

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

The SEAC met on 02nd September, 2022 at 10:30 AM in the Conference Hall of Odisha State Pollution Control Board, Bhubaneswar under the Chairmanship of Sri B. P. Singh. The following members were present in the meeting.

1. Sri B. P. Singh	-	Chairman
2. Dr. K. Murugesan	-	Secretary
3. Dr. D. Swain	-	Member
4. Prof. (Dr.) H.B. Sahu	-	Member
5. Sri J. K. Mahapatra	-	Member
6. Sri K. R. Acharya	-	Member
7. Prof. (Dr.) B.K. Satpathy	-	Member
8. Prof. (Dr.) P.K. Mohanty	-	Member
9. Dr. K.C.S Panigrahi	-	Member
10. Dr. Sailabala Padhi	-	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 OF ENVIRONMENTAL CLEARANCE FOR MANGANESE ORE 0.04 MTPA AND IRON ORE 0.3 MTPA AT KOLMONG IRON & MANGANESE BLOCK OVER AN AREA OF 218.481 HA (AS PER DGPS)/218.530 HA (AS PER ROR) (FOREST: 155.326 HA & NON-FOREST: 63.204 HA) IN VILLAGE-KOLMONG UNDER KOIRA TAHASIL OF SUNDARGARH DISTRICT FOR YAZDANI STEEL & POWER LIMITED OF SRI BINODA KUMAR ACHARYA – EC

1. The proposal is for Environmental Clearance of M/s Yazdani Steel & Power Limited for Manganese Ore 0.04 MTPA and Iron Ore 0.3 MTPA at Kolmong Iron & Manganese Block over an area of 218.481 ha (as per DGPS)/218.530 ha (as per RoR) (Forest: 155.326 Ha & Non- Forest: 63.204 Ha) in village-Kolmong under Koira Tahasil of Sundargarh District.
2. The project falls under category “B” or activity 1 (a) - Mineral of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. Yazdani Steel & Power LTD. (YSPL) was awarded the Kolmong Iron & Manganese Block over an area of 218.481 ha (as per DGPS)/218.530 ha (as per RoR) in village-Kolmong under Koira Tahasil of Sundargarh district of Odisha being the successful bidder the lease was granted under Non captive category for 50 years.
4. The vesting Order issued by the Noda Officer, Steel and Mines Department, Government of Odisha vide No-4369/SM, dated 02.06.2020.Pursuant to the provisions contained in Rule 9A(2) of the Mineral (Other than Atomic and Hydrocarbon Energy Minerals)Concession Rule,2016 order that all the valid rights, approvals, clearances, licenses and the like vested in the previous lessee in respect of the Kolmong Iron & Manganese Block are deemed to have vested in favour of the holder of the letter of intent on the same terms and conditions of every rights, approvals, clearances, licenses and the like which vested with previous lessee.

5. Modified Mining Plan along with Progressive Mine Closure plan was obtained under Rule 23 of MCDR, 2017 form IBM, Bhubaneswar vide letter no MP/A/26-OR/BHU/2020-21 date 20.11.2020 for production of 0.04 MTPA Manganese Ore and 0.3 MTPA Iron Ore with Opencast Fully Mechanized Mining Method. for the period of 2020-21-2024-25 .In order to regularize the statutory provisions, it is proposed to obtain Environmental Clearance for proposed production as per approve mining plan and ToRs Vide no F.No.J11015/05/2021-1a.II(M) dated 4th March,2021 to prepare EIA/EMP report as requirement of Environmental Clearance. Baseline data for environmental parameters was collected during October to December,2020 and public hearing was held on 20th December,2021
6. Kolmong Iron & Manganese Block spreads over an area of 218.481 ha (as per DGPS)/218.530 ha(as per RoR) (Forest: 155.277 Ha & Non-Forest: 63.204 Ha) in village-Kolmong under Koira Tahasil of Sundargarh district of Odisha, The lease area is moderately flat, though there are occasional mounds within the area, studded with flat topped low ridges, reassembling a relict type of topography controlled by differential hardness of rocks. The maximum RL of the area is 654m at the southern part of lease area and the minimum RL of the area is 576m. The area falls in Survey of India Toposheet no.73 G/5. The area is bounded by latitude 21°56'20.01" to 21°57'32.24" N Longitude 85° 18'24.54" to 85°19'22.72"E. The Nearest railway station Barbil is 28 Kms from the lease, to connect Tata Nagar, Kolkata & Bhubaneswar.
7. The nearest important public road is National Highway-215 connecting Panikoili to Rajamunda at an distance of 5 km . Bhubaneswar airport (340 km away) is the nearest airport from the area. There is an airstrip/helipad near Bhadrasahi, Barbil which is around 18 km from the lease area
8. There is no perennial river or water body in the project area. The major drainage channel of the area is kundra nala which is located in the eastern and south-eastern side of the lease hold area.
9. Date of execution of Lease is 30.06.2020 and valid for 50 years upto 30.06.2070.
10. ML area : 218.481 ha(as per DGPS)/218.530 ha(as per RoR) (Forest: 155.277 Ha & Non-Forest: 63.204 Ha)
11. Capital cost of the project is estimated to be Rs. 68.50 Crore, and Capital cost for EMP is estimated to be 3.16 Crore and annual recurring cost is 0.53 Crore
12. Mining operation is semi mechanized opencast with both mechanized and manual excavation of manganese ore, manual breaking, sorting & sizing of manganese ore. Development work will be done by excavator (0.9 m³) and tipper combination. Similarly for iron ore, the production of ROM will be carried out by dumper shovel configuration and the processing will be carried out by mechanized method. During the proposed mining operation period, total maximum ROM of Iron Ore will be handled 1.0498 Million Ton from in-situ ore zone and Maximum 0.2 Million Ton ROM for Manganese Ore. The mining operation will be of one shift.
13. Total 64.633 ha. Land will be proposed to be excavated to win the Mn ore. So, it is estimated that from 2020-21 to end of life of mine 1,03,02,939m³ of waste will be generated during mining operation. Out of total waste generation of waste 95,22,919 m³ will be used for backfilling the exhausted quarry. The balance 7,80,020m³ will be dumped on external dumps.

14. Electricity requirement: The electricity is supplied to the project by WESCO through 1 nos. transformers of capacity 1500 KVA /day inside the lease hold. Solar system shall be installed for lighting at admin building and other mining area. 500KVA of DG Set available in the mine for stand by purpose.
15. H.S.D. requirement: Requirement of H.S.D is 11.0 KLD
16. Manpower requirement of project is 316 nos
17. Peak Water Requirement of the project is 173 KLD and average water requirement of the project is 86 KLDB
18. Before auction and total 53.540 ha of are ahs been already utilized and as per present mining plan additional 26.417 ha shall be utilized and 138.573 ha shall be remain unutilized
19. Based on the Geological Report as supplied by the State Govt., the total resources of ROM (under G2 Level) for both high grade & low grade of Mn ore as on 01.01.2019 was 37,23,658 (MT) and Iron Ore 13,97,650 (MT). After depletion upto 31.03.2020 by the previous lessee, the resource of Manganese Ore was 3722397 MT and the Iron Ore was 1397650 MT (no depletion of iron ore).
20. As on 01.10.2020, the residual reserved Manganese Ore is 34,24,605 MT and considering the target production of 40,000 MT per year, the life of mine will be 85.66 year.
21. As on 01.10.2020, the residual reserved Iron Ore is 12,57,585 MT and considering the target production of 3,00,000 MT per year, the life of mine will be 4.19 year.
22. The life of mine will be increased, If the reserve will increase due to proposed future exploration
23. The Kolmong Iron & Manganese Ore Mine is 'A'-OTFM category mine and mining operation is semi-mechanized open cast.
24. Manganese ore is soft in nature and generally occurs in small pockets. Grade of the ore also varies widely within the ore pockets. The iron ore deposit has also been proposed for semi-mechanized open cast mining. Excavator (0.9m³) and dumpers combination will be used for development of benches in both waste and ore.
25. Deep hole drilling & blasting will be occasionally used to dislodge the hard strata. Rock breaker has been utilized in the area where blasting is not possible. As the manganese ore occurs in the form of small and big pockets in this area, mining operation is of mixed type.
26. In this mine, Manganese ore pockets and iron ore (ROM) will be excavated out by excavator (0.9m³). Then the excavated ROM (Mn) ore material goes to manual ore sorting / sizing yard for sorted out the manganese ore lumps from ROM ore material and the iron ore (ROM) shall be crushed and screened in different size and grade as per the nature.
27. These manganese ore lumps will be then stacked separately as per the grade. The sub grade/ low grade manganese ore are stacked separately. Manganese ore fines are also stacked separately. Then the sized manganese ore are loaded into truck either manually or through machine for dispatch to buyer's destination.
28. The waste material is dumped in Dump-D1 & D3 as well as utilized for the backfilling of part of Quarry-6 & 7.

29. Regarding mining operation, excavator of capacity 0.9m³ and tippers of capacity 20 MT will be used for excavation and transportation of wastes & ROM ore. In the quarry bench height will vary from 3 to 4 m and width will vary from 6-10 m. If necessary, 4 m bench will be divided into small benches. Dump leveling and dump terracing will be done through dozer as per requirement. During the proposed plan period maximum annual production of Manganese ore will be 40,000 MT & Iron Ore will be 3,00,000 MT per annum
30. During proposed period of mining operation total handling of Iron Ore (ROM) from the mine will be around 3,00,000 (MT) and the production of Manganese ore will be around 40,000 MT obtained from insitu body.
31. During the proposed period of mining operation four nos of quarry will operate namely New Pit, Quarry 6 & 7, Dhandariya Pit & Magazine Pit for Mn Ore & Quarry namely New Pit & Dhandariya Pit for Iron Ore. The mining operation will be carried out by Sovel & Tipper combination for excavation of both Ore & Waste.
32. The excavator of capacity 0.9 m³ will be used for feeding of ROM to screening & crushing plant for Iron Ore & the Mn ore will be processed manually.
33. Rock breakers are used to avoid secondary blasting as per the requirements. .
34. There will be no change in proposed method of mining.
35. This working mine shall bring tremendous benefits in the area like:
36. Direct employment opportunities for more than 500 persons.
37. Indirect employment for more than 3000 persons through various service related activities connected with the project operations
38. Improvements in infrastructure in the area Road Network, Water supply to villages through Water tankers & overhead tanks with pipe lines, Electricity facilitation, Healthcare, Education, Other Social Welfare Activities Providing certain facilities for the local panchayats.
39. Financial gains for the state and central Governments, through collection of various taxes like royalty, GST, DMF and NMET (National Mineral Exploration Trust) etc., Increase in General Awareness of the People
40. Improvement of the General Living Standard of the People in the Vicinity.
41. Generation of self-employment through self-help groups.
42. Improvement in Per Capita Income.
43. The user agency as well as Govt of Odisha will be benefitted financially due to the commencement of project
44. Environmental protection as well as the development of the people will be worked in a systematic manner at the block/regional level for overall benefit of the society, region, district and state. The Company will extend their co-operation and assistance in sharing the relevant data/ information/ reports/ documents etc. for continuous improvement of Sustainable Environment Development Plan for economic growth in the mining sector.
45. The Environment Consultant **M/s Adra Consulting Services Pvt. Ltd. Bhubaneswar** along with the proponent made a detailed presentation on the proposal before the Committee.

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

- i) Detail of different grades of Iron from 45+ Fe to 55+ Fe to be used, and of non utilised ore and its management. Complete material balance including source, end use and storage and its moving inventory with layout map.
- ii) Details of 1100KLD HSD, its procurement and storage.
- iii) Complete water balance
- iv) Water Balance details with focus on rain water harvesting and use, lesser drawl of ground water.
- v) There should be atleast 50% of ground water recharge as per the total water requirement for the project. So design and dimensions of rain water harvesting pond with its capacity that will be put up in the project to hold the rain water.
- vi) Silt management practice measures to be followed for protecting nala nearby.
- vii) Compliance to Additional ToR point no. 7 with detail chemical composition of different grades including silica.
- viii) Layout plan showing Iron and Manganese reserves, its mining areas, storage and dump areas.
- ix) Layout map of total broken up area existing and proposed to be broken.
- x) Compliance to NEERI recommendation for Manganese mine expansion to be submitted.
- xi) Detailed plan for Dump management, dust suppression and mitigation measures suggested.
- xii) Cross-sectional dimension of retaining wall and garland drain shall be furnished.
- xiii) Specific measures taken for Manganese poisoning in that area.
- xiv) Reclamation Plan for Dump after conceptual plan.
- xv) Revalidation the Site specific wildlife Management plan for entire area duly approved by PCCF wildlife and contribution to Regional Wildlife plan details.
- xvi) Plot wise kissam of land in tabulated form for non-forest land (63.204ha.) duly certified by concerned Tahasildar and its conversion to mining/industrial use.
- xvii) Unexplored area of 138Ha. can be utilised for installation of solar panels to meet power requirement partially/fully.
- xviii) No. of check dams/settling ponds with capacity to be constructed for protection of the Nala.
- xix) Latest Compliance Report for Previous EC Conditions.
- xx) Proposed R & R plan.

- xxi) Identification of sources of fluoride and its control.
- xxii) Incremental concentration of PM_{2.5} and PM₁₀ and their control.
- xxiii) Regular monitoring of the water quality of discharge and also that of Kundra nana. Since the water is proposed to be discharged to kundra nala, at no pint of time the water quality parameters should exceed the standard limits.
- xxiv) Bench and dump Slope stability studies
- xxv) Protection measures against hazards arising out of vibration and fly rocks.
- xxvi) Certificate from the Mining Department regarding the mineralised zone.
- xxvii) NoC from CGWA for ground water and permission/ Agreement with State Government Water Resource Department.
- xxviii) Biodiversity register for the ML area as per Biodiversity Conservation Act, 2003.
- xxix) Energy Conservation as per BEE and Energy Conservation Act, 2002.
- xxx) On site Emergency plan, Off site Emergency plan linked with District Administration and Disaster Management Plan as per Disaster Management Act, 2005.
- xxxi) Permission of District Collector with respect to Forest Right Act, 2006 and compliance of its condition.
- xxxii) Compliance of condition of Forest Clearance as per Forest Conservation Act, 1980.
- xxxiii) Site specific, Wildlife Conservation and Management plan as per Wildlife Protection Act, 1972 and Odisha State Government Rule, 2006 along with proof of deposit of funds with respective Authorities.
- xxxiv) To submit a Fire Safety Clearance Certificate for the project.
- xxxv) Compliance of Hazardous Waste Rule, 2016, SWM, Hazardous Chemical Rule, Battery Rule, DG Rule, C&D Rule, Electrical & Electronic Rule compliance reports duly Certified by Regional Officer SPCB, Odisha.
- xxxvi) Permission of use of explosives from Chief Controller of Explosives and its condition compliance report.
- xxxvii) Status of installation of Weather Monitoring System
- xxxviii) Status of Occupational health services for Mine employees and peripheral villagers.
- xxxix) Organogram for Management of Pollution control, Environment Management, Forest Management and afforestation, Wildlife Management, Safety Management, Occupational Health services and social accountability
- xl) Clarification on applicability of PESA Act for this project

ITEM NO. 02

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR CONSTRUCTION OF 100 SEATED NEW GOVT. MEDICAL COLLEGE & TEACHING HOSPITAL OVER AN AREA BUILT UP AREA 109632 SQ METERS. AT VILLAGE ANKULA, DIST- JAJPUR OF SRI BIRANCHINARAYAN BARIK – EC

The project proponent did not attend the meeting. The proposal is deferred to next meeting.

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ITEM NO. 03

PROPOSAL OF ENVIRONMENTAL CLEARANCE CONSTRUCTION OF SRI JAGADGURU KRIPALU 400 BEDED MULTI-PURPOSE HOSPITAL & RESEARCH CENTER WITH TOTAL PLOT AREA OF 56372.71 SQ.M I.E. 13.930 ACRES AND PLOT AREA OF 37504 SQ.M AT JAGADGURU KRIPALU UNIVERSITY, BANARA, CUTTACK DISTRICT OF SMT SULAKSHYANA DAS – EC

1. This proposal is for Environmental Clearance Construction of Sri Jagadguru Kripalu 400 Beded Multi-Purpose Hospital & Research Center with total plot area of 56372.71 Sq.m i.e. 13.930 Acres and plot area of 37504 Sq.m at Jagadguru Kripalu University, Banara, Cuttack district of Smt Sulakshyana Das.
2. The project falls under category “B” or activity 8(a) Building and Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. Jagadguru Kripalu University is proposing for establishment of 400 bedded hospital and research center in outskirts of Cuttack City at Vill: Baanara, Banki, Cuttack District, Odisha. The plot area meant for construction of 400 bedded hospital will be established over an area of 13.930 Acres i.e 56372.71 Sq.m with a total builtup area of 37404 Sq.m. Total parking provided for the project will be 11300 sq.m open parking (30% of builtup area) and 11274 sq.m green cover area (20% of Plot area). The land is of Gharabari kissam without any forest land included.
4. **Location and Connectivity** – The project is located at Plot No. 3654, 3656, 3858/4922, 3858/5001, Khata No- 771/462; Kissam – GharabariMauza Banara, Via: Munduli, Tahasil: Dampada. The Hospital will be constructed within the existing campus of JKU. The Geographical co-ordinate of the project site are Latitude: 20° 24' 49.21" - 20° 25' 3.35" N, Longitude: 85° 45' 22"- 85° 45' 22"37 E. and finds place in Toposheet no. 73H/11. The nearest road is Banki Cuttack road at 1km. Nearest Railway station Baranga at 7km. Nearest River is Mahanadi at 2.5km. Munduli Barage at 3.5km. Chandaka Reserve forest at 1km. The nearest Ecologically sensitive area is Chandaka Elephant Sanctuary which is located at 1 Km from the project. The project site is located outside the ESZ boundary of the sanctuary.
5. **Water Requirement** - Total water requirement will be 677 cum per day out of which fresh water requirement will be 406 Cu.m Per day. Water will be sourced from ground water through bore well. Out of the total water requirement of 677 KLD, 406 KLD (60%) of fresh water, which will be met through bore well for drinking, washing and other domestic purpose. 271 KLD (40%) of water will be made available from treated waste water for Flushing and gardening purpose. Application to CGWA for withdrawal of ground water is under process. The treated waste water will be completely used for green belt development, HVAC use and washing purpose.
6. **Waste Water Management** - The waste water generated from the project will be 302 KLD which will be treated through a Sewage Treatment Plant of 370 KLD. Another ETP is proposed for treatment of infectious waste water with capacity of 40 KLD.
7. **Rain water Harvesting** - For water conservation rain water harvesting is proposed which consists of 8 nos of 35 cu.m rain water recharge pits.
8. **Power Requirement** - Based on the Electrical Load calculation, overall maximum demand load is anticipated as approximately 2.5 MVA. 162 KW of solar power generation proposal is

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included in the project which reduces 7% of the total power requirement. There is the proposal for 100% power back up with 1x1250 kVA and 2x750 kVA DG sets.

9. **Green belt** - Plantation will be made over an area of 11274 Sq.Mt with 2500 saplings. The plantation will be completed within 3 years of construction period.
10. **Solid Waste Generation** - During the implementation of the project the biomedical waste generated from the project will be about 2100 Kg. The Bio medical waste generated will be collected, segregated and disposed as per Biomedical waste management rule, 2016. 3 Nos of solid waste segregation room will be constructed for separation of biological waste and other solid waste. Bio medical waste will be disposed through authorized agencies (RAMKY) (Authorized by Odisha State Pollution Control Board)
11. **Fire Fighting system** - The project includes Static water storage tanks and Fire pumps, Wet Riser system, Hose Reels, Portable Fire extinguishers, Automatic Sprinkler system. There is the proposal for 100 Cu.m UG tank and 10 cu.m OHT for fire fighting. The internal road will be 7m wide road which can serve for movement of fire vehicles. In the circulation plan of the project, there will be proper entry and exit points for systematic control of the vehicular movement within the medical complex.
12. All the materials used in construction of this building are strictly in accordance with BIS/ISI specifications and norms conforming to National Building Code, 2016 covering all the safety factors including earthquake and cyclone. The project obtained structural safety certification from the competent authority regarding the construction of the building.
13. **Project Cost** - Total cost of the project is Rs.90.76 crores and the capital cost for EMP is 95 lakhs and the recurring cost will be 27 Lakhs per annum.
14. The Environment Consultant **M/s Kalyani Laboratories Pvt. Ltd. Bhubaneswar** along with the proponent made a detailed presentation on the proposal before the Committee.

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 information / documents from the proponent followed by site visit of the sub-Committee of SEAC.

- i) Backup calculation to attain Zero liquid Discharge concept.
- ii) Details of Rain water Harvesting.
- iii) Location, Source and utilisation/ disposal of 40KLD ETP effluent.
- iv) Provision for Incinerator.
- v) Location of STP, disposal of STP water with no integration of STP & ETP.
- vi) Backup calculation of 175KLD water used in HVAC.
- vii) Parking area in terms of ECS for 4 wheelers and 2 wheelers and their location for staffs, patients and visitors.
- viii) Traffic Study Report to be submitted duly vetted by institute of repute.
- ix) Layout plan and width of road for movement of Fire Tender.
- x) Detailed calculation of greenbelt with breakup and dimensions.

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- xi) Backup calculation of DG sets of 2750KW.
- xii) Layout map showing nearest drain and its distance.
- xiii) Layout of internal drainage map and their fallout if any to external public drain.
- xiv) Copy of permission of the concerned authority of the drain to discharge if any water from project to the nearby drain.
- xv) Breakup of total built up area of the whole project area including university.
- xvi) Permission/Undertaking that total built up area will not exceed 150000sq.mt.
- xvii) Approval Letter from Fire Safety Deptt.
- xviii) Details of accreditation of the University.
- xix) Construction status of the project of the university such as prior to 2006 and after 2006 and till now.

ITEM NO. 04

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR ADDITIONAL INSTALLATION OF CHROME ORE BENEFICIATION UNIT OF THROUGHPUT CAPACITY 18,500 TPA WITHIN THE EXISTING CAMPUS OVER AN AREA OF 7.76 ACRE OR 3.14 HA. IN PLOT NO. 30/301, AT VILLAGE: JAMINIBANDHA, P.O: BHANDARI FOR M/S SHREE MONOLITHICS PVT. LTD OF SRI CHANDRA SEKHAR SAMAL – EC

1. This proposal is for Environmental Clearance for Additional installation of Chrome Ore Beneficiation Unit of throughput capacity 18,500 TPA within the existing campus Over an area of 7.76 Acre or 3.14 Ha. In Plot No. 30/301, at Village: Jaminibandha, P.O: Bhandari for M/s Shree Monolithics Pvt. Ltd of Sri Chandra Sekhar Samal.
2. The project falls under category “B” or activity 2(b) - Mineral beneficiation projects and category ‘B2 ’as the throughput capacity of the beneficiation plant is 18,500 TPA (<20,000 TPA) under EIA Notification dated 14th September 2006 as amended from time to time.
3. M/s Shree Monolithics Pvt. Ltd. proposes for establishment of Chrome Ore beneficiation plant over an area of 7.76 Acres or 3.14 Ha with throughput capacity of 18,500 TPA within the existing Chrome Monolithic Unit at Jaminibindha, Bhandaripokhari, Dist: Bhadrak, Odisha.
4. **Existing Project Details** – The Project has existing Chrome Monolithic unit (Refractory: 2500 MT/month), Refractory mortar: 500 MT/month, Ramming mass: 250 MT/month, Nozzle filling compound: 500 MT/month, Felting mass: 250 MT/month, Chrome Monolythic: 500 MT/month, Chrome sand: 500 MT/ month, High carbon Ferrochrome: 2000 MT/month (reclaimed from nonhazardous slag of steel and ferro alloys) and Ferro Alloys metal: 50,000 MT/ annum (reclaimed from nonhazardous slag of steel and ferro alloys).
5. **Proposed Details** – The Project has proposed an Additional Installation of beneficiation plant with throughput of 18500 TPA
6. Terms of Reference was granted by SEIAA vide letter no – 4180/SEIAA dated 03.03.2022.
7. The existing chrome monolithic unit has obtained Consent to Establish vide letter no – 428/NOC/1473 dated 15.02.2010 and Consent to Operate vide Consent Order NO- 170/CTO-2956/2017 dated 31.08.2018 valid upto 31.03.2022.

8. The EIA EMP study was carried out based on the baseline study carried out during October to December 2020 by M/s Kalyani Laboratories Pvt. Ltd. (KLPL).
9. **Location and Connectivity** - The project is located at Jaminibindha village over an area of 7.76 Acres in Plot No:25/285,19,27,17,18,30,20,21,96/321,29,30/301. Khata No.: 9/9, 92/67, 9/5, 92/61, 9/6, 92/65, 92/62 and 92/64. The project can be identified in Survey of India Toposheet No.:73L/5 & 73K/8; Latitude:20° 57' 26.88"N Longitude:86°21 '21.67"E. The project site is well accessible through NH 5 at 0.1km and railway station is East Coast Railway at 7Km. Nearest River Baitarani at 7km. Nearest habitation is Rebo – 1km and town is Bhandaripokhari-2 Km.
10. **Water Requirement** - Total water requirement for the proposed project will be 150 KLD and make up water requirement will be 10 KLD. Out of the makeup water requirement 1 KLD used for drinking purpose which will be sourced by borewell and rest water requirement of 9 KLD will be sourced from Rain Water Harvesting Pond and ground water. There is a proposal for the installation of ETP of 50 KL capacity for the beneficiation plant to treat the surface runoff water.
11. **Rain Harvesting System** - For water conservation two rain water storage tanks of dimension 50 x 80 x 3 m has been constructed within the plant premises to store the harvested quantity of rain water and for use. Total storage capacity of the tank will be 12000 Cu.m.
12. **Power Requirement** - The total power requirement is estimated as 100 KVA. It is proposed to draw the power from the NESCO.
13. **Employment Generation** - The project generates employment opportunities for 12 personnel which includes operator -2, supervisor 2, 4 nos of semi skilled labour and 4no of unskilled labour.
14. **Raw materials and Process** - 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 46 Km from the project site. The transportation of ore from the mines to the project site will be done through covered trucks. 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.
15. **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 & treated with Ferro-Sulphate solution 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.
16. **Greenbelt** - There is plantation of 100 trees within the plant boundary and with the EC proposal there is the planning for three tier plantation along the boundary along with open space plantation. An area of 8903 Sq.m has been allocated for green belt development with about 2200 saplings plantation proposal.

17. **Project Cost** - Total cost of the project will be 1.75 Crores. For implementation for EMP for the project the allocated capital budget will be 32 lakhs and recurring budget will be 5 lakhs.
18. **CSR Activities** - As per the social need assessment and suggestion of village committee a CSR plan has been prepared with a proposed cost estimate of 11.5 Lakhs which will be utilized within a period of 3 years.
19. The Environment Consultant **M/s Kalyani Laboratories Pvt. Ltd. Bhubaneswar** along with the proponent made a detailed presentation on the proposal before the Committee.

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 information / documents from the proponent.

- i) Process flow diagram showing re usage & storage of effluent/tailing and with capacity of tailing pond and treatment of hexavalent Chromium.
- ii) Supporting documents that Kissam of land has been converted to industrial use.
- iii) Supporting documents that supports the land from road to entry and exit gate of project site belongs to the owner.
- iv) Stack and its height to be made for DG set.
- v) Permission from Oil and Safety Authority as petroleum installation is adjacent to the unit.
- vi) Zero liquid discharge concept to be followed strictly and detailed proposal to this effect to be submitted.
- vii) Pollution load comparative statement of hexavalent chromium in soil, water and nearby water bodies.
- viii) Settling pond and ETP design and capacity.
- ix) Technical write up on handling of tailings and its management.
- x) Measures taken to prevent for Leaching process of hexavalent chromium.

ITEM NO. 05

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR BHAGABANPUR DECORATIVE STONE AN AREA 4.50 HA. BEARING KHATA NO. 215, PLOT NO.705 (PART), 711 (PART), 714 (PART) IN VILLAGE -BHAGABANPUR, TEHSIL - KUKUDAKHANDI, DISTRICT-GANJAM OF MD IRFAN RAZZAK – EC

1. This proposal is for Environmental Clearance for Bhagabanpur Decorative Stone an area 4.50 ha. bearing Khata no. 215, Plot no.705 (Part), 711 (Part), 714 (Part) in village -Bhagabanpur, Tehsil - Kukudakhandi, District-Ganjam of Md Irfan Razzak.
2. The project is categorized under Category-B1 as the total lease area under cluster approach is more than 5 Ha (2 other mines are in the cluster) and is present in Schedule under item 1(a) in the EIA notification, 2006 and its subsequent amendments thereto.
3. This present proposal of Bhagabanpur Decorative Stone is a stone mining project and the total area is 4.50 Ha. / 11.12 acres and is located in Mouza - Bhagabanpur, Tahasil - Kukudakhandi, District - Ganjam of Odisha.

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4. All the mining leases is granted by Tahasildar, Kukudakhandi, Ganjam and has been auctioned and leased out to the successful bidders. The LOI for mining has been issued for 5 years period vide letter no. 6602/SM, dated 06.09.2019. Now, Md. Irfan Razzak Niladri Vihar, (IInd Lane Extension), Aska Road, Berhampur-760001, Dist: Ganjam, Odisha. has applied for Environment clearance for the Bhagabanpur Decorative Stone.
5. TOR letter has been issued vide letter no. 1799/SEIAA on 26.07.2021.
6. Baseline study has been conducted for post monsoon season of 2020 i.e, from December, 2020 to Feb, 2021.
7. Public hearing was exempted for this project because Public Hearing previously was conducted for other 2 mines present in cluster on dated 02-07-2014. At the time of TOR (Terms of Reference), SEAC meeting held on 13.11.2020 had clarified that the same public hearing is valid for this project.
8. The Mining Plan of stone quarry has been approved by the approving authority, Office of the Joint Director of Mines, Odisha, Bhubaneswar for period of 5 years vide letter no 3118/DM on 15.05.2020.
9. **Location And Connectivity:** The Bhagabanpur Decorative Stone is proposed on Khata no- 215, Plot no- 705(P), 711(P), 714(P) of Parbat Kissam in Mouza - Bhagabanpur in Tahasil Kukudakhandi in Ganjam District of Odisha. The area under discussion is featured in Survey of India Topo Sheet No – 74A/11 and is bounded between the Latitude: 19°20'20.00"N to 19°20'29.12854"N, Longitude: 84°44'08.30" E to 84°44'19.15"E. The lease area is located at a distance of 16 km from Mouza Berhampur and at a distance of 33 kms from Tahasil/ District Ganjam and 155.04 kms from the State Capital Bhubaneswar. Berhampur Railway station is the nearest railway station located at a distance of 16 kms from the lease area. Nearest Road bridge is at a distance of 1.5 km from the mining lease area. Metal road connecting to the lease area is at distance of 3 km. SH – 17 is the nearest State Highway at a distance of 3 kms. Major district road is at distance of 3 km. NH-59 is the nearest National Highway which is at a distance of 12 km.
10. The mining lease area is identified and listed in the DSR of Ganjam under minor mineral - stone and is mentioned in Annexure – IX.
11. **Reserves, Method of Mining and Production** – The geological reserves is 126547 cum and Mineable reserves is 92948 cum. Bhagabanpur Decorative Stone is a minor mineral extraction project for exploitation of stone. The average production from the mining is proposed to be 3105 cum/year and total production will be 12,285 cum during the valid lease period of 5 years. The method of mining is proposed as Open cast semi-mechanized method as well as manual method. There is no overburden outside the mine lease area. During the plan period over 0.358ha of land in the south-western side of the M.L area is proposed for waste dump. A total of 36,858 cum (in-situ) waste/rejects is likely to be generated during the plan period. Depending upon the essentially about 70 % of these waste/rejects will be utilized concurrently for construction and maintenance of road in the lease area and will be disposed of as minor mineral other than decorative stone with the permission of the competent authority.

Total Production of the Bhagabanpur Decorative Stone

Year	Total Volume of Excavation M ³	Waste Volume @ 45%: m ³	Present Presently non-saleable stone @ 40% (m ³)	Vol of Decorative Stone (Block & Khanda) @15% (m ³)
1 st Year	12000	5400	4800	1800
2 nd Year	14300	6435	5720	2145
3 rd Year	16100	7245	6440	2415
4 th Year	18800	8460	7520	2820
5 th Year	20700	9315	8280	3105
Total	81900	36855	32760	12,285

12. **Green Belt** in the lease area shall be developed over an area of 0.793 Ha and 3700 saplings will be planted during the valid plan period. This project is expected to meet the demand supply gap of the area for different uses in the domestic market.
13. **Water requirement:** Water requirement for the project will be 11.0 KLD. Water required in the project will be for drinking purpose and dust suppression, which will be sourced from water tanker.
14. **Power Requirement:** Power Requirement will be required 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.
15. **Employment Generation:** Employment Generation from the project is 32 nos. of people and OMS has been assumed to be 0.5 cum. Indirect employment through creation of shops/ stalls, hired vehicles, etc. also can be generated to full fill the day to day requirements of the mining personals.
16. **Project Cost:** The total project cost of entire mining is 90 lakhs and EMP cost is Capital cost Rs. 7.15 lakhs and Recurring cost 10.69 Lakhs/annum.
17. The Environment Consultant **M/s P & M Solution, Noida** along with the proponent made a detailed presentation on the proposal before the Committee.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s P & M Solution, Noida**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent.

- (i) In view of the likely revision of DSR for Ganjam District in future the details of this Minor Mineral reserve to be ensured in the revised DSR.
- (ii) NOC from concerned competent authority for usage of road for transportation of minerals.
- (iii) Plantation on both sides of approach road and its maintenance.
- (iv) Zero liquid discharge from lease area to be maintained.
- (v) In case village / any habitation is very nearby, plan to ensure safety of human life and livestock from accidents be submitted.
- (vi) NOC of BDO of Panchayat for usage of haulage road/Panchayat Road.

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- (vii) Silt management and mitigation from agricultural fields and water bodies nearby.
- (viii) Composition of wastes/dumps and its storage plan for different years with proposed layout
- (ix) Mitigation of flying rock if likely to generate due to possible use of explosive.
- (x) The EIA and CSR activities should be made in cluster approach.
- (xi) ToR was issued to conduct EIA study and submit final EIA report after conducting public hearing. However, the proponent has submitted EIA report without conducting a fresh public hearing and intimated during presentation that public hearing is not required as a public hearing has already been conducted in 2014. The proponent has to give a detailed justification as to why a fresh public hearing will not be conducted.
- (xii) Detailed status of all the mines in cluster.

ITEM NO. 06

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR BAITARINI SAND BED MINES OVER AN AREA OF 6.07 HA. IN MOUZA AMRUTPUR UNDER HATADIHI TAHASIL OF KEONJHAR DISTRICT OF SRI PRADEEP BISWAL – EC

1. This proposal is for Environmental Clearance for Baitarini Sand Bed Mines over an area of 6.07 Ha. in Mouza - Amrutpur under Hatadihi Tahasil of Keonjhar District of Sri Pradeep Biswal.
2. The project falls under category “B” or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. Baitarini River Sand Bed over an area of 6.07 at village Amrutpur under Hatadihi Tahasil in Keonjhar district, Odisha was identified by Tahsildar, Hatadihi and accordingly the Mining plan was prepared and approved for a period of five years i.e. 2020-21 to 2024-25 by The Joint Director of Geology, Keonjhar. Vide letter no – 2410/CZ, on dated 30.07.2020 in favour of Tahsildar, Hatadihi. After approval the said lease was granted to the Successful Bidder.
4. Sri Pradeep Biswal, the Lessee of Baitarini Sand Bed, Amrutpur resides at Bancho under Anandapur Post in Keonjhar district, Odsiha. He was selected as successful bidder of the Sand Bed spreads over the total lease area of 15.0 ac or 6.07 ha at mouza Amrutpur, Tehsil - Hatadihi, in the district of Keonjhar of Odisha by Tahsildar, Hatadihi vide letter no – 306 on dated 28.01.2021.
5. TOR was granted by SEIAA, Odisha vide SEIAA File No. SIA/OR/MIN/60797/2021 – on dated 09.04.2021.
6. Public Hearing was conducted in 16.05.2022. in Village Amrutpur, Khata No. 159, Plot Non 804.
7. Baseline study was conducted during the period 16.05.2022.
8. Replenishment study will be carried out after operation of the mines.
9. The river bank is about 30m from the lease boundary.
10. **Location and Connectivity** - The Baitarini Sand Bed, Amrutpur is located in Village- Amrutpur, Tahasil – Hatadihi, in district Keonjhar of Odisha. The project sand mines is bounded by Latitude 21001’38.12” to 21001’49.68” N and Longitude: 86016’20.77” to

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86016'32.42" E and featured in SOI Toposheet No. F45O8. The area is situated at 29 m AMSL. The nearest National highway NH 215 – 15 Km and Village road: 600 m from the river side from Amrutpur village which is further connected to the Hatadihi. The nearest Railway station at Dekhula Railway PH – 2.0 Km. Other water bodies nearby are Belei Nadi -0.5 Km, Reba Nadi-7.5 Km. No National Park / Wildlife Sanctuary/ Bio-sphere Reserve/ Elephant Corridor/Tiger Reserve/ Eco-Sensitive Zone/ Eco-sensitive Area within 10 Km of the project site. No rare or endangered flora and fauna species are found. The recorded fauna species are common reptiles, birds, amphibians, insects and few mammals such as dog, monkey.

11. **Reserves, Production and Method of Mining** - The geological resources is 121400 cum. The mineable reserve is 64215m³. The production capacity of the quarry as per Mining plan approved is 12843 cum in 5 years. Mining will be open cast manual method. Bench height will be 1.0 m.
12. **Water Requirement** - The total quantity of 1.0 KL of water will be required.
13. **Greenbelt** - Plantation of trees along the roads to help reduce the impact of dust in the nearby villages.
14. **Employment Potential** - This project will generate direct (20 nos.) & indirect (30 nos) employment for 50 nos.
15. **Project Cost** - Estimated Project Cost is 80.0 Lakhs. EMP cost 2 lakhs as capital cost and 0.4 lakhs as recurring cost.
16. The project proponent along with the consultant **M/s Envomin Consultant Private Limited, Bhubaneswar** made a detailed presentation on the proposal.

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

- i) Revised mining plan (as river embankment is at 30meters) 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 - B**. No mining zone of atleast 50 meter shall be maintained from the river embankment.
- 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. 07

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR BALANDA STONE QUARRY 2 OVER AN AREA OF 4.876 HA UNDER CLUSTER APPROACH WITH TOTAL CLUSTER AREA 37.915 HA AT VILLAGE- BALANDA, TAHASIL: LATHIKATA, DISTRICT: SUNDAGARH OF SRI KAMESHWAR TIWARI – EC

The project proponent did not attend the meeting. However, since the proposal in cluster approach has been appraised in the SEAC meeting held on 30.08.2022 and the proponent has to submit the information in cluster approach, individual proposal in cluster approach will not be appraised as decided earlier.

ITEM NO. 08

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR KANTAPADA MAHANADI SAND QUARRY OVER AREA OF 6.47 HA OR 16.00 ACRES FOR PRODUCTION OF 4,200CU.M/ANNUM AT KHATA NO.-439 PLOT NO. – 3278, VILLAGE KANTAPADA TEHSIL-BARAMBA, DISTRICT- CUTTACK OF SRI CHINTAMANI SAMAL – EC

1. This proposal is for Environmental Clearance for Kantapada Mahanadi Sand Quarry over area of 6.47 ha or 16.00 acres for production of 4,200cu.m/annum at Khata No.- 439 Plot No. – 3278, village Kantapada Tehsil- Baramba, District- Cuttack of Sri Chintamani Samal.
2. The project falls under category “B” or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. Kantapada Mahanadi Sand Quarry is located on dry river bed of river Mahanadi at Khata No.- 439, Plot No.-3278, Village – Kantapada, Tahasil: Baramba, District: Cuttack, State: Odisha over an area of 6.47 ha. The project has been granted to successful bidder Shri Chintamani Samal, S/o Basanta Samal, At/Po – Ichhapur, Ps –Baramba, Dist. Cuttack, Pin – 754031.
4. The quarry lease has been allotted to Shri. Chintamani Samal for quarrying of sand (minor mineral) by the Tahasildar Baramba vide letter no. 1185 dated 06/04/2021 for 5 years.
5. Mining Plan has been approved by Deputy Director, Directorate of Geology, Bhubaneswar vide Memo no GXVII (g)- 871/19 7433/ DG dated 12.11.2020.
6. Terms of Reference was issued vide letter no.1341/SEIAA dated 24.05.2021by SEIAA, Odisha.
7. The public hearing has been conducted on 29.12.2021 at Mandap Laxmi Mandir, Near Kantapada Sand Source under Sankhameri gram panchayat, Baramba Tehsil of District Cuttack, Odisha.
8. Baseline study was conducted during pre- monsoon season during March to May, 2021.
9. Replenishment Study has been submitted and study says replenishment of Sand to be 16822cum which is more than the proposed annual production of 4200cum.
10. **Location and Connectivity** - The area under discussion is in Khata No. 439, Plot No. – 3278, Village- Kantapada, Tahasil: Baramba, District: Cuttack, State: Odisha and featured in Survey of India Topo Sheet No – E45F7 and is bounded between the Latitude -20°22'25.0"N to 20°22'35.1"N & Longitude – 85°20'18.9"E to 85°20'33.6"E. The Lease area is well connected by SH – 65 located at a distance of 5kms. Begunia Railway station is the nearest railway station located at a distance of 23kms and nearest airport is Biju Patnaik International Airport,

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Bhubaneswar, approx. 51 Km from the lease area. Nearest Road bridge is Gopinathpur Road Bridge, Mahanadi River approx. 4.5 km from the mining lease. Nearest Habitation Sankhameri village, approx. 130 m

11. **Reserves and Production** - Total Geological Reserve of Kantapada Mahanadi Sand Quarry is 36281 cum and Mineable Reserve is 31820 cum. The average production is proposed to be 4200 cum/year and 21000 cum is the total production during the plan period. The sand will be excavated by open cast semi mechanized method and by manual method also.
12. **Employment Potential** - About 8 persons will be given employment to the people of nearby villages.
13. **Water requirement** - There is requirement of approx. 3.0 KLD water for this project will be taken from mine water tanker or nearby village.
14. **Green belt** shall be done in mining lease approach road. About 700 number of trees will be planted along approach road & at other place after consultation with the local authorities..
15. **Project Cost** - The estimated project cost is Rs 60 Lakhs and EMP cost is about Rs. 6.62 lakhs (Capital), Rs. 3.69 lakhs (recurring). About 2% of the project cost i.e, 1.2 lakh will be used for the development of the social infrastructure of the area.
16. The project proponent along with the consultant **M/s ATMOS Sustainable Solutions Pvt. Ltd., Noida (U.P)** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s ATMOS Sustainable Solutions Pvt. Ltd., Noida (U.P)**, the SEAC recommended for grant of Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – A** 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 - B**.
- 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.
- vi) NOC of BDO of Panchayat for usage of haulage road/Panchayat Road.
- vii) Safety measures should be taken for protection of River Embankment.

ITEM NO. 09

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR BALIGORAD SAND MINE OVER AN EXTENT AREA OF 5.435 HA, RAMIAL RIVER, AT BALIGORAD VILLAGE, KAMAKHYANAGAR TAHASIL, DHENKANAL DISTRICT OF TAHASILDAR, KAMAKHYANAGAR – EC

1. This proposal is for Environmental Clearance for Baligorad Sand Mine over an extent area of 5.435 ha, Ramial River, at Baligorad village, Kamakhyanagar Tahasil, Dhenkanal District of Tahasildar, Kamakhyanagar.
2. The project falls under category “B” or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. The Tahasildar of Kamakhyanagar issued letter to get approved mining plan and obtaining Environmental clearance vide letter no.1723 Dt.19/05/2020 after district collector, Dhenkanal approval of New Sand Mine leases and Successful Bidder name will be selected after auction.
4. The mining plan was approved by Joint Director of Geology, Zonal Survey, Dhenekanal, Odisha vide Letter No. 855/DZ/30.06. 2020.
5. Terms of Reference (TOR), was issued by SEIAA, Odisha, vide proposal Letter Ref. No. 663/SEIAA dated: 26.02.2021
6. Public Hearing (date and place) Public Hearing was conducted on 08.10.2021 at 11.0 AM at nearby Park of Baligorad village in the district of Dhenkanal. News Paper advertisement was given about the sand mining at Baligorad inviting comments, Views, objections and suggestions from public on The Times of India on 05.09.2021 and in Prameya on 04.09.2021. Issues raised during public hearing of this project are Identification and demarcation of area of proposed sand Quarry and road through which sand will be transported. Traffic control near school while sand transportation through narrow village road to avoid road accidents. Repair and maintenance of village roads
7. **Location and Connectivity** - The area under discussion is featured in Survey of India Topo Sheet No –73H/9 and is bounded between the Latitude -20° 54’ 21.93” N to 20° 54’ 30.49” N, Longitude–85° 35’ 49.94” E to 85° 36’ 30.71” E. The lease area is located at a distance of 1.49 km from village Baligorad and at a distance of 5 kms from Kamakhyanagar,45 kms from the District Headquarters Dhenkanal and 99 kms from the State Capital Bhubaneswar. Dhenkanal Railway station is the nearest railway station located at a distance of 25.6 kms from the lease area. Nearest Road Bridge is at a distance of 0.19 km from the mining lease area. Kaccha road connecting to the lease area and with the village – Baligorad is at distance of 1.49 km. SH –20 is the nearest major district road is at distance of 40.70 km. NH-200 is the nearest National Highway which is at a distance of 1.06 km.
8. **Reserves and Production** - The total geological reserve has been estimated as 184790 Cum. Similarly, the mineable reserve of river bed sand is worked out to be 90851 Cum. The project has been proposed for a total production of 54510 Cum of Sand from this Quarry. During the plan period maximum of 10902 Cum of sand will be produced per annum by Open Cast Manual mining method. Excavation & loading of sand into the dumpers and trucks/tractors will be done manually.
9. **Replenishment Study** - As per the replenishment study, Minable area is 26721 Sq.m. Pre-Monsoon and Post-Monsoon Standard Elevation are 41 and 41.57 respectively. Difference in

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Environmental Scientist, SEAC

Elevation is 0.57 Estimated Annual replenishment Volume is 15,230.97 m³ or 24,369.5 Tones. However, the Movable Reserve as per approved Mining Plan is 90851 m³ at highest mRL 41.0. The Annual proposed production is 10902 cubic meters. Since the mining is not done yet estimated Replenishment reserve pre monsoon period is 13,360.5 m³. The excavation may be replenished in one to two years during the subsequent flood/rainy season due to irregular monsoon in the State of Odisha

10. **Water Requirement** – The total water requirement will be 2.5 KLD for different purposes like Domestic, Dust suppression, plantation purposes.
11. **Power Requirement** - No use of electric power as the operation will be done in day time. However solar lights will be used for day to day living purposes.
12. **Employment Potential:** Total number of employees will be around 11 in the mine.
13. **Greenbelt plantation** will be by planting 50-500 saplings of suitable species per annum by the lessee in vicinity of the river bank, haulage roads and near village.
15. The baseline data was collected for the winter season i.e. October to December 2020 in the 10 km study area.
16. **Project Cost** - The project cost is estimated to be Rs. 40.0 lakhs and there is a budgetary provision of Rs.2.5 lakhs as capital cost and Rs.6.0 Lakhs as recurring cost towards environmental protection measures.
17. The project proponent along with the consultant **M/s Rightsource Industrial Solutions Pvt. Ltd., Noida (U.P)** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Rightsource Industrial Solutions Pvt. Ltd., Hyderabad (Telangana)**, the SEAC recommended for grant of Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – A** in addition to the following specific conditions.

- i) Revised mining plan (safety zone of atleast 250m shall be maintained from both sides River Bridge) 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 - B**.
- 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. 10

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR RAJNAGAR SAND MINE WITH PROPOSED EXCAVATION OF 40,002 M3/YEAR OF SAND, AT SUBARNAREKHA RIVER BED HAVING AN AREA OF 5.48 HA LOCATED AT KHATA NO.-377, PLOT NO. 1295/1300 VILLAGE: RAJNAGAR, TEHSIL: JALESWAR, DISTRICT: BALASORE OF SMT LAXMIPRIYA PRUSTY - EC

The project proponent did not attend the meeting. The proposal is deferred to next meeting.


Secretary, SEAC

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 OSPCC 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.

Annexure - B

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	