school, regular health monitoring of all residents in the area and the compliance Report shall be submitted to the Regional office of the Ministry and SEIAA, Odisha.

B. Standard conditions

1. A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the SEIAA, Odisha 5 years in advance of final mine closure for approval.
2. No mining activities will be allowed in forest area, if any, for which the Forest Clearance is not available.
3. No change in mining technology and scope of working should be made without prior approval of the SEIAA, Odisha.
4. No change in the calendar plan including excavation, quantum of mineral and waste should be made.
5. The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and ground water) for the project.
6. Mining shall be carried out as per the provisions outlined in the approved mining plan as well as by abiding to the guidelines of Directorate General Mines Safety (DGMS).
7. Protection of vegetation in the surrounding areas, and proper storage of solid waste, subgrade ore and their use have to be given priority during mining operation.
8. Digital processing of the entire lease area using remote sensing technique shall be

carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment, Forest and Climate Change its Regional Office and SEIAA, Odisha.

9. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM10 and PM2.5 such as haul road, loading and unloading point and transfer points. Fugitive dust emissions from all the sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board.
10. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. The monitoring shall be carried out four times in a year pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board.
11. Transportation of the minerals by road passing through the village shall not be allowed. A 'bypass' road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The project proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.
12. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.
13. Sufficient number of Gullies to be provided for better management of water. Regular Monitoring of pH shall be included in the monitoring plan and report shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.
14. There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.
15. The Project Proponent has to take care of gullies formed on slopes. Dump mass should be consolidated with proper filling/leveling with the help of dozer/compactors.
16. The reclamation at waste dump sites shall be ecologically sustainable. Scientific reclamation shall be followed. The local species may be encouraged and species are so chosen that the slope, bottom of the dumps and top of the dumps are able to sustain these species. The aspect of the dump is also a factor which regulates some climatic

parameters and allows only species adopted to that micro climate.

17. The top soil, if any, shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time. The maximum height of the dumps shall not exceed 8m and width 20 m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled and afforested. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.
18. Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. The drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and over burden dumps to prevent run off of water and flow of sediments directly into the river and other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.
19. Plantation shall be raised in a 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department and as per CPCB Guidelines. The density of the trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.
20. The Project Proponent shall make necessary alternative arrangements, where required, in consultation with the State Government to provide alternate areas for livestock grazing, if any. In this context, Project Proponent should implement the directions of the Hon'ble Supreme Court with regard to acquiring grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded against felling and plantation of such trees should be promoted.
21. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.
22. As per the Company Act, the CSR cost should be 2 % of average net profit of last three years. Hence CSR expenses should be as per the Company Act/Rule for the Socio

Economic Development of the neighborhood Habitats which could be planned and executed by the Project Proponent more systematically based on the 'Need based door to door survey' by established Social Institutes/Workers. The report shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.

23. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
24. Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.
25. Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
26. The project authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
27. The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment, Forest and Climate Change, its Regional Office, Central Pollution Control Board and State Pollution Control Board.
28. A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.
29. State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/ Tehsildar's Office for 30 days.
30. The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment, Forest and Climate Change at www.environmentclearance.nic.in and a copy of the same should be forwarded to the Regional Office.
31. The SEIAA, Odisha may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
32. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
33. The above mentioned stipulated conditions shall be complied in a time-bound manner. Failure to comply with any of the conditions mentioned above may result in cancellation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

STANDARD ENVIRONMENTAL CLEARANCE CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR SAND MINING

Stipulated Conditions:

1. The project proponent should carry out River bed sand mining manually by engaging local laborers in force to check over exploitation of sand at the source.
2. Any change in the plan or quantity to be produced shall require prior approval of SEIAA.
3. There shall be a 'no working zone' to protect the embankment on both sides, road or rail bridge in the vicinity, if any, dam, weir, water intake structure of irrigation or drinking water project, or any cross drainage structure. 10 % of the width of river shall be left intact along the embankments on both sides as 'no mining zone'. Further, no mining shall be allowed within 200 m of any existing structures dam, weir, water intake structure of irrigation or drinking water project, or any cross drainage structure. In case of River Bridge, this no mining zone shall extend upto a minimum stretch of 200 meters from the bridge and it may extend upto 500 meters in sensitive locations. The lease area shall be accordingly curtailed to carve out the actual sand mining area within the leasehold. Exact map of the lease area, and the 'no mining zone' shall be drawn to scale, showing the DGPS coordinates of all corner points, and the location of the bridge, embankment, extraction route & other structures; and such map has to be submitted to SEIAA by the project proponent through the Tahasildar within three months of the date of issue of the EC. The quantum of sand allowed to be extracted will be worked out on the basis of the actual working area.
4. The lease area and the actual working area shall be demarcated on the ground by erecting durable masonry /concrete pillars by the project proponent.
5. The project proponent shall take prior statutory and regulatory clearance as required from the concerned authorities in respect of the project, before carrying out any operation.
6. Mining is not permissible within the water channel or stream flow area. No stream shall be diverted for the purpose of mining and no natural water course shall be obstructed. The mining or any ancillary activity shall not in any way disturb the flow pattern of the river water during the non monsoon period. There shall be no sand mining in the river during the rainy season or when there is flow of water in the river.
7. Sand mining operations shall not affect the existing sources for irrigation / drinking water / industrial purpose.
8. The natural sand dunes, if any, near or surrounding the lease area shall not be disturbed.
9. No transportation of the minerals shall ordinarily be allowed on any road passing through villages/habitations/forest land without prior explicit permission. Transportation

of minerals through existing rural roads can be allowed only by the concerned Govt. Department/BDO and only after required strengthening, such that the carrying capacity of road is increased to handle the sand truck traffic. The project proponent shall bear the cost towards the widening and strengthening of existing public roads in case the same is proposed to be used for the project. No movement on any road is allowed on existing village road network without appropriately increasing the carrying capacity of such roads. 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 Guidelines with respect to complying with traffic congestion and traffic density. Plying of sand extraction trucks may be allowed on roads / path ways passing close to schools, temples, hospitals and such other public places only with prior written permission of competent authority.

10. Vehicles hired for transportation of sand from the site should be in good condition and should have pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
11. The vehicles shall not be overloaded and shall be covered with Tarpaulin. The Tahasildar may collect an appropriate road maintenance levy from the lessee as part of the lease conditions on the basis of quantum of sand transported, and utilize the proceeds of the levy for proper maintenance of the extraction paths and roads to prevent their degradation on account of plying of sand trucks.
12. The project proponent shall take all precautionary measures against causing damage to flora and fauna of the locality. The PP shall plant and nurse to full establishment a minimum of 50 number of saplings of native tree species along the approach roads, river banks and in community areas in consultation with the Gram Panchayat.
13. Water spray should be made on the road/extraction paths to control dust emission during transportation of sand.
14. The Project Proponent shall undertake phased restoration, reclamation and rehabilitation of land affected by mining and completes this work before abandonment of mine.
15. Environmental Management Plan (EMP) shall be implemented by PP to ensure compliance with the environmental conditions specified above. The year wise funds earmarked for environmental protection measures shall be kept in separate account and shall be spent according to the plan proposed. Year wise progress of implementation of EMP shall be reported to the SEIAA, Odisha and OSPCB along with the compliance report.
16. The proponent shall take necessary measures to ensure that there is no adverse impact of the mining operations on the human habitation if any, existing nearby.
17. It shall be mandatory for the project management to submit quarterly compliance reports on the status of implementation of the above stipulated environmental safeguards to the SEIAA, Odisha / SPCB, Odisha/ Regional Office of the MoEF&CC, Bhubaneswar, in hard and soft copies on 1st day of January, April, July, October of each calendar year, failing which EC is liable to be revoked.

18. River Bank stabilization shall be made through stone patching. Plantation of adequate number native species on river banks and both sides of haulage roads shall be made.
19. Since NH200, Kuccha Road and temple are only at a distance of 800 mtr, 570 mtr and 500 mtr respectively, all traffic safety measures shall be taken to avoid any kind of accidents.
20. Bio - toilet provision shall be made.
21. As raised during public Hearing and committed by PP, Loknathpur Sasan village road shall not be used for transportation of sand.
22. Stone patching on river bank with plantation in-between and the ramp construction shall be done in consultation with and advice of concerned W.R.Deptt, Government of Odisha.
23. Necessary sprinkling on Haulage Road and Avenue plantation shall be done.
24. At the end of mine closure, the proponent shall immediately remove all the sheds put up in the quarry and all the equipment in the area before closure of the quarry.
25. The conditions stipulated in the environmental clearance will be closely monitored on the ground by the lease granting authority, i.e. the Tahasildar, who shall ensure compliance of the stipulated conditions and take corrective measures promptly in case of any non- compliance and also ensure that the project proponent submits quarterly compliance reports.
26. The concerned Regional Office of the MoEF&CC/ SPCB, Odisha shall periodically monitor compliance of the stipulated conditions as applicable for this project. The project authorities should extend full cooperation to the MoEF&CC officer(s)/SPCB officer(s) by furnishing the requisite data / information / monitoring reports.
27. A copy of the clearance letter shall be sent by the proponent to concerned Gram Panchayat /Panchayat Samiti /Zilla Parisad /Municipal Corporation / Urban Local Body as the case may be.
28. Project proponent shall obtain Consent to Operate from the OSPCB and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the State Pollution Control Board.
29. The SEIAA, Odisha may revoke or suspend this EC, if implementation of any of the above conditions is not satisfactory. The SEIAA, Odisha reserves the right to alter /modify the above conditions or stipulate any further condition in the interest of environment protection.
30. The Project Proponent (lease holder) shall inform the SEIAA of any change in ownership of the mining lease. In case, there is any change in ownership or mining lease is transferred, then mining operation can be carried out only after transfer of EC as per provisions of the para 11 of EIA Notification, 2006, as amended from time to time.

31. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this environment clearance besides attracting penal provisions in the Environment (Protection) Act, 1986.
32. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court and any other Court of Law relating to the subject matter.
33. This Environmental Clearance (EC) is subject to orders/judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
34. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.

**ESSENTIAL PHYSICAL CRITERIA AS PER ENFORCEMENT AND MONITORING
GUIDELINES FOR SAND MINING, JANUARY 2020 OF MOEF&CC, GOVT. OF INDIA**

Sl. No.	Essential Criteria	Reference
1.	"No Mining Zone": 1/4th the part of the river width (excluding 3/4th the central part of the river width) on both sides of the river towards the river bank	4.1.1 (Para - e) Page - 16
2.	a) Distance between two clusters : ≥ 2.5 km b) Area of mining lease area in a cluster: ≤ 10 ha.	4.1.1 (Para - k) Page - 19
3.	Concave River Bank : No extraction of sand	
4.	No mining if a) Upstream: Lease is 1 km from major Bridge and high ways or $5(x)$ of the Bridge / public civil structure / water intakes point subject to lease is located at a minimum 250 meter distance. Where x = Span of the bridge. b) Downstream side: Lease is 1 km from the major bridge and Highways Or $10x$ of the bridge / public civil structure / water intake point Subject to lease is located at a minimum distance of 500 meter where x = span of the bridge	4.3 (Para - h) Page - 23
5.	Mining depth : ≤ 3 meter (maximum 3 meter)	4.3 (Para - m) Page - 24
6.	Mining distance from river bank: $1/4^{\text{th}}$ of the river width, But subject to not less than 7.5 meter	4.31 (Para - m) Page - 24
7.	Area for removal of minerals : $\leq 60\%$ of mine lease area	4.3 (Para - s) Page - 25
8.	Minable sand per ha. Available for actual mining : $\leq 60,000$ MT/Annum	
9.	Regular replenishment study and replenishment rate	