



## Minutes of 153<sup>rd</sup> Meeting of SEIAA, Odisha held on 03.02.2024

### AGENDA No.153.01

Proposal No.	SIA/OR/MIN/406856/2022
Date of application	31.01.2023
File no.	406856/796-MINB1/02-2023
Project Type	New proposal for EC
Category	B1
Project/Activity including Schedule No.	1(a) Mining of minerals
Name of the Project	Proposal for EC of Kerandi Sand Bed (River-Mahendra Tanaya) over an area of 20.717 acres or 8.384 ha bearing Khat no. 172, Plot No. 651, 555, 358, 359 in the village Kerandi, Tahasil-Paralakhemundi, Dist-Gajapati, Odisha
Name of the company/Organization	G. VENKATA RAMANA
Location of Project	village Kerandi, Tahasil-Paralakhemundi, Dist-Gajapati, Odisha
ToR Date	02.03.2022
Name of the Consultant	M/s Cognizance Research India Pvt. Ltd

**Proposal in brief:** The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.

1. This proposal is for environmental clearance for Kerandi sand bed over an area of 20.717 acre or 8.384 Hectares In village Kerandi under Paralakhemundi Tahasil of Gajapati District of Sri G. Venkata Ramana.
2. **Category:** The project is categorized in Category-B-1 of Schedule under item 1(a)-Mining of Minerals in the EIA notification, 2006 and its subsequent amendments.
3. The proposed mine lease has been granted to Tahasildar Paralakhemundi, Gajapati District. The mining plan for the ML area has been approved by the Dy. Directorate of Geology Authorized officer, O/o Joint Directorate of Geology, Berhampur (South Zone), Odisha vide Memo no 260(2)/SZ dated 25.02.2020.
4. The Letter of Intent for mining has been issued for 5 years period dated 20.05.2019.
5. The sairat at of the Mine has been auctioned for leasing purpose and the Mine lease has been awarded to Sri. G. Venketa Ramana by Tahasildar Paralakhemundi, Gajapati District. vide letter no 7325/ Sairat Dated 31.12.2019.
6. **Public hearing details:** Public hearing was held on 19.09.2022 in the Gram Panchayat office, Kerandi village, Gajapati district. Issued raised during public hearing were sand mining from the river bed, transportation of sand, dust suppression measure, environment protection, peripheral development, road development and plantation. The CER budget will be 2% about Rs. 40000 of the total project cost will be spend after discussion with District Collector.
7. **TOR details:** Terms of Reference (ToR) of proposed Sand mining project has been issued by SEIAA, Odisha vide File no-SIA/OR/MIN/70575/2021 dated 02.03.2022
8. **Location and connectivity:** The proposed Kerandi sand quarry comes under the village Kerandi, Tehsil-Paralakhemundi, District- Gajapati, in the State of Odisha. The project site is located in survey of India Toposheet No. 74B/1 & 74B/2 and bounded between the Longitude 84°06'23.5"E to 84°07'28.8"E and Latitude 18°45'49.00"N to 18°46'09.3"N. Mine Lease area is accessible through by own conveyance from SH 4 which is 1.2 Km away from ML area in North direction. The area is at a distance of 03km from district headquarters Gajapati. The nearest railway station is Paralakhemundi railway station at a distance



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of 4.11 Km in NW. Nearest road bridge and river embankment is at a distance of 2km and in southwest direction of the project site.

2. **Topography and drainage:** The proposed sand bed is on the River Mahendratanya. The river flows from East to West direction along the quarry lease area. The quarry lease area is present above 2.0 Km in North-East of the village Kerandi. The proposed area is more or less flat with highest elevation of 56 m above msl. The shallow depth excavation on dry/nominally wet sand close to the bank or dry river bed mining has been proposed which will have no impact on drainage. Abandoned stream channels on terrace and inactive flood plains have been preferred rather than active channels and flood plains.

10. **Replenishment report:** The estimated average erosion thickness is computed within the entire lease area and common safe workable area respectively. However, the volume of sand available after post monsoon is around 48370 m<sup>3</sup>, which can be treated as safe extractable within the framework of the study after arrival of river level as it was in Premonsoon. Further volume of sand also computed which can be extracted as on date (during mining plan preparation) is 96740 m<sup>3</sup>. As it is a new mine no excavation has done in the present year. So, total minable reserve available for mining is 1,45,110 m<sup>3</sup> whereas, approved production capacity is for the year is 6,000 m<sup>3</sup>.

11. **Reserves:** Total Geological reserves is estimated to be 150980Cum. and total minable reserves is estimated to be 96740 Cum. Total production is given in the following table:

Year	River Sand Production in cum
1st	6000
2nd	6000
3rd	6000
4th	6000
5 <sup>th</sup>	6000
Total	30000

12. **Mining method:** It is proposed to produce targeted sand production by opencast manual method of mining without drilling and blasting. Sand from river bed within the lease area will be extracted by manual method using handpicks, spade, hand shovel and manually loaded into trucks/tractors and dispatched. The sand will be collected in dry river bed in the lease area. Mining will be started from north western part of the quarry and progress towards eastern side. A 7.5 m wide safety barrier will be left undisturbed around the mine lease boundary. The mineral extraction will be done for a period of 210 days in a year. Dry pit mining will be followed i.e mining at all times will be above flowing river bed water level with no mining when water is above bed level. Sand will be collected in slices up to a depth of 2.0 m. Sand will be transported to the buyer's location by 8 Cum/4 Cum capacity trucks/tractors.

13. **Water requirement:** Total water requirement for the mining project is 4.0KLD. This water will be supplied from the nearby village through hired tankers.

Activity	Water requirement in KLD	Source
Dust suppression /allied mining activity	2.0	Through tankers from nearby villages & bore well
Green Belt/Plantation	1.0	
Domestic	1.0	



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Total in KLD

4.0

14. **Baseline study:** The baseline data generation has been carried out during March 2021 to May 2021 for the period of three months.

- During the study period the concentration of  $PM_{10}$  varies from  $60.56 \mu\text{g}/\text{m}^3$  to  $92.14 \mu\text{g}/\text{m}^3$ . Concentration of  $PM_{2.5}$  varies from  $39.4 \mu\text{g}/\text{m}^3$  to  $55.6 \mu\text{g}/\text{m}^3$ . The concentration of  $SO_2$  varies from  $4.5 \mu\text{g}/\text{m}^3$  to  $11.3 \mu\text{g}/\text{m}^3$  and  $NO_x$  concentrations vary from  $11.3 \mu\text{g}/\text{m}^3$  to  $22.1 \mu\text{g}/\text{m}^3$ . From the ambient air quality monitoring carried out for three months (March-May 2021) of the study period shows that the critical pollutants like  $PM_{10}$ ,  $SO_x$  and  $NO_x$  are well within the permissible limits.
- The noise level as measured in the core zone is 55.8 dB (A) in daytime and 43.5 dB (A) in the night time. In the buffer zone the noise level ranges from 50.4 dB(A) & 56.4 dB(A) during day time and 40.1 dB(A) & 46.8 dB(A) during night time.
- The pH level of the ground water sample ranges from 7.32-7.52. This indicates that the pH of the ground water in the study area is nearly neutral and as per the drinking water standard. Total hardness ranges from 250-315 mg/l, and total dissolved solid ranges from 415 to 471 mg/l.
- The pH range of the surface water samples is neutral ranging from 7.1 to 7.9. Dissolved oxygen in the surface water sample ranges from 7.2-7.8 mg/l. Chemical oxygen demand of the surface water body is 6-8 mg/l.
- The analysis results show that soil is basic in nature as pH value ranges from 7.82 to 8.24 which show that the soil is alkaline in nature. Potassium is found to be from 48.21 mg/kg to 60.45 mg/kg. The water holding capacity is found in between 15.28% to 17.46%.

15. **Greenbelt:** Plantation will also be carried out along the mineral transportation roads in the nearby villages. About 200 saplings will be planted in year. Also plantation will be carried out in the available free government areas with in the study area.

S.No	Year	No. of plants to be Planted	Area of Plantation in Ha.
1	1st Year	40	0.035
2	2nd Year	40	0.035
3	3rd Year	40	0.035
4	4 <sup>th</sup> Year	40	0.035
5	5 <sup>th</sup> Year	40	0.035
	Total	200	0.175

16. **Manpower requirement:** Besides the direct and indirect employment to 33 persons, the company will provide vocational skill training to the unemployment youth of the neighbouring villages through outside agencies. Local villagers residing in the nearby villages shall be employed as semi-skilled workers.

17. **Project cost:** The estimated project cost is Rs 20 Lakhs. For EMP the budget is Rs. 2.26 lakhs as capital cost and Recurring cost of 1.766 lakhs. For Corporate Environmental responsibility budget allocated is Rs.40000/-. For Occupational health checkup a sum of Rs. 202000 had been allocated.

### Budget for Environmental Protection

S.No	Particulars	Amount per Annum (INR)	
		Capital	Recurring Cost



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1	Dust suppression	100000	100000
2	Plantation and its protection	100000	50000
3	Personal Protective Equipment	66000	66000
4	Environmental Monitoring	100000	100000
5	Budgetary for Tarpaulin @ Rs 2000/- (18*12)	20000	20000
6	Maintenance of the Road		100000
	<b>Total in INR</b>	<b>386000/-</b>	<b>436000/-</b>

18. **Environment Consultant:** The Environment consultant **M/s Cognizance Research India Pvt. Ltd** along with the proponent made a presentation on the proposal before the Committee on dtd. 03.03.2023.

19. The SEAC in its meeting dated **03.03.2023** decided to take decision on the proposal after receipt of the following from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	Site photographs along with Geo-Tag photos along with Coordinates indicated the date of photos.	Site Photograph Attached as Annexure -I	Photographs attached.
2.	Clarification regarding mis-match of Plot no. in DSR and documents submitted online.	Due to some clerical mistake in DSR report, one plot no. was mentioned wrongly in Kerandi Sand Bed at page no. 09 as Plot no. 151 but the corrected Plot No. stand as 651, So please consider this proposal for grant of EC.	The PP has attached Corrected plot no. of DSR page 2.
3.	As per Sand Sustainable Guidelines, 2020, no mining should be allowed below water level. Brief note/justification on procedure mining of sand will be conducted as per guidelines.	The mining will developed in dry area only, no mining is proposed in waterlogged area. As per Sand Sustainable Guidelines, 2020, No mining should be allowed below water level, as our mining depth is restricted upto a depth of 2 meter from Surface, This will not intersect the ground water table, and every year Replenishment will take place.	To be added as specific condition.
4.	There is a mis-match in budget submitted for Environmental Protection and EMP budget in EIA	The report is submitted with mentioning the EMP budget.	Submitted.





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and presentation. This shall be clarified.

20. The SEAC in its meeting held on dated 12-07-2023 decided to take decision on the proposal after receipt of the following document from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	Clarification regarding plot no. change in DSR is to be issued by the approving authority of the DSR. Such clarification duly certified by appropriate authority need to be submitted before recommendation of EC.	It is submitted that there is no changes in plot no. of the proposed source; it is just a clerical mistake.  Instead of Plot no.651, the DSR reflect the plot no.151.	Clarification regarding plot no. change in DSR is to be issued by the approving authority of the DSR has been submitted.

2. **Whether SEAC recommended the proposal** – The proposal was placed in SEAC meeting held on 13.11.2023 and the SEAC recommended for grant of Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – A** and following specific conditions:

- Amended EIA Notification dated 25<sup>th</sup> July, 2018, Guidelines for sustainable sand mining, 2016 and Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India shall be adhered to in execution of Mining as per **Annexure – B**.
- Sand extraction shall be limited to quantity and depth as per replenishment study report. Regular replenishment study as per guidelines to be conducted and report to be submitted.
- Provision of Bio-toilet shall be made at the site.
- 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.
- Stone patching with plantation in between along the stretch of the bank associated with sand mining and necessary ramp construction shall be made.
- No natural water course shall be obstructed or diverted for the purpose of sand mining.
- As per Sand Sustainable Guidelines, 2020, the proponent shall ensure that no mining should be allowed below water level.

### **Decision Of Authority: Approved**

After detailed deliberations, the Authority decided to **grant Environmental Clearance** with usual stipulated conditions as applicable for stone quarry.

- Maximum depth of mining as per replenishment of sand depth and maximum quantity of extraction shall be limited to the quantity as per ARRS report or annual production quantity as per mining plan, whichever is less i.e. **6000 cum/annum**.
- The EC is valid till the validity of DSR or validity of lease period whichever is earlier.
- The Grant of EC for further period will be considered after submission of approved DSR by SEIAA as per the MoEF& CC, Govt. of India Notification S.O. 3611(E) dated 25.07.2018, Sustainable sand mining guidelines-2016 and Enforcement & Monitoring Guideline for sand mining-2020 and also as per the Hon'ble Supreme Court order vide its order dated 10.11.2021 in Civil Appeal Nos. 3661-3662 of 2020 (State of Bihar Vrs. Pawan Kumar and Others).



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The Project Proponent (lease holder) shall deposit Rs.4,50,000/-, with the respective District Environment Society for raising 900 plants (minimum @100 trees per Ha) of native species within 2 years in a suitable location adjoining to quarry.

The PP will implement the EMP cost of Rs. 2.26 Lakh (Capital Cost) and Rs. 1.766/- (Recurring Cost) and CER Cost is Rs. 40,000/-

**APPROVED BY**

Member Secretary, SEIAA

Member, SEIAA

Chairman, SEIAA



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## AGENDA No.153.02

Proposal No.	SIA/OR/MIN/431971/2023
Date of application	06.06.2023
File no.	431971/344-MINB1/06-2023
Project Type	New proposal for EC
Category	B1
Project/Activity including Schedule No.	1(a) Mining of minerals
Name of the Project	Proposal for EC of Mantrajholla Stone Quarries Cluster over an area of 11.936 hectares in Mantrajholla village of Rayagada Tahasil, District- Rayagada, State Odisha submitted under cluster approach with total cluster area 11.936 Hectares with consisting of 8 stone quarries
Name of the company/Organization	Tahasildar, Rayagada
Location of Project	Mantrajholla village of Rayagada Tahasil, District- Rayagada, State Odisha
ToR Date	02.03.2022
Name of the Consultant	M/s P & M Solution, Noida

**Proposal in brief:** The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.

1. This proposal is for Environmental Clearance for Mantrajholla Stone Quarries Cluster over an area of 11.936 hectares in Mantrajholla village of Rayagada Tahasil, District- Rayagada of Tahasildar Rayagada.
2. **Category:** As per the EIA notification 2006 and its subsequent amendment, Proposed Project falls in Category B1 under schedule of activity 1(a)-Mining of minerals.
3. The proposed project is in Cluster Situation as other leases are within 500 m radius of lease & total lease area becomes greater than 5 ha. The proposed project is not comes under DLC land present at the site.
4. There are Four other quarries lies within 500m of the lease area i.e. Mantrajholla Stone Quarry & Mantrajholla Stone Quarry (I, II, III), is granted by Tahasildar, Rayagada situated over a cluster area of 11.936 ha which is greater than 5 ha.
5. **Details of mine lease:**

Table: DETAILS OF MINE LEASE AREA (Proposed Quarries)

S. No.	Name of Quarry	TOR Details	Lease area (Ha.)	Land Schedule	Kissam
1	Mantrajholla Stone Quarry IV	Letter no 5181 dated 19.08.2022	1.214	Khata No- 20 Plot No - 118	Pahad
2	Mantrajholla Stone Quarry V	Letter no 5346 dated 02.09.2022	1.214	Khata No- 20 Plot No - 122	Pahad
3	Mantrajholla Stone Quarry VI	Letter no 5177 dated 19.08.2022	2.023	Khata No- 20 Plot No - 102	Pahad
4	Mantrajholla Stone Quarry VII	Letter no 5183 dated 19.08.2022	1.214	Khata No- 20 Plot No - 102	Pahad





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Total			5.665		
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**Table: DETAILS OF MINE LEASE AREA (Existing Quarries)**

S. No.	Name of Quarry		Lease area (Ha.)	Land Schedule	Kissam
1	Mantrajholla Quarry	Stone	2.023	Khata No- 20 Plot No - 118	Pahad
2	Mantrajholla Quarry I	Stone	2.023	Khata No- 20 Plot No - 118	Pahad
3	Mantrajholla Quarry II	Stone	1.011	Khata No- 20 Plot No - 118	Pahad
4	Mantrajholla Quarry III	Stone	1.214	Khata No- 20 Plot No - 122/1	Pahad
To tal			6.271		

6. **Public hearing details:** Public hearing was successfully executed on date 04.03.2023 in Mantrajholla village of Kuli Gram Panchayat of Maligam R.I Circle under Rayagada tahasil of Rayagada district, Odisha. Issues raised during the public hearing are vibrational impact due to drilling and blasting, noise impacts, agricultural impacts, dust pollution, environment protection, protection of water bodies, peripheral development, plantation and employment.
7. **Location and connectivity:** The Mantrajholla Stone Quarry (IV, V, VI, VII) located at village- Mantrajholla, Tehsil - Rayagada, District- Rayagada, Odisha. Geo graphically the ML area lies from Latitude 19°12'46.49" to 19°13'10.86" N and Longitude from 83°27'56.07" to 83° 28'07.11" E with an elevation of about 279 mRL to 331 mRL. The area falls in Survey of India topo sheet No. E44F8. The area represents almost flat land.
8. **Baseline study details:** Meteorological data at the site was monitored during March 2022 to May 2022 representing pre monsoon season.
  - a) **Ambient Air Quality Monitoring (AAQM)** has been carried out at eight locations. The minimum and maximum level of PM<sub>2.5</sub> recorded within the study area was in the range of 19.21µg/m<sup>3</sup> to 54.78µg/m<sup>3</sup> with the 98<sup>th</sup> percentile ranging between 24.61µg/m<sup>3</sup> to 54.69µg/m<sup>3</sup>. The minimum and maximum level of PM<sub>10</sub> recorded within the study area was in the range of 53.28µg/m<sup>3</sup> to 87.30µg/m<sup>3</sup> with the 98<sup>th</sup> percentile ranging between 65.38µg/m<sup>3</sup> to 85.85µg/m<sup>3</sup>. The minimum and maximum concentration of SO<sub>2</sub> recorded within the study area was 5.44µg/m<sup>3</sup> to 18.56µg/m<sup>3</sup> with the 98<sup>th</sup> percentile ranging between 8.49µg/m<sup>3</sup> to 17.74µg/m<sup>3</sup>. The minimum and maximum level of NO<sub>2</sub> recorded within the study area was in the range of was 9.45µg/m<sup>3</sup> to 20.31µg/m<sup>3</sup> with the 98th percentile ranging between 13.32µg/m<sup>3</sup> to 20.17µg/m<sup>3</sup>.
  - b) **Water quality:** To assess the physical and chemical properties of water in the region, ground water samples from six locations & surface water from two locations were collected from various water sources around the mine lease area. The pH of the ground water samples in the region varied from 6.78 to 7.51. The results indicate groundwater is generally in conformity with the drinking water standards (IS: 10500) and surface water is in conformity with IS-2296 standards.
  - c) **Noise Levels:** The values of noise observed in some of the areas are primarily owing to vehicular traffic. Assessment of hourly night time Leq (L<sub>n</sub>) varies from 38.5 to 43.4 dB (A) and the hourly daytime Leq





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(Ld) varies from 49.7 to 56.1 dB (A) within the study area. The status of noise quality within the 10 km zone of the study area is, therefore, within the MoEF&CC standards.

d) **Soil quality:** 07 soil samples were collected in and around the mine lease area to assess the present soil quality of the region. The pH of the soil indicates that the soil is slightly alkaline in nature. Based on the results, it is evident that the soils are not contaminated by any polluting sources.

9. **Production and Reserves:** Mantrajholla Stone Quarry (IV, V, VI, VII) over an Cluster area of 5.665 ha/14.0 Acre for Proposed production of 15,929 cum/year of stone.

**Table: Geological and Mineable Reserves: - (Proposed Quarries)**

S No.	Name of the Quarry	Geological Reserves	Mineable Reserves
1	Mantrajholla Stone Quarry IV	118858	59595
2	Mantrajholla Stone Quarry V	135312	60502
3	Mantrajholla Stone Quarry VI	207359	110988
4	Mantrajholla Stone Quarry VII	284832	114710
<b>Total</b>		<b>746361</b>	<b>345795</b>

**Table: Geological and Mineable Reserves: - (Existing Quarries)**

S No.	Name of the Quarry	Geological Reserves	Mineable Reserves
1	Mantrajholla Stone Quarry	520129	189447
2	Mantrajholla Stone Quarry I	334757	157109
3	Mantrajholla Stone Quarry II	-	-
4	Mantrajholla Stone Quarry III	362799	112976
<b>Total</b>		<b>-</b>	<b>-</b>

**Table: Production Details: - (Proposed Quarries)**

S No.	Name of the Quarry	Production (cum/year)
1	Mantrajholla Stone Quarry IV	4162
2	Mantrajholla Stone Quarry V	3037
3	Mantrajholla Stone Quarry VI	4698
4	Mantrajholla Stone Quarry VII	4032
<b>Total</b>		<b>15929</b>

**Table: Production Details: - (Existing Quarries)**

S No.	Name of the Quarry	Production (cum/year)
1	Mantrajholla Stone Quarry	4162
2	Mantrajholla Stone Quarry I	4037
3	Mantrajholla Stone Quarry II	2850



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4	Mantrajholla Stone Quarry III	4162
Total		15211

**10. Mining method:** 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. Tipper trucks will be used for transporting stone and waste. Drilling & blasting will be carried out as & when required. Lessee will take all necessary permission and do accordingly DGMS norms. Blasting will be carried out by an employed blaster. Short hole blasting will be practiced. The blasting will be carried out by delay detonators using slurry explosive to achieve fragmentation & less throw. The storage of explosive not proposed, Blasting should be done by only Govt. authorized agency after permission taken by authority.

**11. Waste generation and management:** No top soil is proposed to be generated. No storage is proposed. The Overburden generated from the cluster is expected to be 8850 cum.

S No.	Name of the Quarry	Waste (cum)
1	Mantrajholla Stone Quarry IV	2310
2	Mantrajholla Stone Quarry V	1690
3	Mantrajholla Stone Quarry VI	2610
4	Mantrajholla Stone Quarry VII	2240
Total		8850

**12. Water requirement:** The water requirement for workers for drinking purpose will be around 1.50 KLD & the total water requirement will be around 18.30 KLD. This water will be supplied from the nearby area.

Activity	Calculation	Round off Figure in KLD
Drinking	@ 10 lpcd per labor $10 \times 150 / 1000 = 1.50$ KLD	1.50
Dust Suppression	Total approach road to be water sprinkled = 2400 m $2400 \text{ m} \times 6 \text{ m} \times 0.5 \times 2 \text{ times} / 1000 = 14.40$ KLD	14.40
Plantation	1196 plants (during plan period) @ 2 L/per plant = $1196 \times 2 \text{ lts} = 2392 / 1000 = 2.392$ KLD	2.392
Total		18.292 ~ 18.30

**13. Greenbelt:**

S. No.	Quarry	No. of Plants in Safety zone, along approach road and at other places in village after consulting local authorities
1	Mantrajholla Stone Quarry IV	122
2	Mantrajholla Stone Quarry V	122
3	Mantrajholla Stone Quarry VI	202
4	Mantrajholla Stone Quarry VII	122
5	Mantrajholla Stone Quarry	202
6	Mantrajholla Stone Quarry I	202
7	Mantrajholla Stone Quarry II	102





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8	Mantrajholla Stone Quarry III	122
	<b>Total</b>	<b>1196</b>

14. **Manpower requirement:** The number of working people required for the proposed project is 150.

**Table: Employment generation In cluster**

S. No.	Quarry	Manpower
1	Mantrajholla Stone Quarry	20
2	Mantrajholla Stone Quarry I	23
3	Mantrajholla Stone Quarry II	18
4	Mantrajholla Stone Quarry III	16
5	Mantrajholla Stone Quarry IV	20
6	Mantrajholla Stone Quarry V	16
7	Mantrajholla Stone Quarry VI	18
8	Mantrajholla Stone Quarry VII	19
	<b>Total</b>	<b>150</b>

**Table: Employment generation (for Proposed Quarries)**

S. No.	Quarry	Manpower
1	Mantrajholla Stone Quarry IV	20
2	Mantrajholla Stone Quarry V	16
3	Mantrajholla Stone Quarry VI	18
4	Mantrajholla Stone Quarry VII	19
	<b>Total</b>	<b>73</b>

15. **Project cost:**

**Table: (Mantrajholla Stone Quarry IV)**

S. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
1.	Pollution Control Dust Suppression /Water Sprinkling	--	1,00,000
2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	50,000 40,000 10,000 10,000
3.	Green belt development	24,400	10,000
4.	Maintenance of approach road	65,000	52,000
	<b>Total</b>	<b>89,400</b>	<b>2,72,000</b>

**Table: (Mantrajholla Stone Quarry V)**

S. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
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1.	Pollution Control Dust Suppression /Water Sprinkling	--	1,00,000
2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	50,000 40,000 10,000 10,000
3.	Green belt development	24,400	10,000
4.	Maintenance of approach road	1,10,000	52,000
Total		1,34,400	2,72,000

**Table: (Mantrajholla Stone Quarry VI)**

S. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
1.	Pollution Control Dust Suppression /Water Sprinkling	--	1,00,000
2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	50,000 40,000 10,000 10,000
3.	Green belt development	40,400	10,000
4.	Maintenance of approach road	4,250	52,000
Total		44,650	2,72,000

**Table: (Mantrajholla Stone Quarry VII)**

S. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
1.	Pollution Control Dust Suppression /Water Sprinkling	--	1,00,000
2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	50,000 40,000 10,000 10,000
3.	Green belt development	24,400	10,000
4.	Maintenance of approach road	1,72,500	52,000
Total		1,96,900	2,72,000

**Table: BUDGET ALLOCATION FOR EMP IMPLEMENTATION (Cluster)**

S. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
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2.	Pollution Control Dust Suppression /Water Sprinkling	--	8,00,000
	Pollution Monitoring	--	50,000
	i) Air pollution		40,000
	ii) Water pollution		10,000
	iii) Soil Pollution		10,000
	iv) Noise Pollution		
3.	Green belt development	2,39,200	80,000
4.	Maintenance of approach road	6,00,000	4,16,000
<b>Total</b>		<b>8,39,200</b>	<b>14,06,000</b>

**Table: CER budget- Cluster**

S. No.	Activity	Capital Cost (in Rs.)/annum
1.	Financial aid for medical camp in Mantrajholla village. @ Rs. 10,000/ camp (8 camp in a year).	80,000
2.	Skill development program camps like computer learning, sewing etc. in Mantrajholla village. @Rs 10,000/trainer (8 trainer)	80,000
<b>TOTAL</b>		<b>1,60,000</b>

16. **Environment Consultant:** The Environment consultant M/s P & M Solution, Noida along with the proponent made a presentation on the proposal before the Committee.

17. The SEAC in its meeting held on dated 07-07-2023 decided to take the decision on the proposal after receipt of the following from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	According to the concerned Tahasildar, 4 quarries out of the 8 quarries has obtained EC from DEIAA and now they are not in operating stage but might operate in near future. But as per the Notification of 28 <sup>th</sup> April 2023, all proposals that were granted EC by DEIAA, they must be reappraised by SEAC. Clarification in writing as to why the proponent has not applied for all the 8 quarries in the cluster but has only applied for 4 quarries. The proponent has to submit revised EIA/EMP report	The revised EMP with 8 quarries in the cluster has been prepared and submitted herewith as <b>Annexure – I</b> . But since the size of the EIA/EMP Report is too large to be uploaded on the ADS reply so kindly grant the permission so that we can mail the Cluster EIA/EMP Report.	Cluster EMP to be submitted as couldn't upload in ADS.

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	including all stone quarries in cluster (8 quarries)		
	DEIAA had the power to grant EC for the lease area 0-5 ha. But, how DEIAA had granted EC for 4 quarries more than 5 ha. This has to be clarified.	Earlier the EC were granted individually by DEIAA hence the area was not exceeded 5 Hect. and all the EC copy were attached herewith along with compliance.	
3.	RL of water table in the mineral stone quarry zone comprising of all 8 quarries during summer and rainy season to be provided along with the RL of the surface post mining as per the approved mining plan of each of 8 leases in the cluster.	The ground water Table varies during the summer is varies between 18m to 22m from the surface level. During dry season the water table falls at 22m from surface whereas during rainy season the water table remains at 18m from surface. As the mining activities. Detail of RL is attached as <b>Annexure – II</b> .	Details of Quarry floor level at end of the period of all 8 leases has been submitted.
4.	Nos of proposed blasting per day as per the approved mining plan for all 8 leases under the cluster approach to be presented. The sequence of blasting of each of the leases under the cluster to be presented so that simultaneous blasting in adjacent leases in the cluster do not affect the area in between ML area boundaries.	The details are attached as <b>Annexure – III</b> .	Blasting plan for 8 quarries is submitted.
5.	Geo-coordinates of the mining lease area boundary of each of all 8 leases under the cluster approach superimposed on the cadastral map to be furnished.	The details are attached as <b>Annexure – IV</b> .	Revenue map and Google map showing all 8 leases under the cluster approach has been submitted.
6.	Layout of the entire area of 5.665 ha/14.0 Acre of Mantrajholla Stone Quarry (Cluster Approach) indicating the location of all 8 mining leases to be considered under the cluster approach along with location of waste dump, product storage area, route of transportation of the mined	The detail of all 8 stone quarries is attached as <b>Annexure – V</b> .	Individual layout of all 8 leases has been submitted.





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mineral products to the market, system of rainwater drainage (Garland drain) etc. of each of the above-mentioned leases along with the location of the proposed STP as per the approved mining plan.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s P & M Solution, C-88, Sector 65, Noida**

2. **Whether SEAC recommended the proposal** – The proposal was placed in SEAC meeting held on 13.11.2023 and the SEAC approved the EIA/EMP with view that SEIAA, Odisha may consider to grant Environmental Clearance to individual lease for **Mantrajholla Stone Quarry** cluster without referring to SEAC with specific conditions as per **Annexure – C** 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) Report on vibration study.
- vi) DLC status of the lease area from concerned DFO as certified by the concerned Tahasildar.
- vii) 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.
- viii) 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.
- ix) An undertaking to obtain NOC from CGWA and permission from WR department, Govt. Of Odisha for use of ground water. Accordingly, specific condition to be stipulated in EC of individual lease.
- x) The project proponent shall maintain periodic health check-up records of their employees and ensure use of face mask by workers in crushing and handling sections of the stone quarry for ensuring that working personnel are not affected by silicosis.
- xi) The project proponent shall undertake re-grassing of the area or any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for fodder, flora, fauna etc. after ceasing mining operation that is at the time of mine closure.
- xii) A condition on SOP for blasting and safety on management of flying rock to be implemented and detail risk and hazard management procedure shall be followed by the lessee as per the **Annexure – D**.
- xiii) Haulage road shall be developed and maintained perennially and perpetually by the proponent in consultation with the concerned authority of the Govt.



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### Decision Of Authority: Approved

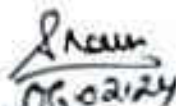
After detailed deliberations, the Authority approved the cluster EIA & EMP report as per SEAC recommendation. The PP is required to submit individual applications of cluster with following documents:

- 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) Report on vibration study.
- vi) DLC status of the lease area from concerned DFO as certified by the concerned Tahasildar.
- vii) 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.
- viii) 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.
- ix) An undertaking to obtain NOC from CGWA and permission from WR department, Govt. Of Odisha for use of ground water. Accordingly, specific condition to be stipulated in EC of individual lease.
- x) The project proponent shall maintain periodic health check-up records of their employees and ensure use of face mask by workers in crushing and handling sections of the stone quarry for ensuring that working personnel are not affected by silicosis.
- xi) The project proponent shall undertake re-grassing of the area or any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for fodder, flora, fauna etc. after ceasing mining operation that is at the time of mine closure.

### **APPROVED BY**

  
Member Secretary, SEIAA

  
Member, SEIAA

  
06.02.24  
Chairman, SEIAA





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### AGENDA No.153.03

Proposal No.	SIA/OR/MIN/453149/2023
Date of application	04.12.2023
File no.	453149/115-MINB1/12-2023
Project Type	Fresh ToR
Category	B1
Project/Activity including Schedule No.	1(a) Mining of minerals
Name of the Project	Proposal for ToR for Expansion of Khatkurbahal (North) Block, ML Area: 156.43 ha) with production capacity of Limestone 1.6 million TPA, Dolomite 2.42 million TPA, Mineral Reject 0.035 million TPA, Top Soil 0.033 million TPA & Over Burden: 1.455 million TPA (Total excavation: 5.543 million TPA) with Proposed crusher & screen with capacity of 800 TPH for inclusion of Dolomite as mineral at Villages: Khatkurbahal & Phalsakani, Tehsil: Kutra, District: Sundargarh, Odisha by M/s. Shiva Cement Limited.
Name of the company/Organization	M/s. Shiva Cement Limited Sri Maonj Kumar Rustagi Director
Location of Project	Villages: Khatkurbahal & Phalsakani, Tehsil: Kutra, District: Sundargarh, Odisha
ToR Date	N/A
Name of the Consultant	M/s J.M. EnviroNet Pvt. Ltd., Noida

**Proposal in brief:** The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.

1. This proposal is for Environmental Clearance of M/s. Shiva Cement Limited for Expansion of Khatkurbahal (North) Block, ML Area: 156.43 ha) with production capacity of Limestone 1.6 million TPA, Dolomite 2.42 million TPA, Mineral Reject 0.035 million TPA, Top Soil 0.033 million TPA & Over Burden: 1.455 million TPA (Total excavation: 5.543 million TPA) with Proposed crusher & screen with capacity of 800 TPH for inclusion of Dolomite as mineral at Villages: Khatkurbahal & Phalsakani, Tehsil: Kutra, District: Sundargarh of Sri Manoj Kumar Rustagi.
2. **Category:** This project falls under Category "B", Project or 1(a) for "Mining of Minerals" projects as per EIA Notification dated 14th Sept, 2006 and its amendments as the Mining Lease Area is less than 250 ha.
3. **Location and connectivity:** The proposed project is situated near Villages - Khatkurbahal & Phalsakhani, Tahasil - Kutra, District - Sundergarh, Odisha. The geo coordinates of the project are - latitude - 22° 16'45.31025" N to 22° 17'10.12835" N and 84° 27'36.13496" E to 84° 29'18.22107" E. The project is a part of the Survey of India Toposheet No. is 73 B/7, 73 B/8, 73 B/11, 73 B/12 of the core and buffer zone of project. The mine is well connected with SH-10 (~5.5 Km in SSW Direction). The nearest railway is available at Sonakhan (~12.9 km in SE direction), the nearest airport is Ranchi (Birsamunda) Airport (~ 143 km in NE direction) & the nearest city is Rajgangpur (~12.5 km in SE direction). Mine site comes under seismic zone II as per IS: 1893 (Part-I): 2002.





**4. Statutory Clearances obtained:**

- M/s. Shiva Cement Limited has an existing Cement Plant with clinker production capacity 3.0 million TPA & Cement 2.0 million TPA at Village - Telighana, Tahasil - Kutra, District Sundargarh, Odisha for which Environment Clearance has been obtained from MoEF&CC vide File No. J-11011/84/2008-IA.II (I) on dated 23.03.2022.
  - Khatkurbahal Limestone & Dolomite Mine (ML Area- 72.439 ha.) with Production Capacity 1.5MTPA located near villages - Khatkurbahal & Kulenbahal, Tahasil - Kutra, District - Sundergarh for which Environment Clearance has been obtained from SEIAA, Odisha vide letter No 37895/62-MINB1/11-2021 on dated 11.03.2022.
  - Khatkurbahal (North) Block Limestone Mine (ML Area- 156.43 ha.) with limestone production capacity of 1.6 million TPA located at Villages - Khatkurbahal & Phalsakhani, Tahasil - Kutra, District - Sundergarh, Odisha for which Environment clearance has been obtained from MoEF&CC vide File No J-11015/47/2020-IA.II (I) on dated 17.03.2022.
  - Lease was executed on 15.11.2023 and registered on 16.11.2022 in respect of Limestone Mineral in favor of M/s. Shiva Cement Ltd. for a period of 50 years from the date of registration. Lease was also executed on 15.11.2023 and registered on 16.11.2022 in respect of Dolomite Mineral in favor of M/s. Shiva Cement Ltd for a period of 50 years from the date of registration. Mining lease will be valid up to 15.11.2072.
  - CTE has been obtained SPCB, Odisha vide letter no. 546/IND-II-NOC-6603.
  - Modification of Mining Plan along with Progressive Mine Closure Plan (PMCP) has been approved vide letter no. MCDR-MiFL0LST/1/2022-BBS-IBM\_RO\_BBS dated 20.12.2023.
  - NOC from CGWA has been obtained vide letter no. CGWA/NOC/MIN/ORIG/2021/14185 on dated 29.12.2021 which will be valid upto 28.12.2023.
5. Dolomite has been added as a mineral in mining lease for which proposal for amendment in EC was appraised in SEAC, Odisha in its meeting held on 03.08.2022 and on 02.11.2022 in which SEAC recommended the proposal for amendment in EC. The proposal was placed in the meeting of SEIAA held on 19.01.2023 for consideration of amendment in EC which was referred back to SEAC for reconsideration of the proposal. SEAC issued a clarification letter on 01.08.2023. In compliance of clarification letter issued by SEAC, they have submitted Fresh proposal for Environment clearance to use dolomite as a mineral.
6. There is no change in total excavation (5.543 million TPA) proposed in the existing Environment Clearance within the Mining lease area, except change in use of dolomite as a mineral for which Mining lease has been granted.
7. Public hearing for the project has already been conducted on 24.08.2021 for total excavation 5.543 million TPA, where it was mentioned that 2.42 MTPA of Dolomite as waste.
8. **Total reserves:** The total geological reserve of Limestone is 53.37 million tons, out of which 21.41 Million tonnes are minable reserve as on 01/08/2023. Total life of mine for limestone will be 15 years. The total geological reserve of Dolomite is 73.04 million tons, out of which 43.40 Million tonnes are minable reserve for Dolomite as on 01/08/2023. Total life of mine for Dolomite will be 21 years.
9. **Land use:** The total ML Area is 156.43ha. out of which 42.461 ha. is Government land and 113.96 ha. is private land. At the conceptual stage, total mined out area will be 98.96 ha., out of which 14.84 ha. area





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will be converted into water reservoir and 14.84 ha. area will backfill area. As well as 15.03 ha. area covered under dump and 28.45 ha. area will be undisturbed.

10. **Method of Mining:** The method of mining adopted in Khatkurbahal (North) Block is opencast fully mechanized method. 0.3m thick topsoil on an average will be scraped which will be initially stacked in the lease area and subsequently will be used for spreading over the waste dump, back-filled area and plantation pits for rehabilitation of waste dump and reclamation of mined out area. Opencast method of mining will be adopted with the deployment of machines like 115 mm dia DTH drill, 1.8m<sup>3</sup> & 2.5 m<sup>3</sup> capacity excavator, 50 t capacity dumper etc. Only one pit/quarry is proposed to be developed in plan period for limestone. Opencast mechanized mining by forming systematic benches of 6.0 m height with proper width of 9. Conventional drilling blasting will to be adopted for excavation of limestone as well as waste as per requirement and site conditions/ constraints due to proximity of habitations. Hard rock mass will be loosened by the primary blasting of DTH drilled holes. Controlled blasting technique will be adopted to minimize the ground vibration and flying fragments using NONEL with delay elements depending upon the location of human settlements. Generally, slurry explosives, ANFO etc. will be used for blasting. Top part of the hole over 2m (approx) will be stemmed by the drill cuttings and remaining 4 m hole length will be charged by the slurry explosives. Oversized boulders will be broken by the deployment of rock breakers instead of secondary blasting. The excavation & loading of blasted rocks will be done by excavators of 1.8 cum & 2.5 cum capacity as well as loader/frontend loaders of 1.5 cum capacity. One crusher will be commissioned in the M.L. area. Crusher mainly consists of hopper, feeder, crusher, vibratory screens and a number of belt conveyors. ROM limestone and dolomite will be transported to crusher sites mineral will be crushed & screened into the different sizes such as lumps (+10-30mm, 30- 60mm & 60 - 80mm) and fines (-10mm). The transport of Limestone will be done by 50 Ton capacity dumpers from mine faces to crusher (average distance b/w quarry & crushing unit is 1.5 km) and after crushing the limestone will be dispatched to the Cement plant initially by road (19.2 km) and later by OLBC (8.7 km).
11. **Top Soil management:** Top soil is fertile in nature. It contains organic matter and macro & micro nutrients. Total 0.0225 million tons of Topsoil will be generated and stacked in 1.15 ha area and at the conceptual stage 0.54 million tons of Topsoil will be generated at conceptual stage. Top soil will be stacked initially, shifted subsequently to 7.5 m wide safety zone along the M.L. boundary within M.L. area, and spread over the backfilled area for plantation.
12. **Solid waste generation:** Solid waste generated will be stacked in dump and backfilled in mined out area. Screen reject will be used for blending and clay (part of waste) will be used in raw mix for clinkerization in the existing cement plant.
13. **Water requirement:** Total water requirement is 82 KLD out of which 15 KLD will be sourced from ground water for drinking & domestic purpose and remaining 67 KLD will be sourced from the sump of existing mine and later from this mine sump as and when developed.
14. **Power Requirement:** Power requirement will be around 2.0 MW (which will be sourced from WESCO of Grid Corporation of Odisha Limited). DG of 600 KVA capacities is also proposed for emergency power.
15. **Man Power requirement:** Total man power for the project is 306 persons. The Unskilled /semi-skilled manpower are being sourced from the local area whereas the skilled manpower is being sourced from local as well as outside. Preference is given to the locals as per their skills set, qualification and eligibility.



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- 16. Rehabilitation & Resettlement:** The total ML Area is 156.43 ha, out of which 42.461 ha is Government land and 113.96 ha is private land. Rehabilitation & Resettlement is under process. Total 201 families in two villages, are affected due to this project.
- 17. Greenbelt:** Total 3.41 ha developed under Greenbelt as well as Plantation will be done on 33.723 ha area (14.845 ha area on backfilled area and 18.878 ha area on safety zone along nallah, village road and around the habitation).
- 18. Project cost:** Total project cost is Rs. 160 Crores. Cost for Environment Protection is 11.57 Crores. Recurring Cost for EMP is Rs. 1.0 Crore per annum.
- 19. Environment Consultant:** The Environment consultant **M/s J.M. Enviro Net Pvt. Ltd., Noida** along with the proponent made a presentation on the proposal before the Committee.
- 20. During presentation, the consultant along with the representative of the project proponent requested to issue ToRs with exemption of public hearing for the following reasons:**
- i) There will be no change in total excavation (5.543 million TPA) proposed in the existing Environment Clearance within the Mining lease area except change in use of dolomite for which Mining lease has been granted for Dolomite as a mineral.
  - ii) Public hearing for the project has already been conducted on 24.08.2021 for total excavation 5.543 million TPA which includes 2.42 MTPA Dolomite as waste.
- Considering the information furnished and the presentation made by the consultant **M/s J.M. Enviro Net Pvt. Ltd., Noida** along with the project proponent,
- 2. Whether SEAC recommended the proposal –** The proposal was placed in SEAC meeting held on 27.12.2023 and After detailed discussion, the SEAC recommended the following:
- A. The SEIAA, Odisha may consider for exemption of conducting public hearing for the proposal for the reasons as requested by the project proponent at para 20 above.
  - B. The following specific ToRs may be prescribed in addition to standard ToRs as per **Annexure – A** for conducting detailed EIA study.
    - i) Approved mining plan including dolomite as a mineral product.
    - ii) Status of all the work progress on the project site.
    - iii) Mitigation measures to be followed to prevent silt accumulation w.r.t. the Sankh nala flowing nearby should be included in EMP.
    - iv) Status of all the activities/programmes covered against the issues raised in Public Hearing conducted on 24.08.2021.
    - v) Mineral balance and the amount of waste generated in a flow chart manner.
- 3. Earlier the PP had applied their proposal vide proposal no. SIA/OR/MIN/273587/2022 dt. 19.05.2022 for amendment of EC. Accordingly, the proposal was placed 107<sup>th</sup> meeting of SEIAA, Odisha held on 19.01.2023, 20.01.2023 & 21.01.2023. After detailed deliberation in the matter, the Authority decided to referred back to SEAC for reconsideration of the proposal with the following observation:**
- (i) The extant proposal involves change of product mix by including dolomite as an "Ore" in place of "Waste".
  - (ii) The proposal also involves setting up of 600TPH crusher with consequent increase in pollution load.
  - (iii) As per MoEF&CC, GoI OM F.No. IA.3-22/10/2022-IA.III (E 177258) dated 11.04.2022 capacity addition with change in product mix or increase in pollution load require revised EIA/EMP report. The SEAC may give their considered view whether there is requirement of fresh Public Consultation in light of MoEF&CC, OM dated 11.04.2022.



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1. The DSR of dolomite mining in Sundargarh District has not been approved by SEIAA & SEAC as per Order dated 10.11.2021 of Hon'ble Supreme Court in CA No-3661-3662 of 2020 in the matter of the State of Bihar & Others Vrs Pawan Kumar & Others.
2. In regards to the Transportation of mineral by road, the EAC of Ministry in its 42<sup>nd</sup> meeting has warned the consultant for non-compliance of ToR & recommended the EC in its 46<sup>th</sup> meeting after submission of an Undertaking by PP dated 28.01.2022 that the "Environmental Clearance, if granted, will be functional only after installing the Over Land Belt Conveyor (OLBC) for Captive Consumption of Limestone."
4. Again, the proposal was placed in 131<sup>st</sup> SEIAA meeting held on 10.08.2023 & 11.08.2023 and the Authority rejected the proposal with following views:
- (i) Decision on the proposal shall be taken after the DSR of dolomite mining in Sundargarh District has been approved by SEIAA & SEAC.
  - (ii) An undertaking shall be submitted that they shall abide by the undertaking submitted to MoEF & CC, Govt of India dt. 28.01.2022 that "Environmental Clearance, if granted, will be functional only after installing the Over Land Belt Conveyor (OLBC) for Captive Consumption of Limestone".
  - (iii) Project proponent needs to clarify that the crusher is for dry grinding of the ore and the reported emissions are for conditions of dry grinding.
  - (iv) There is a change in Product Mix from earlier EC for which the PP is adding 600 tph Crusher to process the Dolomite. Therefore, this may be considered as a fresh EC and PP may be advised accordingly.
  - (v) Also, the PP should not apply for EC with permission to sell, rather the EC to be applied for fresh equipment installation with change in product mix and all related issues to be complied.
  - (vi) All other points asked are also to be complied while applying.
- The Authority agrees with the recommendation of SEAC and the application for amendment in EC is rejected with the following reasons as per the recommendation of SEAC.
- (i) Decision on the proposal shall be taken after the DSR of dolomite mining in Sundargarh District has been approved by SEIAA & SEAC.
  - (ii) An undertaking shall be submitted that they shall abide by the undertaking submitted to MoEF & CC, Govt of India dt. 28.01.2022 that "Environmental Clearance, if granted, will be functional only after installing the Over Land Belt Conveyor (OLBC) for Captive Consumption of Limestone".
  - (iii) Project proponent needs to clarify that the crusher is for dry grinding of the ore and the reported emissions are for conditions of dry grinding.
  - (iv) There is a change in Product Mix from earlier EC for which the PP is adding 600 tph Crusher to process the Dolomite. Therefore, this may be considered as a fresh EC and PP may be advised accordingly.
  - (v) Also, the PP should not apply for EC with permission to sell, rather the EC to be applied for fresh equipment installation with change in product mix and all related issues to be complied.
  - (vi) All other points asked are also to be complied while applying.
5. Now, the PP has applied fresh proposal for ToR vide their proposal vide application no. SIA/OR/MIN/453149/2023 dt. 04.12.2023

### Decision Of Authority: Approved

After detailed deliberation in the matter, the authority decided to issue ToR (both standard and specific conditions) for EIA studies. The PP may be dispensed off of conducting public hearing due to following reasons.

- i) There will be no change in total excavation (5.543 million TPA) proposed in the existing Environment Clearance within the Mining lease area except change in use of dolomite for which Mining lease has been granted for Dolomite as a mineral.
- ii) Public hearing for the project has already been conducted on 24.08.2021 for total excavation 5.543 million TPA which includes 2.42 MTPA Dolomite as waste.

  
Member Secretary, SEIAA

APPROVED BY

  
Member, SEIAA

  
Chairman, SEIAA





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### AGENDA No.153.04

Proposal No.	SIA/OR/MIN/419148/2023
Date of application	23.02.2023
File no.	419148/1501-MINB1/02-2023
Project Type	New proposal for EC
Category	B1
Project/Activity including Schedule No.	1(a) Mining of minerals
Name of the Project	Proposal for EC of Kudubadi Pahad Decorative Stone Deposit over 38.077 ha in village Kudubadi Pahad under Daspalla Tahsil in Nayagarh district, Odisha, of M/s SGS Mines & Industries Pvt. Ltd.
Name of the company/Organization	SGS Mines & Industries Private Limited
Location of Project	village Kudubadi Pahad under Daspalla Tahsil in Nayagarh district, Odisha
ToR Date	02.08.2022
Name of the Consultant	M/s Srushti Seva Private Limited, Nagpur.

**Proposal in brief:** The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.

1. This proposal is for Environmental Clearance of Kudubadi Pahad Decorative Stone Deposit of M/s SGS Mines & Industries Pvt. Ltd. over an area 38.077 ha. in village Kudubadi Pahad under Daspalla Tahsil in Nayagarh district of Sri Gyan Murti Shah.
2. **Category:** The proposed project as per EIA Notification dated 14th September 2006 and subsequent amendments, falls under Category "B", Project or Activity 1(a) - Mining of Minerals.
3. The said area is to be granted as mining Lease for mining of decorative stone for thirty years with effect from the execution of the lease deed. The letters of intent for grant of mining lease is issued vide Letter No. 7437/SM-MC2-MC-0066-2021/S & M, Bhubaneswar, Dt.14.09.2021 in favour of M/s. SGS Mines & Industries Pvt. Ltd. Since the execution has not been done, the lease will be expired after a period of 30 years from the date of execution. The mining operation yet not started. This is a new mine. DEO, Nayagarh Division confirms that the said area is not coming under D.C forest.
4. The mining plan of the project has been approved under Mineral Concession Rule, 2016 and Granite Conservation & Development Rule, 1999 vide letter no - MXXII-(c)-8/2021/2047/DM on dated 07.03.2022 by Directorate of Mines, Bhubaneswar, Govt of Odisha.
5. The District Survey Report for additional sources of Morrum, Sand, Granite Stone and Laterite Stone of Nayagarh district has been prepared in accordance with Appendix - x, Para - 7 (iii) (a) of S.O. No - 3611(E) dated 25.07.2018 of MoEF & CC, New Delhi and approved by Collector, Nayagarh on dated 19.02.2020. Since the DSR was approved before the grant order, this mining lease is not shown in the DSR. However prospecting license was granted to M/s SGS Mines & Industries Limited, which was shown in page - 3 of approved DSR.
6. The methodology for the risk assessment has been based on the specific risk assessment guidance issued by the Directorate General of Mine Safety (DGMS), Dhanbad, vide Circular No.13 of 2002, dated 31st December, 2002.



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7. Although 3 proposed Prospecting leases has been identified adjacent to the lease area, but only this deposit has obtained Lol. So, it is being applied as individual lease.
8. D.O. Nayagarh confirms that the applied ML area is not coming under ESZ of Mahanadi Wildlife Sanctuary vide letter no 7600 dated 28<sup>th</sup> November, 2020.
9. **TOR details:** Terms of Reference (TORs) was prescribed by SEIAA, Odisha for this mining project vide Letter No. 5075/SEIAA on dated 02.08.2022.
10. **Public hearing details:** Public hearing has been conducted on 28.12.2022 at 11.00 AM at Daspalla Block Office Premises of Nayagarh district in accordance with the procedure of EIA Notification 2006. Issues raised during public hearing are local employment to stop migration of labourers, protection of environment and control of pollution (Air, Water and Noise), flora and fauna shall be conserved, endangered species like Pangolins shall be protected, respiratory diseases due to mining, maintenance of roads, water supply, protection of historical monuments like Bhatagada, Palli Sabha Grama Sabha not conducted before public hearing, local schools will be affected due to mining and other activities, traffic congestion due to movement of heavy loaded vehicles and damage of agricultural land due to transportation, Budget allocated for action plan on issues raised during public hearing includes capital cost of Rs. 7.86 lacs and recurring cost of Rs. 3.5 lacs.
11. **Location and connectivity:** The proposed mine is situated over an area of 38.077 ha in village- Kudubadi Pahad under Daspalla Tehsil, in the district of Nayagarh of Odisha State. The area is featured in Survey of India Toposheet No. F-45S/11 (7310/11) and is bounded between Latitude: 20° 19' 26.60" to 20° 19' 48.30" N, Longitude: 84° 36' 33.50" to 84° 37' 30.00" E; bearing Khata no 1 – and Plot no- 1/P, 2/P, 3/P and 4/P. The proposed area is about 25 km from Daspalla. The Applied M.L. area could be approach from Daspalla following Daspalla –Nayagarh NH Road, Kudubadi Pahad village at 9.0 km. NH-224. The proposed area is 125 km from the state capital Bhubaneswar. The nearest railway station is Nayagarh which is at 100 km from the Applied M.L. area. Nashagarh RF (0.55 Km, N); Central RF (5.0 Km, E); Chadhiapalli RF (4.0 Km, SE); Bori PF (8.0 Km, W) are present from the proposed site.
12. There are no National parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant reserves (existing as well as proposed) present within 10 km of the applied mine lease area. However, Mahanadi Wildlife Sanctuary is located 10.2 Km from the lease. A Joint verification has been carried out by the forest officials on 20.11.2020 regarding compatibility of site.
13. **Reserves and production:** The maximum production ROM will be 18750 cum/annum. As estimated, the total geological reserve is about 93, 63, 773.12 cum, out of which 47, 99, 184 cum have been considered as mineable reserves.

Year	Total volume of Rock	Volume of Marketable Ore (32%)	Volume of Blocks (80%)	Non- Saleable Blocks (20%)	Volume of Waste (68%)
	(m <sup>3</sup> )	(m <sup>3</sup> )	(m <sup>3</sup> )	(m <sup>3</sup> )	(m <sup>3</sup> )
1st Year	18750.00	6000.00	15000.00	3750.00	12750.00
2nd Year	18750.00	6000.00	15000.00	3750.00	12750.00
3rd Year	18750.00	6000.00	15000.00	3750.00	12750.00



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4th Year	18750.00	6000.00	15000.00	3750.00	12750.00
5th Year	18750.00	6000.00	15000.00	3750.00	12750.00
<b>Total</b>	<b>93750.00</b>	<b>30000.00</b>	<b>75000.00</b>	<b>18750.00</b>	<b>63750.00</b>

14. **Mining method:** Open cast semi-mechanized method will be adopted using machineries such as excavator, line offset, compressor, jack hammer, wire ropes and drill rod etc. Bench parameter will be kept at 3m height and 3m width. Individual bench slope will be 90° whereas overall pit slope will be 45°.
15. **Mine development:** Weathered zone of 0.5 – 1.0m will be scraped from the top. Drilling will be carried out by using jack hammers driven by air compressor. Generally, excavation done in two phases. Both vertical & horizontal holes will be done to expedite wire saw cutter to detach the blocks from the mine face. Splitting of different size of blocks are done by using various cutting tools. Then sizing & shaping of the blocks will be done by using chisels, hammer to give final dimension.
16. **Baseline details:** Base line data has been generated during March'2022 to May'2022 (Summer Season).
  - a) **AAQ result-** The Ambient Air Quality Monitoring reveals that out of eight monitoring stations the minimum and maximum concentrations of 98th percentile  $PM_{10}$  were reported to be  $46.6\mu g/m^3$  and  $88.0\mu g/m^3$  near lease area and at Banigochia respectively. Similarly, 98th percentile  $PM_{2.5}$  was found minimum at lease area ( $28\mu g/m^3$ ) while the maximum at village Banigochia -  $52.0\mu g/m^3$ . 98th percentile  $SO_2$  was found to be minimum  $5.6\mu g/m^3$  at Baliapalli & maximum  $16.7\mu g/m^3$  at Near village Banigochia. Minimum and maximum concentrations of 98th percentile  $NO_2$  were found to be  $10.5\mu g/m^3$  at Dhura &  $24.1\mu g/m^3$  at near banigochia. Minimum and maximum concentrations of 98th percentile CO were found to be  $0.14\text{ mg}/m^3$  at lease area &  $0.54\text{ mg}/m^3$  at Near village Banigochia respectively.
  - b) **Ground water quality:** pH values varied between 6.98 to 7.74, Dissolved Solids - 49 to 74 mg/l, Turbidity - 2.8 to 4.4 NTU, Total hardness - 89 to 117 mg/l. Chloride – 1.4 to 2.6 mg/l. Calcium – 16.5 to 23.1 mg/l, Magnesium – 4.8 to 6.1 mg/l. It is observed that all the samples are within the permissible limit of IS 10500: 2012.
  - c) **Surface water quality:** pH values varied between 6.98 to 7.44, Turbidity – 5.2 to 7.2 NTU, BOD – 1.0 to 2.1 mg/l, Dissolved Solids - 64.5 to 81.4 mg/l, Dissolved oxygen - 6.3 to 7.0 mg/L, Iron – 0.08 to 0.16 mg/L, Chloride – 10.7 to 17.1 mg/l.
  - d) **Noise level study:** Noise level varies from 42.5 to 61.0 dB (A) during Day time and 33.1 to 43.5 dB (A) during Night time, which are within the limit of regulatory norms of CPCB. All the noise levels monitored in the study area are well within Ambient Noise Standards for their respective land use category.
  - e) **Soil quality:** Texture of soil within the study area is sandy loamy. Soil of the study area is slightly acidic in nature. The bulk density of soil samples varies from  $1.32$  to  $1.6\text{ gm}/\text{cm}^3$  porosity varies from 14.5 to 25.1%. Silt varies from 18 to 21 %. Calcium varies from 1.2 to 2.0 mg/kg and Sulphate varies from – 0.18 to 0.42 mg/kg.
17. **Water requirement:** 10 KLD of water will be required, out of which 2 KLD for drinking purpose, 3 KLD for plantation and 5 KLD for dust suppression purpose. It is proposed to tap this quantity of water as per suitability. A sewerage system of septic tank followed by soak pit will be provided for the project area. Drinking water is made available from the tube wells of nearby village Kudubadi.



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**Waste management:** Waste generated from this mine are weathered Charnockite & schist. These waste rocks are removed from the quarry in the form of off-standard blocks. A total of 63, 750 Cum waste will be generated during plan period. 40% of the generated waste will be utilized for maintenance and construction of the haul road, approach and existing roads in the surrounding areas periodically. Remaining 38250 m<sup>3</sup> of waste will be temporarily dumped over 0.879 ha with a average height of 5m maintaining appropriate slope. However, the waste generated from the mines are not exactly waste. These are highly used for road construction & stone patching purposes and used by Stone artesian. So, later this waste will be supplied to local requestors. Retaining wall (164m x 1m x 1m) and garland drain (167m x 1m x 1m) will be constructed along with pit and dump. Settling tank will be constructed to arrest the wash-off water. During the cutting of decorative stone block, silt will be generated. Considering silt generation 0.0015 t/Cum, daily 100 Kg of silt will be generated. Since the waste generated from the mine is devoid of topsoil or laterite and the lease area is a completely exposed rock, the surface runoff from the lease area is devoid of silt.

19. **Power/Fuel requirement:** The requirement of power is mainly for mineral transport, office lighting etc. Fuel (Diesel) would be used for operating equipments and heavy machinery and for office, electricity will be consumed from the nearby substation.
20. **Greenbelt:** A green belt is proposed along/inside the lease boundary to form a barrier mainly for dust flow control. About 2.310 ha will be developed for green belt development. Plantation will be carried out in undisturbed area also. During first five-year, safety zone area will be planted. About 760 trees (152 trees to be planted per year) will be planted. Species like Amla, Neem, Mango, Gamhari, Kasi, Bahada, Jamun, and Bamboo are proposed to be planted.

Year	Area to be planted (m <sup>2</sup> )	No. of Saplings	Type of species to be Planted	Location
1 <sup>st</sup> Year	950	152	Amla, Neem, Mango, Gamhari, Kasi, Bahada, Jamun, and Bamboo	Along the Safety Zone
2 <sup>nd</sup> Year	950	152		
3 <sup>rd</sup> Year	950	152		
4 <sup>th</sup> Year	950	152		
5 <sup>th</sup> Year	950	152		
<b>Total</b>	<b>4750</b>	<b>760</b>		

21. **Plantation development:** As suggested DFO, Nayagarh, a Scheme for creation of fruit orchards has been prepared under the supervision of Sri B.N. Mohanty, Retd IFS to enrich wildlife habitat and availability of food wildlife animal. 450 fruit trees of 9 species as suggested, will be developed in six patches. Financial budget for the scheme of fruit orchard plantation is about Rs. 2, 36, 150.00/- as estimated, which may be spent in association with Forest department. This fruit orchard plantation is over and above, plantation suggested in mining plan, or any other plantation as suggested by the Committee.
22. **Manpower requirement:** The mining activity will generate employment for 20 numbers from which 17nos under skilled worker, unskilled worker & 3nos managerial staffs
23. **Project cost:** Estimated cost of the proposed project is 2.0 crores. CSR activities will be taken up in the nearby villages mainly contributing to education, health, training of women self-help groups and contribution to infrastructure etc., CER budget is allocated as 2.0% of the profit. Cost of Environment Management Plan (EMP) includes capital cost of 10.36 lakhs and recurring cost of 2.50 lakhs.





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EMP Particulars	Capital Cost (Rs. in Lakhs)	Recurring Cost (Rs. Lakhs/Annum)
Dust Suppression (mobile haul road water Sprinkling system etc.)	3.0	1.0
OB Dump Management (like retaining wall, garland drains, check dams, settling ponds etc)	1.0	0.25
Water & Waste water Management	1.0	0.25
Plantation/Green belt development	1.0	0.25
Environment Monitoring, Compliance Management, Safety etc.	2.0	0.75
Wildlife Safety measures	2.36	---
<b>Total</b>	<b>10.36</b>	<b>2.50</b>

CER - Category	Cost in Lakh/Annum
Provide drinking water facility in surrounding villages	0.5
Health Camp	1.0
Repair of Roads	0.5
Temple Development, Sports & Education	0.5
<b>Total</b>	<b>2.5</b>

24. **Environment Consultant:** The Environment consultant M/s Srushti Seva Private Limited, Nagpur, along with the proponent made a presentation on the proposal before the Committee on 12.04.2023.

25. The SEAC in its meeting held on **12-04-2023** deferred the proposal and recommended the following:

**A. The proponent may be asked to submit the following for further processing of EC application:**

- Submit the revised DSR within a week as the proposed resource is not an identified source in DSR. The proposal will be subjected to submission of revised DSR incorporating the identified source.
- Certificate from concerned DFO Nayagarh and DFO Satakosia that there are no reserve forests in the proposed site as the KML file shows dense forest growth in the proposed lease area and also the distance of Tiger reserve from the site.
- Detailed note on Wildlife Conservation Plan as the reserve forest is nearby.
- Clarification from the concerned DFO about requirement of forest clearance as the lease area is full of dense forest growth.
- As observed in KML file, there is dense forest growth within 38Ha. of lease area. The Project proponent also has mentioned in presentation that the available mining reserve is limited to only 5 Ha. Therefore, the Project Proponent may revise the mining lease area from 38 Ha. to 5Ha. for consideration of Environmental Clearance of the proposal.
- List of flora and fauna present in proposed site duly certified by concerned DFO.
- The Project Proponent may request to Steel and Mines dept. for trial excavations within lease area for rough estimation of presence of mineable reserve within the lease area, so that lease area can be reduced from 38ha. to 5Ha.

**B. The proposed site shall be visited by Sub-Committee of SEAC to verify the followings**



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- i) Involvement of forest land in the lease area as KML file shows dense forest growth in the proposed lease area.
- ii) Environmental settings of the lease area.
- iii) Mining activity, if any carried out in the lease area.
- iv) Road connectivity to the lease area.
- v) Any other issues including local issues.

26. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i)	Submit the revised DSR within a week as the proposed resource is not an identified source in DSR. The proposal will be subjected to submission of revised DSR incorporating the identified source.	DSR of Nayagarh district was approved on 19.02.2020 before the Lol order. However, prospecting license was granted to M/s. SGS Mines & Industries Limited, which was shown in last para of page -2 of approved DSR. Letter the Pl. is converted to ML. SO, it may be considered as identified source. And accordingly Lol is issued by Steel & Mines Dept., Govt of Odisha. And also, Nayagarh has already confirmed the source as identified source and sent the details to SEIAA, Odisha for inclusion in the revised DSR. ADM Nayagarh letter is attached as <b>Annexure - 1</b> .	<b>Annexure - 1 is attached.</b>
ii)	Certificate from concerned DFO Nayagarh and DFO Satakosa that there are no reserve forests in the proposed site as the KML file shows dense forest growth in the proposed lease area and also the distance of Tiger reserve from the site.	The total area of 38.077 ha is a Govt. waste land of Parvat - 1 kissam and not coming under any D.C. Land Scheduled duly certified by DFO, Nayagarh is attached as <b>Annexure - 2</b> . By order, two contiguous wild life sanctuaries, namely Satkosia Geroge Sanctuary & Baisipalli wildlife Sanctuary were notified as Satkosia Tiger Reserve. However Baisipalli Sanctuary not coming under the core zone of Satkosia TR. DFO, Nayagarh has already confirms the distance of Baisipalli wildlife sanctuary, which is more than 10.0 km from the lease area. The Notification on declaration of Tiger Reserve by MoEF & CC is attached as <b>Annexure - 3</b> .	<b>Annexure - 2 and Annexure - 3 is attached.</b>



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		However, as per S.O. 2163 (E) on 09.05.2022, General condition shall not applicable to Minor mineral projects.	
iii)	Detailed note on Wildlife Conservation Plan as the reserve forest is nearby.	In terms of Wildlife Conservation Plan, to comply DFO, Nayagarh Division, a scheme for creation of 6 nos., of fruit orchards has been prepared with estimated cost of about Rs. 2.36 lakhs, which may be spent in association with Forest department. The said Scheme is attached as <b>Annexure – 4</b> .	Complied
iv)	Clarification from the concerned DFO about requirement of forest clearance as the lease area is full of dense forest growth.	DFO, Nayagarh already confirms that; the lease area is a non-forest land, So no Forest clearance is required. Ref. <b>Annexure – 2</b> .	Complied
vi)	As observed in KML file, there is dense forest growth within 38Ha. of lease area. The Project proponent also has mentioned in presentation that the available mining reserve is limited to only 5 Ha. therefore, the Project Proponent may revise the mining lease area from 38 Ha. to 5Ha. for consideration of Environmental Clearance of the proposal.	Since the exploration work has been done within 5 ha out of 38 077 ha, DFO, Nayagarh Division allowed to start the work restricted within the 5 ha. After entire exploration, further permit may be required.  The mining plan has been prepared based on the already area over 5.0 ha and for the balance area, proposal for exploration is also given in the mining plan. Before submission of next review of Mining plan for approval as per the prevailing statute.  Again, the KML file shows the image taken in the month of July in the Rainy season, resulting greenery in the entire area.	-
vi)	List of flora and fauna present in proposed site duly certified by concerned DFO.	Authenticated list of Flora & Fauna is attached as <b>Annexure – 5</b> .	Complied and as <b>Annexure – 5 is attached.</b>
vii)	The Project Proponent may request to Steel and Mines dept. for trial excavations within lease area for rough estimation of presence of mineable reserve within the lease	During the prospecting license period 5.0 ha area explored and Pl. report submitted for grant of mining lease over 38,077 ha. LOI obtained for grant of 38,077 ha of ML area. After execution of mining lease, mining operation will	-





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area, so that lease area can be reduced from 38ha. to 51ha.	start. While mine will be in operation entire area will be explored and during submission of next mining plan for further 5 years of mining operation entire area exploration detail with available resources will be provided.	
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27. The SEAC in its meeting held on **17-08-2023** decided to take decision on the proposal after a site visit of the Sub-Committee of SEAC.

28. The proposed site was visited by the sub-committee of SEAC on 04.12.2023. Following are the observations of the sub-committee:

- The Project site is located about 40 km from Daspala.
- The Kudubudi hill was seen about a kilometre away as there was no regular road to approach. The hill and its surroundings are filled with trees like jungle.
- The layout was explained by the Consultant and representative of PP. The mining activity will start from the foot hill of opposite side of the hill we saw.
- The site has no approach road from the mine site till the revenue road which is at a distance of 600 meter.
- There is no habitation nearby and the Brutanga dam site is far from the site crossing two hills and in the reverse direction of flow of water. The catchment area will also be far.
- Accordingly, the PP and Consultant were asked to submit documents with regard to above as a part of KML file and also showing the coordinates of mining site, which they showed there.
- The documents submitted are attached below herewith along with NOC for EC for mining over lease area.
- From the above it could be seen that mining could be allowed in the area presently explored based on a valid mining plan. In case of change in mining plan and change in production level, they need to apply for EC amendment again.
- Although it is not forest-land as informed, there are lot of trees which may have to be cut while making the approach road of 600 mt joining the existing road. Thus, required permission for approach road and trees cutting needs to be taken and procedure followed before commencement of mining.
- All other points and conditions related to be followed.

Considering the information furnished and the presentation made by the consultant, **M/s Srushti Seva Private Limited, Nagpur**, along with the project proponent

2. **Whether SEAC recommended the proposal** – The proposal was placed in SEAC meeting held on 27.12.2023 and the SEAC recommended for grant of Environmental Clearance upto lease period with stipulated conditions as per **Annexure – A and following additional conditions;**

- Haulage road shall be developed and maintained perennially and perpetually by the proponent in consultation with the concerned authority of the Govt.
- The project proponent shall maintain periodic health check-up records of their employees and ensure use of face mask by workers in crushing and handling sections of the decorative stone quarry for ensuring that working personnel are not affected by silicosis.
- The project proponent shall undertake re-grassing of the area or any other area which may have been disturbed due to their mining activities.



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- (vi) The site has no approach road from the mine site till the revenue road which is at a distance of 600 meter. There are lot of trees which may have to be cut while making the approach road of 600 meter joining the existing road. Thus, required permission for approach road and trees cutting needs to be taken and procedure followed before commencement of mining.

### Decision Of Authority: Approved

After detailed deliberations, the Authority decided to grant **Environmental Clearance** with usual stipulated conditions as applicable for decorative stone quarry with specific conditions recommended by SEAC.

- Maximum quantity of extraction shall be limited to **18750 cum/annum**. Area of extraction limited to 5.0 ha out of total lease area 38.077 Ha.
- The validity of EC is for or validity of DSR or validity of lease period whichever is earlier.
- The site has no approach road from the mine site till the revenue road which is at a distance of 600 meter. There are lot of trees which may have to be cut while making the approach road of 600 meter joining the existing road. Thus, required permission for approach road and trees cutting needs to be taken and procedure followed before commencement of mining.
- The Grant of EC for further period will be considered after submission of approved DSR by SEIAA as per the MoEF& CC, Govt. of India Notification S.O. 3611(E) dated 25.07.2018, Sustainable sand mining guidelines-2016 and Enforcement & Monitoring Guideline for sand mining-2020 and also as per the Hon'ble Supreme Court order vide its order dated 10.11.2021 in Civil Appeal Nos. 3661-3662 of 2020 (State of Bihar Vrs. Pawan Kumar and Others).
- The Project Proponent (lease holder) shall deposit Rs.19,00,000/-, with the respective District Environment Society for raising 3800 plants (minimum @100 trees per Ha) of native species within 2 years in a suitable location adjoining to quarry.
- The PP will implement the EMP cost of Rs. 10.36 Lakh (Capital Cost) and Rs. 2.50 (Recurring Cost) and CER Cost is Rs. 2.5 Lakh

  
Member Secretary, SEIAA

APPROVED BY

  
Member, SEIAA

  
06.02.24  
Chairman, SEIAA





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### AGENDA No.153.05

Proposal No.	SIA/OR/MIN/418212/2023
Date of application	22.06.2023
File no.	418212/821-MINB1/06-2023
Project Type	New proposal for ToR
Category	B1
Project/Activity including Schedule No.	I(a) Mining of minerals
Name of the Project	Proposal for ToR of Balanda Stone Quarries Cluster (7,9,14,15,16) over an area of 44.05 acres or 17.823 hectares bearing Khata no. 504, 506 and Plot no. 2473/P, 1899/P, 2008/P & 2009/P, 2473/P, 2473 P & 2010/P and 1893/P & 2010/P in village Balanda, Tahasil-Lathikata, District- Sundargarh State Odisha submitted under cluster approach with consisting of 5 stone quarries.
Name of the company/Organization	Sri Bijay Agarwal
Location of Project	village Balanda, Tahasil-Lathikata, District- Sundargarh State Odisha
ToR Date	N/A
Name of the Consultant	M/s P&M Solution, Noida

**Proposal in brief:** The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.

- The SEAC in its meeting held on 31-07-2023 decided to defer the proposal to the next meeting and will consider it after receipt of the following from the proponent:
  - Details of total number of quarries present in the Balanda Stone Quarries Cluster (including existing and proposed mines) in tabulated form.
  - Details of status of existing mines & proposed mines with name of lessee.
  - Copies of Environment Clearance, CTE & CTO of existing mines in cluster.
  - A detailed notes giving reason why the EIA study undertaken and ToRs issued earlier does not contain all quarries i.e. Balanda Stone Quarries 1 to 16 and presently another proposal has been submitted for issue of ToRs in cluster approach.
- The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	Details of total number of quarries present in the Balanda Stone Quarries Cluster (including existing and proposed mines) in tabulated form.	Details of all quarries are in tabular form. Annexed herewith, (Annexure-1)	Details of all quarries submitted.
2.	Details of status of existing mines & proposed mines with name of lessee.	Details of status of existing mines & proposed mines with name of lessee (Annexure -2)	Details of all quarries submitted.
3.	Copies of Environment Clearance, CTE & CTO of existing mines in cluster.	Copies of Environmental Clearance, CTE & CTO of existing mines in cluster (Annexure -3)	EC, CTE and CTO copies of Balanda Stone Quarry No 2, 3 and 10.





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	A detailed notes giving reason why the U/A study undertaken and ToRs issued earlier does not contain all quarries i.e. Balanda Stone Quarries 1 to 16 and presently another proposal has been submitted for issue of ToRs in cluster approach.	A detailed notes on Balanda Stone Quarries Cluster (1 to 16) is annexed herewith (Annexure-4)	Justification has been submitted where it is mention proposed quarries 14,15 & 16 were identified as new source and approved after 14.07.2021.
3.	The SEAC in its meeting held on dated 18-11-2023 decided that the proponent shall be called for a detailed presentation for consideration of ToRs.		
4.	The proposal was called for a detailed presentation for consideration of ToRs in this SEAC Meeting dated 27-12-2023.		
5.	This proposal is for Terms of Reference (TOR) for Balanda Stone Quarries Cluster (7,9,14,15,16) over an area of 44.05 acres or 17.823 hectares bearing Khata no. 504, 506 and Plot no. 2473/P, 1899/P, 2008/P & 2009/P, 2473/P, 2473/P & 2010/P and 1893/P & 2010/P in village Balanda, Tahasil-Lathikata, District-Sundargarh of Sri Bijay Agarwal.		
6.	<b>Category:</b> As per the EIA Notification dated 14th September 2006 and its subsequent amendments the proposed project falls under category B1 (>5ha) of Schedule in item 1 (a) – Mining of minerals.		
7.	There were originally 13 stone quarries known as Balanda Stone Quarry-1 to 13 in the village of Balanda, Tahasil-Lathikata, District-Sundargarh. Prior to July 9, 2021, four of these quarries, namely Stone Quarry-4, 11, 12, and 13 had already been extinct. On July 9, 2021, a TOR (Terms of Reference) application was submitted for the remaining 9 stone quarries - Balanda Stone Quarry-1, 2, 3, 5, 6, 7, 8, 9, and 10. Subsequently, on November 18, 2021, SEIAA Odisha granted TOR in favor of Balanda Stone Quarry-1, 2, 3, 5, 6, 7, 8, 9, and 10. Following the TOR approval, the lease period for quarry no. 7 and 9 expired. Simultaneously, the Tahasildar Lathikata declared stone quarry no. 5 and 6 as extinct and introduced three new quarries, namely no. 14, 15, and 16. Consequently, a new TOR application was submitted on February 14, 2023, specifically for Balanda Stone Quarry-7, 9, 14, 15, and 16.		
8.	<b>List of Statutory Clearances obtained earlier -</b>		
	a) Balanda Stone Quarry-7: Mining Plan Approved on Letter no- 1493, Dt- 27.10.2021		
	b) Balanda Stone Quarry-9: Mining Plan Approved on Letter no- 793, Dt- 16.04.2022		
	c) Balanda Stone Quarry-14: Mining Plan Approved on Letter no- 1489, Dt- 27.10.2021		
	d) Balanda Stone Quarry-15: Mining Plan Approved on Letter no- 1491, Dt- 27.10.2021		
	e) Balanda Stone Quarry-16: Mining Plan Approved on Letter no- 1655, Dt- 23.11.2021		
9.	<b>Location and connectivity:</b> The project is located at plot no.- Balanda SQ- 7: 2473/P, Balanda SQ- 9: 1899/P, 2008/P, 2009/P, Balanda SQ- 14: 2473/P, Balanda SQ- 15: 2473/P, 2010/P and Balanda SQ- 16: 1893/P, 2010/P of Village- Balanda, Tehsil- Lathikata, Dist- Sundargarh, State- Odisha. The ML area is located in Topo sheet no. F45G16, F45G12. The kissam of the land is as follows: Balanda SQ- 7: Patita, Balanda SQ-9: Parbat, Balanda SQ-14: Pahad. Balanda SQ- 15: Pahad, Balanda SQ- 16: Parbat. The nearest NH- 6Km, nearest SH- 5.5Km, nearest Airport- Rourkela- 15Km, the nearest water body- 800m, Reserve forest- 1.7Km, Road Bridge- 6.2Km, Rail Bridge- 5.8Km, river embankment-6.2 Km, electric transmission pole- 550m, village road- 300m. Nearest Habitation- 500m, the nearest sanctuary is Palkot Wild Life Sanctuary- 63Km.		
10.	<b>Total Reserves Production:</b> The total Geological Reserves for the ML area is 5765755.7Cum, Mineable Reserves for the ML area is 2400609.1Cum.		





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### Water requirement:

Activity	Calculation	Round off Figure in KLD
Drinking	@ 10lpcd per labor $(10 \times 448/1000) = 4.48$ KLD	4.48
Dust suppression	Total haulage road to be water sprinkled = 6000 m <sup>2</sup> $m \times 6 m \times 0.5 \text{ lt/sqm} \times 2 \text{ times} / 1000 = 36$ KLD	36
Plantation	7154 plants in financial year @ 2 lt. per plant $7154 \times 2 \text{ lt} = 14308/1000 = 14.308$ KLD	14.308
<b>Total</b>		<b>54.788 ~ 55 KLD</b>

12. **Power Requirement** - No electricity required at quarry site. Only diesel is used for operating mining equipment only. For which 4 KL of HSD will be used and sourced from local market.

### 13. Mining Plan Details:

a) **Method of Mining:** Semi Mechanized Open cast Method.

#### Production capacity per annum:

Sl no.	Quarry name	Maximum Production (in a financial year) in Cum
01	Balanda Stone Quarry - 7	50049
02	Balanda Stone Quarry - 9	50057.8
03	Balanda Stone Quarry - 14	15016
04	Balanda Stone Quarry - 15	15015
05	Balanda Stone Quarry - 16	80017
<b>Total</b>		<b>210154.8</b>

#### Total production in 5 years:

Sl no.	Quarry name	Total Production in 5 Years
01	Balanda Stone Quarry - 7	250140
02	Balanda Stone Quarry - 9	250271.6
03	Balanda Stone Quarry - 14	75080
04	Balanda Stone Quarry - 15	75075
05	Balanda Stone Quarry - 16	400176.4
<b>Total</b>		<b>1050743</b>

#### Proposed mining depth as per approved mining plan:

Sl no.	Quarry name	Proposed Mining Depth from Quarry Floor Level
01	Balanda Stone Quarry - 7	10m
02	Balanda Stone Quarry - 9	07m
03	Balanda Stone Quarry - 14	04m
04	Balanda Stone Quarry - 15	10m
05	Balanda Stone Quarry - 16	10m

#### Equipments used and list of machinery:

Name	Capacity	Quantity
Driller	4" diameter	9
Compressor	450cfm	5
Rock Breaker	2201	5
Excavator	2101	10



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Tipper	10MT	15
Water carrier	1000 liters	15
Safety equipments such as Helmets, safety shoes, Goggles, & Hand gloves	---	As required (according to DGMS Guidelines)

14. **Solid waste generation & mitigation:** • Only weathered rock will be considered as waste and will be dumped in a temporary dump; and it will be used for the maintenance of the approach road

15. **Wastewater generation:** The said quarry area does not have any stone crusher within the lease area. Thus, no trade effluent is generated from the quarry site. However, during the rainy season, surface runoff containing suspended solids and silts flows out.

### 16. Greenbelt Development:

Year	Greenbelt development	Plantation along both sides of approach road	No. of plants in Anganwadi, Schools, Panchayat Bhawan in consultation with the government body/local authorities	Species of Plant
1 <sup>st</sup> Year	1.237 ha/60 plants	120	1253	Plants suggested by villagers
2 <sup>nd</sup> year	1.237 ha/60 plants	120	1253	
3 <sup>rd</sup> year	1.237 ha/60 plants	120	1250	
4 <sup>th</sup> year	1.237 ha/60 plants	120	1249	
5 <sup>th</sup> Year	1.237 ha/60 plants	120	1249	
<b>Total</b>	<b>300</b>	<b>600</b>	<b>6254</b>	
<b>Total</b>		<b>7154</b>		

17. **Total Employment:** Balanda SQ- 7: 63, Balanda SQ- 9: 76, Balanda SQ- 14: 34, Balanda SQ- 15: 26, and Balanda SQ- 16: 69 people will be engaged.

18. **Project Cost:** The total project cost is approx. 2Cr. The Capital cost allocated for implementation of EMP is ₹29,30,800 and recurring cost allocated for EMP is ₹24,08,000.

19. **Environment Consultant:** The Environment consultant M/s P&M Solution, Noida along with the proponent made a 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.

**Whether SEAC recommended the proposal –** The proposal was placed in SEAC meeting held on 27.12.2023 and the SEAC prescribed the following specific ToRs in addition to standard ToRs as per Annexure – B for conducting detailed EIA study

- Submit NOC/Permission copy for 55KLD of ground water/surface water utilization. They should also take permission from Water Resource Department.
- Submit plan for roads to be used for transportation and its management.
- Submit the SOP for blasting to be conducted at the cluster ML area.

### Decision Of Authority: Approved

After detailed deliberation in the matter, the authority decided to issue cluster ToR (both standard and specific conditions) for EIA studies.

### APPROVED BY

Member Secretary, SEIAA

Member, SEIAA

Chairman, SEIAA



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AGENDA No.153.06	
Proposal No.	SIA/OR/MIN/438192/2023
Date of application	11.08.2023
File no.	438192/347-MINB1/08-2023
Project Type	New proposal for ToR
Category	B1
Project/Activity including Schedule No.	1(a) Mining of minerals
Name of the Project	Proposal for ToR for Rengitipalli - A,B,C,D & E Stone Quarries Cluster over an area of 170.249 acres or 68.899 hectares in the village Rengitipalli under Tahasil Kodala in District Ganjam, State Odisha submitted under cluster approach with consisting of 5 stone quarries.
Name of the company/Organization	JUTI KRUSHNA PANDI
Location of Project	village Rengitipalli under Tahasil Kodala in District Ganjam, State Odisha
ToR Date	N/A
Name of the Consultant	M/s Cognizance Research India Pvt. Ltd.,

**Proposal in brief:** The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEIAC/SEIAA, are given as under.

1. The proposal was considered by the committee to determine the "Terms of Reference (ToR)" for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendment thereafter.
2. **Category:** As per EIA Notification 2006, and its subsequent amendments, the proposed project falls under B category in item 1(a) - Mining of Minerals.
3. This proposal is for Terms of Reference for obtaining Environmental Clearance for Rengitipalli - A, B, C, D & E Stone Quarries Cluster over an area of 170.249 acres or 68.899 hectares in the village Rengitipalli under Tahasil Kodala in District Ganjam of Sri Juti Krushna Pandi.
4. The mining plan was approved by Sri S.P. Nanda vide letter no. 714,716,718 & 720 on dated 27.05.2022.
5. Mining lease is an identified sairat source in the DSR Ganjam in Para no 14 - Rengitipalli-A, 13 - Rengitipalli-B, 26 - Rengitipalli-C, 27 - Rengitipalli-D, 28 - Rengitipalli-E in Page no 65,67.
6. The proposed project is a 5 stone quarries cluster mines Rengitipalli A & B were existing mines and the Rengitipalli C,D,E are new mines.

Sl. No.	Quarry name	Name of Lessee
01	Rengitipalli - A	Sri Juti Krushna Pandi
02	Rengitipalli - B	Sri Juti Krushna Pandi
03	Rengitipalli - C	Not Auctioned



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04	Rengitipalli - D	Sri Bhagaban Parida
05	Rengitipalli - E	Sri Bhagaban Parida

**7. Location and connectivity:** The quarries are located in SE Part of village Rengitipalli, under Kodala Tahasil of Ganjam district in Odisha State. District headquarters Chatrapur is at a distance of 28.00 Km and is covered in the Survey of India Topo Sheet No – E45A14. The geo-coordinates of the quarry cluster are: Latitude - 19°35'54.52"N to 19°36'25.49" N Longitude - 84°54'01.95"E to 84°55'12.95"E. Nearest National Highway is NH-16 is at a distance of 20.20 Km in SE. The quarry is of 1.30 Km in NE away from the state highway is SH-30. The Nearest Airport is Biju Patnaik International Airport which is at a distance of approx. 160 km towards NE direction. Nearest Dam is Luhakote dam at a distance of 8.00 Km in NW. Nearest reserve forest is Karishinagiri hill Reserve Forest is at a distance of 4.85 Km in SE. Nearest road bridge is Makundapur bridge over Rushikulya River at a distance of 11.00 Km. in SW. Nearest river embankment is Makundapur bridge over Rushikulya River at a distance of 11.00 Km. in SW. Nearest Electric transmission line is 0.20 Km from the Lease area. The Nearest Habitation is 0.20 Km in the North direction.

**8. Baseline study:** Baseline Study has been conducted during the period March, 2023 to May, 2023.

**9. Reserves and total production:** The total Geological reserve of cluster area is 12167027 Cum and Mineable reserve is 6739940 Cum and the total production for the Proposed Project is 11,900 cum/year.

Name of Sources	Vol. of Stone in (m <sup>3</sup> )
Rengitipalli - A	4200
Rengitipalli - B	3500
Rengitipalli - C	---
Rengitipalli - D	2000
Rengitipalli - E	2200
<b>TOTAL</b>	<b>11900</b>

**10. Mining method:** The Method of Mining will be opencast Semi-mechanized Method. Extraction and loading into truck & Tractor will be done by Machinery. The transportation of Stone from Quarry site to destination shall be achieved by dumper/tractor.

**11. Waste generation and management:** During plan period 2975 cum per annum of waste will be generated from the total cluster area and the waste will be used in maintenance of haulage road and back filling.

Plan Period	Name of Quarry	Maximum Production (cum)	Waste (cum)
5 Years	Rengitipalli - A Stone Quarry	4200	1050
5 Years	Rengitipalli - B Stone Quarry	3500	875
5 Years	Rengitipalli - D Stone Quarry	2000	500
5 Years	Rengitipalli - E Stone Quarry	2200	550
Total		11900	2975





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**12. Water requirement:** Total Water Requirement for the proposed project will be 33 KLD.

Activity	Calculation	Round off Figure in KLD
Drinking	@ 10 lpcd per labor $39 \times 10 / 1000 = 0.39$ KLD	0.39
Dust suppression	Total haulage road to be water sprinkled = 2528 m $2528 \times 6m \times 1.0 \text{ ltr} \times 2 \text{ times} / 1000 = 30336 \text{ L.P.D}$ 30.336 KLD	30.336
Plantation	1000 plant in five year @ 2 L/per plant $1000 \times 2 = 2000 / 1000 = 2.0$ KLD	2.0
<b>Total</b>		<b>32.726 KLD ~ 33 KLD</b>

**13. Greenbelt development:** The plantation proposal has been given to plant around 1000 saplings over an area of 0.40 ha. in the auctioned area. Species likely to be planted are Chakunda, Neem etc. as per the availability. Spacing between the saplings will be kept 2.5 meters x 2.5 meters only.

**14. Manpower:** Total number of persons that will be required for the proposed project is 39 numbers.

**15. Project Cost:** The estimated cost of the proposed project is Rs 1 crore.

Sl. No.	Activity	Capital Cost (in Rs.)
1	Health check-ups Facility in Rengitipalli village.	1,00,000
2	Distribution of Sanitizer and Mask to the villagers of Rengitipalli village	40,000
3	Water Storage tank in village Rengitipalli	20,000
4	Distribution of educational kits & books in schools (i.e. Rs. 2,000/ kit)	40,000
<b>TOTAL (in life time)</b>		<b>2,00,000</b>

**16. Environment Consultant:** The Environment consultant M/s Cognizance Research India Pvt. Ltd., along with the proponent made a presentation on the proposal before the Committee.

**17.** The SEAC in its meeting held on dated **01-09-2023** decided to take the decision on the proposal after receipt of the following from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
1.	Previous Environmental clearance copies along with its compliance report of existing mines.	Copy of Previous Environmental clearance Copies along with its compliance report of existing mines is attached herewith.	Existing mines Rengetipalli - A & B previous EC and previous EC compliance reports has been submitted.
2.	Include Quarry C in the HIA report which is not auctioned yet, as reported	Yes, the Quarry C is included in the EIA report and the revised KML is prepared.	Google map showing all



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by PP Submit the revised KML file including all quarries present in the cluster.		quarries has been submitted.
Copy of agreement/letter of authorization from all the lease holders present in the cluster to take the lead and carry out the EIA study prior to recommendation of TOR.	Copy of authorization letter is attached herewith.	Authorization letter on behalf of all lease holders has been submitted.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Cognizance Research India Pvt. Ltd.,**

**Whether SEAC recommended the proposal** – The proposal was placed in SEAC meeting held on 27.12.2023 and the SEAC prescribed the following specific ToRs in addition to standard ToRs in cluster approach as per **Annexure – A** for conducting detailed EIA study.

- Installation of STP of adequate capacity and requisite design.
- Copies of Previous obtained EC which SEIAA has granted as informed by the proponent.
- Traffic study duly vetted by reputed institution.
- Green belt in safety zone of each mine and all-round the clusters to be confirmed with details.
- Arrangement of pipeline sprinkling (permanent water line) to be explored and confirmed.
- Silt management and SoP for the same to arrest /remedy of silt ingress to surrounding agricultural lands.
- Kisam of land to be submitted.
- Safety measures during blasting including provision of warning to be submitted.
- Map showing ESZ, Sanctuary boundary and lease boundary.
- Distance of nearest elephant corridor from cluster.
- Site photographs along with the consultant.
- Individual mining plan for each quarry/mine in the cluster as the proponent has submitted cluster mining plan.
- Standard Operating Procedures (SOP) for Blasting of all the quarries along with blasting management.
- Dust Management.
- Details of any court case if any pending for the cluster or any of leases under it.

### Decision Of Authority: Approved

After detailed deliberation in the matter, the authority decided to issue cluster ToR (both standard and specific conditions) for EIA studies.

APPROVED BY

  
Member Secretary, SEIAA

  
Member, SEIAA

  
Chairman, SEIAA





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### AGENDA No.153.07

Proposal No.	SIA/OR/MIN/435709/2023
Date of application	02.08.2023
File no.	435709/825-MINBI/08-2023
Project Type	New proposal for EC
Category	B1
Project/Activity including Schedule No.	1(a) Mining of minerals
Name of the Project	Proposal for EC of Kanaka Sand Bed (River-Rusikulya) over an area of 31.211 ha. (submitted under cluster approach with total lease area of 35.43 ha.) in village Kanaka, Tehsil Purushottampur, District Ganjam, Odisha
Name of the company/Organization	Sri Krupasindhu Muduli
Location of Project	village Kanaka, Tehsil Purushottampur, District Ganjam, Odisha
ToR Date	02.09.2022
Name of the Consultant	M/s P and M Solution, Noida

**Proposal in brief:** The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SI/AC/SEIAA, are given as under.

1. This proposal is for Environmental Clearance for Kanaka Sand Bed over an area of 31.211 ha. (Submitted under cluster approach with total lease area of 35.43 ha.) in village Kanaka, Tehsil Purushottampur, District Ganjam of Sri Krupasindhu Muduli.
2. **Category:** As Per EIA Notification, 2006 and subsequent amendments the project falls under Category B1 under Schedule of item of 1(a) - Mining of Minerals.
3. The Mining Lease has been granted vide letter no 1635 date 04/05/2022 The Successful Bidder is Sri Krupasindhu Muduli, S/o- Sri Jhuriya Muduli, At- Ramakrushna Nagar, 2<sup>nd</sup> Lane, Lochapada, Berhampur.
4. The Mining plan has been approved by the Deputy Director Geology, O/o The Joint Director of Geology (S.Z) on dated 29.03.2022.
5. The present proposal is a new mine shown as an identified source in the DSR of the Ganjam district. SI No 01; Page No 63.
6. The Terms of Reference (TOR) has been granted by SEIAA, Odisha vide letter No. 5348/SEIAA Dated 02.09.2022.
7. **Location and connectivity:** The mine lease area is located in Village - Kanaka, Tahasil- Purushottampur, District - Ganjam, Odisha, is on Khata no- 472, Plot no- 865, 865/1012 & 785/1013 of Rushikulya river. The lease area is covered in the Survey of India Topo Sheet No – 74A/14 & 74A/15 and geo coordinates are Latitudes -19°30'10.47" N to 19°30'25.53" N and Longitudes – 84°51'09.09" E to 84°52'07.06" E. The Kism of land is Nadi. The Nearest National Highway is NH-16 which is at a distance of approx 21.65 km in East direction. The Nearest State Highway is SH-32 which is at a distance of approx 1.40 km in East direction. The Nearest distance of approach road is 0.26 Km. The Nearest Airport is Biju Patnaik International Airport which is at a distance of approx 130.30 km towards NE direction. The Nearest Reserve Forest is Taratarini RF which is at a distance of 4.59 Km in ESE direction. Krishnaagiri Reserve Forest, approx. 9.90 Km in NE. Ashuri Reserve Forest, approx. 7.70 Km in NNW. The Nearest





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Road Bridge is within the mining lease. The Nearest Rail Bridge is Ganjam Railway Bridge at a distance of 21.04 Km. The Nearest River Embankment is at a distance of 0.20 Km from the lease boundary. The Nearest Electric transmission line is running within the mining lease.

8. **Public hearing** was conducted on 06.01.2023 at Kanaka village, under Purushottampur Tahasil of Ganjam District, Odisha. Issues raised during public hearing are accidents due to sand transportation through village roads, transporting trucks shall be properly covered with tarpaulin to avoid spillage, water sprinkling for dust suppression, protection of Environment, Mining of sand shall be restricted in submerged or water flow area to avoid water pollution and deposit of silts leading to growth of shrubs at river bed. Budget allocated for Corporate Environmental Responsibility (CER) of Proposed Kanaka Sand Bed is Rs.160000 and for cluster is Rs.180000 and Budget for Environmental Protection of Proposed Kanaka Sand Bed is Rs.659000 as capital cost and Rs. 383000 as recurring cost. Budget for Environmental Protection for cluster is Rs.778400 as capital cost and Rs. 666000 as recurring cost.
9. **Total reserves, production and Method of Mining:** The total Geological reserves is 564525cum and Mineable Reserves is 347575 cum and the Proposed Production of the Project is 1,00,400 cum/year. The Method of Mining will be opencast Manual Method. Extraction and loading into truck & Tractor will be done by manual means. The transportation from Sand Quarry site to destination shall be achieved by dumper-tractor. The Proposed depth of mining is 2.5 Meters as per approved mining plan.

Year	Vol. of Sand in (m <sup>3</sup> )
1 <sup>st</sup>	100400
2 <sup>nd</sup>	100400
3 <sup>rd</sup>	100400
4 <sup>th</sup>	100400
5 <sup>th</sup>	100400
<b>TOTAL</b>	<b>502000</b>

10. **Replenishment study:** The Replenishment study was done during Pre- and Post-Monsoon Period (Nov 2022 & May 2022) by UAV/Drone survey (volumetric survey) method. After the Replenishment study it was found that 31,153.65 cum of sand have been proposed to be replenished annually.
11. **Baseline study:** Baseline Study conducted during March, 2022 to May, 2022.

a) **AIR ENVIRONMENT**

Ambient Air Quality Monitoring reveals that the minimum & maximum concentrations of PM10 for all the 8 AQ monitoring stations were found to be 51.59 µg/m<sup>3</sup> at AQ7 and 94.69 µg/m<sup>3</sup> at AQ1, respectively. The minimum & maximum concentrations of PM2.5 were found to be 22.65 µg/m<sup>3</sup> at AQ4 and 56.05 µg/m<sup>3</sup> at AQ1, respectively.

As far as the gaseous pollutants SO<sub>2</sub> and NO<sub>x</sub> are concerned, the prescribed CPCB limit of 80µg/m<sup>3</sup> for residential and rural areas has never surpassed at any station. The minimum & maximum concentrations of SO<sub>2</sub> were found to be 5.36 µg/m<sup>3</sup> at AQ4 & 26.12 µg/m<sup>3</sup> at AQ1, respectively. The minimum & maximum concentrations of NO<sub>x</sub> were found to be 10.01 µg/m<sup>3</sup> at AQ7 & 34.88 µg/m<sup>3</sup> at AQ1, respectively.

b) **WATER ENVIRONMENT**

➤ **Ground water:** Analysis results of ground water reveal the following: -

- pH varies from 7.16 at GW3 to 7.81 at GW4 during study period.
- Total hardness varies from 112 mg/l at GW2 to 161 mg/l at GW1 during study period.





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- Total dissolved solids vary from 269 mg/l at GW5 to 344 mg/l at GW1 during study period.

### Surface water

- The analysis results indicate that the pH ranges between 7.32 and 7.58.
- Dissolved Oxygen (DO) was observed in the range of 6.2 to 7.1 mg/l against the minimum requirement of 4 mg/l.
- BOD values were observed to be in the range of 10-12 mg/l.
- The chlorides and Sulphates were found to be in the range.
- Based on the results it is evident that most of the parameters of the samples comply with 'Category 'B' standards of CPCB indicating their suitability for Drinking water source after conventional treatment and disinfection.

### c) NOISE ENVIRONMENT

Noise monitoring reveals that the maximum & minimum noise levels at day time were recorded as 59.1 Leq. dB (A) at NQ2 & 48.6 Leq. dB (A) at NQ4, respectively. The maximum & minimum noise levels at night time were found to be 43.6 dB (A) at NQ7 & 38.2 dB (A) at NQ3. There are several other sources in the 10 km radius of study area, which contributes to the local noise level of the area. Traffic activities as well as activities in nearby villages and agricultural fields add to the ambient noise level of the area.

### d) SOIL ENVIRONMENT

Samples collected from identified locations indicate the soil is sandy type and the pH value ranging from 6.56 to 6.98, which shows that the soil is alkaline in nature. Potassium is found to be from 50.8 mg/kg to 259.0 mg/kg. The water holding capacity is found in between 22.0 % to 28.8%.

12. **Water requirement:** Total Water Requirement is 7.97 ~ 8.0 KLD for the Proposed Project and 9.14 ~ 9.0 KLD for the Cluster Area.
13. **Greenbelt:** 3120 Plants are proposed to be planted for the Proposed Site.
14. **Manpower:** 89 nos. of Manpower for the Proposed Project & 145 Manpower for the Cluster Area is required for the proposed project.
15. **Project cost:** Estimated cost of the proposed Project is Rs 80 Lakhs. EMP Cost includes Capital cost of 6.59 Lakhs and Recurring cost of 3.83 Lakhs. For Cluster Area EMP Cost includes Capital cost of Rs 7.784 Lakhs and Recurring cost of 6.66 Lakhs.

Sl. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
i)	Pollution Control Dust Suppression /Water Sprinkling	--	1,00,000
ii)	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	50,000 40,000 20,000 10,000
iii)	Green belt development	6,24,000	1,00,000
iv)	Maintenance of haul road	35,000	63,000
<b>Total</b>		<b>6,59,000</b>	<b>3,83,000</b>

#### For cluster

Sl. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
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i)	Pollution Control Dust Suppression /Water Sprinkling	--	2,00,000
ii)	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	1,00,000 80,000 40,000 20,000
iii)	Green belt development	7,08,400	1,00,000
iv)	Maintenance of road	70,000	1,26,000
<b>Total</b>		<b>7,78,400</b>	<b>6,66,000</b>

- Environment Consultant:** The Environment consultant M/s P and M Solution, Noida along with the proponent made a presentation on the proposal before the Committee.
- The SEAC in its meeting held on dated on **22-09-2023** decided to take the decision on the proposal after receipt of the following from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
5.	Nearest Electric transmission line is running within the mining lease. Thus, submit details and dimension of Electric high transmission tower line.	The location detail and detail dimension of Electric HT line has submitted for your reference as <b>Annexure-I</b> .	-
6.	Submit actual area after excluding area from no mining zone for Bridge, electric transmission line and water channel present in lease area.	Area under no mining zone - 13.698Ha. Area under water channels - 8.630Ha. Actual area available for mining - 8.883Ha. The total lease area of the proposed quarry is 31.211 Ha. The common safest workable area for mining during Replenishment Study is 5.743 Ha.	-
7.	Submit separate EMP budget for each quarry in the cluster for both Kanaka Sand Bed and Bhimpur Sand Bed.	The separate EMP budget for each quarry in the cluster for both Kanaka Sand Bed and Bhimpur Sand Bed has submitted for your reference as <b>Annexure-II</b> .	submitted

Considering the information / documents furnished by the proponent and presentation made by the consultant M/s P & M Solution, Noida on behalf of the proponent.

- Whether SEAC recommended the proposal** – The proposal was placed in SEAC meeting held on 28.12.2023 and the SEAC approved the EIA/EMP report in cluster approach and recommended the following:
  - The SEIAA, Odisha may consider to grant Environmental Clearance to individual lease for Kanaka Sand Bed (under cluster approach) without referring to SEAC with stipulated conditions as per **Annexure – G** after receipt of individual applications from the lessee in cluster along with following documents.





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- 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) Previous production details of individual lease duly certified by Tahasildar.
  - vi) Replenishment Study Report of individual lease.
- b) Following specific conditions may be stipulated in individual Environmental Clearance.
- i) Amended EIA Notification dated 25th July, 2018, Guidelines for sustainable sand mining, 2016 and Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India shall be adhered to in execution of Mining as per **Annexure – II**.
  - ii) Sand extraction shall be limited to quantity and depth as per replenishment study report. Regular replenishment study as per guidelines 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.

### Decision of Authority: Approved

After detailed deliberations, the Authority approved the cluster IIA & EMP report as per SEAC recommendation. The PP is required to submit individual applications with following documents:

- i) Filled in form-I of individual lease
- ii) Prefeasibility report of individual lease
- iii) EMP of individual lease (Cluster EMP of Rs. 6.59 Lakh (Capital Cost) and Rs. 3.83 Lakh (Recurring Cost, CLR Cost is Rs. 1.81 Lakh))
- iv) Approved Mining Plan of individual lease.
- v) Previous production details of individual lease duly certified by Tahasildar.
- vi) Replenishment Study Report of individual lease.

### APPROVED BY

  
Member Secretary, SEIAA

  
Member, SEIAA

  
Chairman, SEIAA



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### AGENDA No.153.08

Proposal No.	SLA/OR/MIN/430940/2023
Date of application	08.07.2023
File no.	430940/76-MINBI/07-2023
Project Type	New proposal for EC
Category	B1
Project/Activity including Schedule No.	1(a) Mining of minerals
Name of the Project	Proposal for EC of Bhatakumarada Stone Quarry over an area of 15.805 ha. bearing Khata No. 1769, Plot No. 4877, under total cluster area of 17.423 ha. in Bhatakumarada village of Purushottampur Tehsil, in Ganjam District of Odisha
Name of the company/Organization	Sri Krupasindhu Muduli
Location of Project	Bhatakumarada village of Purushottampur Tehsil, in Ganjam District of Odisha
ToR Date	02.08.2022
Name of the Consultant	M/s P and M Solution, Noida

**Proposal in brief:** The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.

1. This proposal is for Environmental Clearance for Bhatakumarada Stone Quarry over an area of 15.805 ha. bearing Khata No. 1769, Plot No. 4877, under total cluster area of 17.423 ha. in Bhatakumarada village of Purushottampur Tehsil, in Ganjam District of Sri Krupasindhu Muduli.
2. **Category:** As per EIA Notification 2006 and its subsequent amendments, the proposed project falls under Schedule in Item 1(a)-Mining of Minerals.
3. Mining Lease granted by vide letter no 1631 date 04/05/2022. Successful Bidder is Sri Krupasindhu Muduli S/o- Jhuriya Muduli, At- Ramakrushna Nagar, 2nd Lane, Lochapada, Berhampur. The proposed land doesn't fall in D.C land.
4. The Mining Plan of Bhatakumarada Stone Quarry has been approved by Deputy Director of Geology, O/o The Joint Director of Geology, South Zone, Berhampur on dated 29.03.2022.
5. Mining lease is an identified sariat source in the DSR page no.69 sl.no. 37.
6. Terms of Reference (TOR), was issued by SEIAA, Odisha, vide proposal Letter Ref. No 5079/SEIAA, Dated 02.08.2022.
7. Public hearing was conducted on 10.01.2023 at Bhatakumarada village, under Purushottampur Tahasil of Ganjam District, Odisha. Issues raised during public hearing are protection of temple and other structures in locality, dust and noise pollution shall be controlled, controlled blasting should be done, damage of roads due to transportation, local employment and livelihood, speed of transportation vehicles, safety of villagers and free health camp. Budget incurred for the action plan is Rs.1,90,000.

**Table: CER Budget**

Sl. No.	Activity	Capital Cost (in Rs.) / Annum
1.	Financial aid for medical camp in Bhatakumarada village. (@ Rs. 15,000/camp (4 camp in a year))	60,000





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12.	Skill development program camps like computer learning, sewing etc. in Bhatakumarada village. @ Rs 20,000/trainer (4 trainer)	80,000
	Construction of separate (for boys & girls) toilets in school of Bhatakumarada village (25,000 toilet)	50,000
<b>TOTAL</b>		<b>1,90,000</b>

8. **Location and connectivity:** The mine lease area is located in Village - Bhatakumarada, Tahasil- Purushottampur, District - Ganjam, Odisha, is on Khata no- 1769, Plot no- 4877 covered in the Survey of India Topo Sheet No - F45A15 and is bounded between the Latitude -19°25'26.86" N to 19°25'45.47" N and Longitude - 84°52'07.95" E to 84°52'24.55" E. KISSUM of land is Parbat. Nearest water bodies are - Bhatakumarada Water Reserve, approx. 1.60 km in N direction, Sahi Bandha Water Reserve, approx. 4.0 km in NE direction. Nearest town is Purushottampur, approx. 9.80 km in North direction. Nearest Railway station is Narsimhapur Railway station, approx. 8.50 km in SE direction. Nearest National Highway - SH 32, approx. 0.18 km E direction. Nearest Airport - Biju Patnaik International Airport is approx. 130 km towards NE direction.
9. **Total Reserves and Proposed Production:** As estimated, Geological Reserves is 47,05,691 Cum (Proposed Mine) and 3,15,900 Cum (Existing Mine); Mineable Reserves is 38,94,937 Cum (Proposed Mine) and 1,74,150 Cum (Existing Mine); Proposed Production is 1,03,320 Cum /Annum (Proposed Mine) and 2664 Cum /Annum (Existing Mine).

Year	Total Production in cum
1 <sup>st</sup>	103320
2 <sup>nd</sup>	103320
3 <sup>rd</sup>	103320
4 <sup>th</sup>	103320
5 <sup>th</sup>	103320
<b>Total</b>	<b>516600</b>

10. **Mining method:** Mining will be done by opencast semi-mechanized method. Proposed Mining Depth is 35m. Transportation of minerals will be done by an approach road of approx.0.25 km which further connects to SH 32.
11. **Waste generation and management:** Total 57400 Cum waste generated in the proposed project.

Year	Waste /Rejects in cum
1st Year	11480
2nd Year	11480
3rd Year	11480
4th Year	11480
5th Year	11480
<b>Total</b>	<b>57400</b>

12. **Water requirement:** Total Water Requirement will be 6.0 KL/D for proposed project and 8.00 KL/D for Cluster.

Activity	Calculation	Round off Figure in KL/D
Drinking	@ 10 lped per labor	1.06



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	10*106/1000= 1.06 KLD	
Dust Suppression	Total approach road to be water sprinkled = 500 m 500 m*6m*0.5 *2 times/1000= 3.0 KLD	3.0
Plantation	1742 plant (during plan period) @ 2 L/per plant= 1742*2Lts= 3484/1000= 3.48 KLD	3.48
<b>Total</b>		<b>7.54 ~ 8.00</b>

13. **Power requirement:** Electrical power will be required only for site office and will be obtained from Solar energy.

14. **Greenbelt:** 1580 plants has been proposed for the project and 1742 for Cluster.

Year	Green belt Nos.
	In Safety Zone, Approach road & at other place in village after consulting local authorities
1 <sup>st</sup>	--
2 <sup>nd</sup>	1580
3 <sup>rd</sup>	Maintenance
4 <sup>th</sup>	
5 <sup>th</sup>	
<b>Total</b>	<b>1580</b>

Year	Green belt Nos.
	In Safety Zone, Approach road & at other place in village after consulting local authorities
1 <sup>st</sup>	--
2 <sup>nd</sup>	1742
3 <sup>rd</sup>	Maintenance
4 <sup>th</sup>	
5 <sup>th</sup>	
<b>Total</b>	<b>1742</b>

15. **Baseline study details:** Baseline Study conducted during March, 2022 to May, 2022.

- a) **Air quality:** Ambient Air Quality Monitoring reveals that the minimum & maximum concentrations of PM10 for all the 8 AQ monitoring stations were found to be 40.24 to 63.79  $\mu\text{g}/\text{m}^3$  with the 98th percentile ranging between 54.35  $\mu\text{g}/\text{m}^3$  to 63.57  $\mu\text{g}/\text{m}^3$ . The minimum & maximum concentrations of PM2.5 were found to be 20.28  $\mu\text{g}/\text{m}^3$  to 32.42  $\mu\text{g}/\text{m}^3$  with the 98th percentile ranging between 26.02  $\mu\text{g}/\text{m}^3$  to 32.41  $\mu\text{g}/\text{m}^3$ . As far as the gaseous pollutants SO<sub>2</sub> and NO<sub>x</sub> are concerned, the prescribed CPCB limit of 80 $\mu\text{g}/\text{m}^3$  for residential and rural areas has never surpassed at any station. The minimum & maximum concentrations of SO<sub>2</sub> were found to be 7.23 to 14.28  $\mu\text{g}/\text{m}^3$  with the 98th percentile ranging between 11.55  $\mu\text{g}/\text{m}^3$  to 13.24  $\mu\text{g}/\text{m}^3$ . The minimum & maximum concentrations of NO<sub>x</sub> were found to be 9.68  $\mu\text{g}/\text{m}^3$  to 21.70  $\mu\text{g}/\text{m}^3$  with the 98th percentile ranging between 15.10  $\mu\text{g}/\text{m}^3$  to 21.23  $\mu\text{g}/\text{m}^3$ .



b) **Water quality:** The pH limit fixed for drinking water samples as per IS-10500 Standards is 6.5 to 8.5 beyond this range the water will affect the mucus membrane or water supply system. During the study period, the pH was varying for ground waters from 7.24 to 7.86 & in Surface water from 7.24 to 7.56. The pH values for all the samples collected in the study area during study period were found to be within the limits. The desirable limit for total dissolved solids as per IS-10500 Standards is 500 mg/l whereas the permissible limit in absence of alternate source is 2000mg/l. In ground water samples collected from the study area, the total dissolved solids are varying from 322 mg/l to 405 mg/l. Hardness of ground water varies from 219 mg/l to 265 mg/l. The desirable limit for Hardness is 200 mg/l whereas the permissible limit is 600mg/l. Concentration of Fluorides varied from 0.21 mg/l to 0.40 mg/l.

c) **Noise study:** The values of noise observed in some of the areas are primarily owing to vehicular traffic. Assessment of hourly night time Leq (Ln) varies from 36.5 to 44.3 dB (A) and the hourly daytime Leq (Ld) varies from 45.8 to 59.2 dB (A) within the study area. The status of noise quality within the 10 km zone of the study area is, therefore, within the MoEF & CC standards.

d) **Soil study:** Physical characteristics of soil were characterized through specific parameters viz bulk density, porosity, water holding capacity, pH, electrical conductivity and texture. Soil pH plays an important role in the availability of nutrients. Soil microbial activity as well as solubility of metal ions is also dependent on pH. In the study area, variations in the pH of the soil were found to be slightly alkaline (7.23 to 7.64). Electrical conductivity (EC) is a measure of the soluble salts and ionic activity in the soil. In the collected soil samples the conductivity ranged from 274- 320 µmhos/cm.

16. **Manpower:** 102 nos of persons are required for proposed project and 106 nos of persons for Cluster.

17. **Project Cost**—Total estimated cost for the proposed project is 60 Lakhs and 100 Lakhs for Cluster. (For Proposed Mine Bhata Kumarada Stone Quarry) Capital cost is 3.785 Lakhs and Recurring cost is 4.01 Lakhs/annum; (For Cluster) Capital cost is 4.734 Lakhs and Recurring cost is 7.02 Lakhs/annum.

S. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
1.	Pollution Control Dust Suppression /Water Sprinkling	--	1,00,000
2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	50,000 40,000 20,000 10,000
3.	Green belt development	3,16,000	1,00,000
4.	Maintenance of approach road	62,500	81,000
<b>Total</b>		<b>3,78,500</b>	<b>4,01,000</b>

S. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.)
1.	Pollution Control Dust Suppression /Water Sprinkling	--	2,00,000



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	Pollution Monitoring	—	1,00,000
	i) Air pollution		80,000
	ii) Water pollution		40,000
	iii) Soil Pollution		20,000
	iv) Noise Pollution		
3.	Green belt development	3,48,400	1,00,000
4.	Maintenance of approach road	1,25,000	1,62,000
<b>Total</b>		<b>4,73,400</b>	<b>7,02,000</b>

18. **Environment Consultant:** The Environment consultant M/s P & M Solution, Noida along with the proponent made a presentation on the proposal before the Committee on 31.07.2023.

19. The SEAC in its meeting held on **31-07-2023** decided to take the decision on the proposal after receipt of the following from the proponent. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
a.	Cluster details along with revised KML showing all the quarries in the cluster.	Cluster KML file has been sent to the mail <a href="mailto:Id-seng.odisha.2019@gmail.com">Id-seng.odisha.2019@gmail.com</a> and the PDF photo has been attached as <b>Annexure-XIV</b> .	submitted
b.	Status of other mines in cluster and their present operation status. As informed other mines have already closed due to forest land involved in the lease area. Name of such mines and an undertaking from the concerned Tahasildar that they are not in operation due to involvement of Forest land in the lease area and will not be put into auction in future.	Undertaking from Tahasildar, Purushottampur regarding the status of other mines in cluster has been attached as <b>Annexure-I</b> .	submitted
c.	The lessee informed that only two quarries in operation and one has already obtained Environmental Clearance in 2021. The proponent has to clarify along with copy of Environmental Clearance of other mine as to why this will not be treated as cluster approach.	Clarification letter from Tahasildar, Purushottampur regarding cluster approach has been attached as <b>Annexure-II</b> .	submitted
d.	Copy of Environment Clearance, Consent to Establish and Consent to Operate obtained for existing quarry.	EC copy, CTE and CTO copy of existing quarry has been attached as <b>Annexure-III</b> .	submitted
e.	Proposal for Fly Rocks Management and safety measures.	Proposal for Fly Rocks Management and safety measures has been attached as <b>Annexure-IV</b> .	submitted



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	Certified documents from Tahasildar regarding the distance of nearest habitation from the blasting site as well as lease boundary.	Certified copy <sup>2</sup> from Tahasildar, Purushottampur regarding the distance of nearest habitation from the blasting site as well as lease boundary has been attached as <b>Annexure-V</b> .	submitted
g.	An undertaking that they will explore to use liquid explosives as the habitation area is nearby.	Undertaking from the project proponent regarding use of liquid explosive during blasting has been attached as <b>Annexure-VI</b> .	submitted
h.	Compliance to the specific ToR-5 about how much waste/rejects will be used in construction & maintenance of haulage road.	Specific ToR compliance regarding waste/ rejects during construction and maintenance of haulage road has been attached as <b>Annexure-VII</b> .	submitted
i.	Detailed proposal for Surface Run-off Treatment System (SRTS) to be followed. Zero discharge of waste water/surface run - off from mining lease area to nearby public pond shall strictly be followed.	Declaration of proponent regarding Zero discharge of waste water/ surface run-off from mining lease area to nearby public pond has been attached as <b>Annexure-VIII</b> .	submitted
j.	Reduced level of water level in pre-monsoon and post monsoon and reduced level of mining pit to be submitted.	Water level data in Pre-monsoon and post-monsoon has been attached as <b>Annexure-IX</b> .	submitted
k.	Detail proposal for issues raised in Public Hearing with special reference towards protection and renovation of temple and haulage road.	Action plan regarding issues raised in public hearing for protection and renovation of temple and haulage road has been attached as <b>Annexure-X</b> .	submitted
l.	Detailed management plan on waste generated in mines and Crusher unit.	Waste management plan of mine and cluster unit has been attached as <b>Annexure-XI</b> .	submitted
m.	Note on blasting management and engagement of expert for guiding in blasting in mining area as habitation is very close to the lease area.	SOP for blasting has been attached as <b>Annexure-XII</b> .	submitted
n.	The proponent shall not resort to deep hole blasting without due approval from DGMS.	Declaration of project proponent regarding blasting has been attached as <b>Annexure-XIII</b> .	submitted

Considering the information / documents furnished by the proponent and presentation made by the consultant **I/s P & M Solution, C-88, Sector 65, Noida** on behalf of the proponent.

**2. Whether SEAC recommended the proposal** – The proposal was placed in SEAC meeting held on 28.12.2023 and 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



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**Bhatakumara Stone Quarry** cluster without referring to SEAC with specific conditions as per **Annexure-A** 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) Report on vibration study.
- vi) DLC status of the lease area from concerned DFO as certified by the concerned Tahasildar.
- vii) 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.
- viii) 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.
- ix) An undertaking to obtain NOC from CGWA and permission from WR department, Govt. Of Odisha for use of ground water. Accordingly, specific condition to be stipulated in EC of individual lease.
- x) The project proponent shall maintain periodic health check-up records of their employees and ensure use of face mask by workers in crushing and handling sections of the stone quarry for ensuring that working personnel are not affected by silicosis.
- xi) The project proponent shall undertake re-grassing of the area or any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for fodder, flora, fauna etc. after ceasing mining operation that is at the time of mine closure.
- xii) A condition on SOP for blasting and safety on management of flying rock to be implemented and detail risk and hazard management procedure shall be followed Haulage road shall be developed and maintained perennially and perpetually by the proponent in consultation with the concerned authority of the Govt.

### Decision of Authority: Approved

After detailed deliberations, the Authority approved the cluster EIA & EMP report as per SEAC recommendation. The PP is required to submit individual applications 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) Report on vibration study.
- vi) DLC status of the lease area from concerned DFO as certified by the concerned Tahasildar.
- vii) An Undertaking by the lessee not to use wagon drilling blasting to be submitted.

  
Member Secretary, SEIAA

APPROVED BY  
  
Member, SEIAA

  
06-02-24  
Chairman, SEIAA





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### AGENDA No.153.09

Proposal No.	SlA/OR/MIN/448672/2023
Date of application	07.11.2023
File no.	448672/987-MINB2/11-2023
Project Type	New proposal for EC
Category	B2
Project/Activity including Schedule No.	1(a) Mining of minerals
Name of the Project	Proposal for EC of Charamula Stone Quarry over an area of 10.002 acres or 4.048 hectares bearing Khata no. 259, Plot no. 445 in Village Charamula, Tahasil Kotpad, District Koraput, State Odisha.
Name of the company/Organization	Rajlaxmi Constructions Limited Sri Sujit Kumar Bhuyan
Location of Project	Village Charamula, Tahasil Kotpad, District Koraput, State Odisha
ToR Date	N/A
Name of the Consultant	N/A

I. **Proposal in brief:** The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of St-AC/SEIAA, are given as under.

- i) This is a proposal for mining of stone from Charamula Stone Quarry over an area of 10.002 acres or 4.048 hectares bearing Khata no. 259, Plot no. 445 in Village Charamula, Tahasil Kotpad, District Koraput, State Odisha.
- ii) The mining area is a part of Survey of India Toposheet No. E44E8(65I/8) and is bounded between the Latitude - 19° 1'55.18"N to 19° 2'03.95"N and Longitude - 82°26'4.88"E to 82°26'16.80"E.
- iii) The mining lease is an identified sairat source in the DSR. The Charamula Stone Quarry sairat source will be leased out under the OMMC Rules, 2016 by Tahasildar, Kotpad to the successful bidder (lessee) on the basis of public auction for a lease period of 5 years.
- iv) Documents submitted: -Form-I, PFR, checklist, Mining Plan and approval letter, DSR, D.L.C., Village sheet, Cluster certificate from Tahasildar, topo map etc.
- v) Whether submitted KML file of the lease area-Yes
- vi) Whether submitted scrutiny fee-Yes, of Rs. 1000/- vide e Challan Reference Id No. 35CECAI/992 dt. 02.11.2023
- vii) Distance from nearest sanctuary/LSZ- Sunabeda WLS-158.0 Km
- viii) Whether the lease area coming in D.L.C report-No, as certified by Tahasildar, Kotpad
- ix) Whether the lease area reflecting in DSR-Yes
- x) Method of mining-Semi-mechanized
- xi) Distance from nearest road bridge-1.60 km, village road -0.22 km
- xii) Whether it is part of cluster- No
- xiii) Whether EC obtained earlier-Yes from DEIAA and the PP has submitted EC compliance
- xiv) Date of approval of mining plan- the Joint Director Geology, Koraput vide letter no. 498 dt. 23.08.2023
- xv) Production capacity per annum-25010 cum/annum (max.), total production in 5 years period-125133 cum, Geological reserve-417700 cum and Mineable reserve-272130 cum
- xvi) Whether the DSR has been prepared as per the MoI&CC, Govt. of India Notification S.O. 3611(E) dated 25.07.2018, Sustainable sand mining guidelines-2016 and Enforcement & Monitoring Guideline for sand mining-2020- No



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(xvii) The EMP budget provision of Rs. 1.30 Lakh/annum

(xviii) No deficiencies/omission have been noticed in the above documents- Nil

**Whether SEAC recommended the proposal** – The proposal was placed in SEAC meeting held on 28<sup>th</sup> 27<sup>th</sup> & 30<sup>th</sup> December 2023 and the SEAC recommended to grant EC valid from the date of EC accorded up to the lease period with following additional conditions:

- Consent / NoC shall be obtained from the concerned authority if village road is to be used for transportation. The said road shall also be maintained by the lessee.
- In view of likely revision of DSR the mention of this deposit with final coordinates is to be ensured
- Plantation programme to be completed within first two years and to be maintained in remaining years.
- Depth of Mining as proposed should not be beyond 6m from the ground level.
- Mitigation measures for flying Rock for safety be put in place.
- Stone quarry project proponent need to maintain periodic health check-up records of their employees and ensure use of face mask by workers in crushing and handling sections of the stone quarry for ensuring that working personnel are not affected by silicosis.
- The boundary area of the deposit as per the revised / updated DSR to be defined by geo coordinates based on DGPS survey superimposed on the cadastral map.
- Construction of garland drains retaining wall and settling tank should be ensured to prevent erosion during rainfall and to collect silt generated during the mining activity.
- submit the previous EC letter to SEIAA

### Decision of Authority Approved

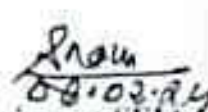
After detailed deliberations, the Authority decided to grant **Environmental Clearance** with usual stipulated conditions as applicable for stone quarry.

- Maximum depth of mining 6.0 meter. Maximum quantity of extraction shall be limited to **25010 cum/annum**.
- The EC is valid till the validity of DSR or validity of lease period whichever is earlier.
- The Grant of EC for further period will be considered after submission of approved DSR by SEIAA as per the MoEF& CC, Govt. of India Notification S.O. 3611(E) dated 25.07.2018, Sustainable sand mining guidelines-2016 and Enforcement & Monitoring Guideline for sand mining-2020 and also as per the Hon'ble Supreme Court order vide its order dated 10.11.2021 in Civil Appeal Nos. 3661-3662 of 2020 (State of Bihar Vrs. Pawan Kumar and Others).
- The Project Proponent (lease holder) shall deposit Rs.2,50,000/-, with the respective District Environment Society for raising 500 plants (minimum @100 trees per Ha) of native species within 2 years in a suitable location adjoining to quarry.
- The PP will implement the EMP cost of Rs. 1.30 Lakh

### APPROVED BY

  
Member Secretary, SEIAA

  
Member, SEIAA

  
Chairman, SEIAA





## Minutes of 153<sup>rd</sup> Meeting of SEIAA, Odisha held on 03.02.2024

### AGENDA NO.153.10

Proposal No.	SLA/OR/MIN/305297/2023
Date of application	09.11.2023
File no.	69062/184-MINB1/01-2022
Project Type	Proposal for Amendment of EC based replenishment study report of sand
Category	B1
Project/Activity including Schedule No.	I(a) Mining of minerals
Name of the Project	Proposal for Amendment of EC of Adhapati Paikanadi Sand Sairat is located in village Adhapati over an area of 12.50 Acres/ 5.059 Ha. under Tirtol tahasil in Jagatsinghpur District of Odisha.
Name of the company/Organization	Sri HARAPRASAD SENAPATI
Location of Project	At Village Adhapati, under under Tirtol tahasil in Jagatsinghpur District of Odisha.
ToR Date	N/A
Name of the Consultant	N/A

#### 1. Proposal in brief:

The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.

- This is a proposal for amendment of EC of Adhapati Paikanadi Sand Sairat is located in village Adhapati over an area of 12.50 Acres/ 5.059 Ha. under Tirtol tahasil in Jagatsinghpur District of Odisha.
- The project proponent has obtained EC from SEIAA, Odisha vide EC letter no. EC22B001OR142679 dt. 18.07.2022 for Adhapati Paikanadi Sand Sairat is located in village Adhapati over an area of 12.50 Acres/ 5.059 Ha. under Tirtol tahasil in Jagatsinghpur District of Odisha.
- During EC application the PP has submitted required documents along with mining plan where it is mentioned that mineable reserve of the proposed sand was 32950 cum with depth of sand deposition was 1.0 meter and proposed for annual extraction-15180 cum.
- The SEIAA also granted EC for 1<sup>st</sup> year production 5000 cum with depth of mining 0.5 meter.
- There is an EC conditions point no. 7.1 to 2.2 in page no. 03 that "Pending carrying out of the study & submission of the report, this clearance is being granted in an adhoc manner and is liable to be revoked after one year i.e. after 31<sup>st</sup> November 2023 if satisfactory replenishment study report is not submitted."
- The PP has submitted EC compliance report and mentioned that 2465 cum sand already extracted from the source in 1<sup>st</sup> year.
- Now, the PP has submitted amendment of EC application and submitted replenishment study report by Areal Construction & Geo-India Services a ORSAC empanelment Agency with mentioned that pre-monsoon RL 14.246m and post-monsoon 15.151m and 28343.47 cum of sand replenished in the said sand bed and proposed production for next year is 17006.082 cum.
- Any deficiencies/omission have been noticed in the above documents- Nil

2. Whether SEAC recommended the proposal – The proposal was placed in SEAC meeting held on 28.12.2023 and the SEAC observed that PP has requested to consider the concept of resource accounting of sand and take the volume of replenishment as a measure for resource augmentation.

The replenishment study has found around 28343.47124 cum of sand available for mining during the study period. PP has requested at least 17006.082 Cum instead of 15180 CUM i.e. as per mining plan.

## Minutes of 153<sup>rd</sup> Meeting of SEIAA, Odisha held on 03.02.2024

After detailed discussion, the SEAC decided to recommend for extraction of sand of quantity 15186 cum as per approved mining plan.

### Decision of Authority: Approved

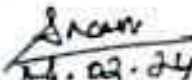
After detailed deliberation in the matter, the Authority decided to allow amendment of EC as per the SEAC recommendation with the following specific stipulation:

- Maximum quantity of extraction of sand shall be allowed to **15000 cum per year** for the rest of the lease period i.e. for the 2<sup>nd</sup> year, 3<sup>rd</sup> year, 4<sup>th</sup> year and 5<sup>th</sup> year. The PP is required to carry out the Annual rate of replenishment study (ARRS) through ORSAC empanel agency in subsequent year and submit the report to SEIAA, Odisha.
- The EC is valid till the validity of DNR or validity of lease period whichever is earlier.

### APPROVED BY

  
Member Secretary, SEIAA

  
Member, SEIAA

  
06.02.24  
Chairman, SEIAA



## Minutes of 153<sup>rd</sup> Meeting of SEIAA, Odisha held on 03.02.2024

AGENDA NO.153.11	
Proposal No.	SIA/OR/MIN/302978/2023
Date of application	04.09.2023
File no.	SEIAA-1418/02-2021
Project Type	Proposal for Amendment of EC based replenishment study report of sand
Category	B2
Project/Activity including Schedule No.	1(a) Mining of minerals
Name of the Project	Proposal for Amendment of EC of Jayapur River Sand Quarry (River-Brahmani) over an area of 6.00Acre or 2.4281 Ha under Bhuban Tahasil of Dhenkanal District Odisha
Name of the company/Organization	Sri Manoj Pothal
Location of Project	At-Jayapur, Bhuban Tahasil of Dhenkanal District Odisha
ToR Date	N/A
Name of the Consultant	N/A

**1. Proposal in brief:** The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.

- (i) This is a proposal for amendment of EC of Jayapur River Sand Quarry over an area of 6.00Acre or 2.4281 Ha under Bhuban Tahasil of Dhenkanal District Odisha.
- (ii) The project proponent has obtained EC from SEIAA, Odisha vide EC letter no. 1987/SEIAA dated 05.08.2021 for Jayapur River Sand Quarry over an area of 6.00Acre or 2.4281 Ha under Bhuban Tahasil of Dhenkanal District Odisha.
- (iii) During EC application the PP has submitted required documents along with mining plan where it is mentioned that mineable reserve of the proposed sand was 50000 cum with depth of sand deposition was 2.0 meter and proposed for annual extraction-10000 cum.
- (iv) The SEIAA also granted EC for 1<sup>st</sup> year production 5000 cum with depth of mining 1.0meter.
- (v) There is an EC conditions point no. 9.1 to 9.2 in page no. 03 that "Pending carrying out of the study & submission of the report, this clearance is being granted in an adhoc manner and is liable to be revoked after one year i.e. after 15<sup>th</sup> October 2022 if satisfactory replenishment study report is not submitted."
- (vi) The PP has submitted compliance of EC conditions with mentioned that the quarry has been operated for the period 2021-22, 2022-23 & 2023-24 and extracted 4986 cum, 9663 cum & 4924 cum of sand from the source respectively.
- (vii) Now, the PP has submitted amendment of EC application and submitted replenishment study report by RQP Sri santosh Kumar Panda with mentioned that the Post-monsoon reserve - Reserve as per approved mining plan =  $108\% \times 47440 = 43960 = 1.079$  or say 108%. The proposed production for next year is 24552 cum.
- (viii) Any deficiencies/omission have been noticed in the above documents- Nil

**2. Whether SEAC recommended the proposal –** The proposal was placed in SEAC meeting held on 13<sup>th</sup>, 15<sup>th</sup>, 17<sup>th</sup> & 18<sup>th</sup> November 2023 and the SEAC observed that Replenishment Study Report is not as per guidelines. Inter-alia it does not provide -

- a) Benchmarks and GCP details
- b) Details of grids.
- c) Areas of deposition and erosion for working out net area.

## Minutes of 153<sup>rd</sup> Meeting of SEIAA, Odisha held on 03.02.2024

After detailed discussion, the SEAC opined that Replenishment study report submitted is not as per Sustainable Sand Mining Guidelines and lacks details. Hence, this proposal is **not recommended for sand mining subject to outcome of further replenishment studies.**

3. The proposal was placed in 149<sup>th</sup> SEIAA meeting held on 28.12.2023 & 29.12.2023 and the authority observed that SEIAA has granted EC for 1<sup>st</sup> year production of 5000 cum for the year 2021. However, the PP has carried out mining operation extracting 4986 cum in the year 2022-23 and 9663 cum in the year 2023-24 without EC.

After detailed deliberation in the matter, the authority decided to seek explanation from the Tahasildar, Bhuban how the PP was allowed to extract sand in the year 2022 and year 2023 without EC.

4. Now, the PP has submitted clarification based on our ADS letter dt. 08.01.2024

### Decision of Authority: Reject

The Authority perused the reply of Tahasildar, Bhuban vide letter dt. 30.01.2024 based on the out ADS letter dt. 08.01.2024. After detailed deliberation in the matter, the Authority decided to reject the amendment of EC proposal as the ARRS report is not done as per sustainable guideline of MoEF & CC guideline due to following lacunae

- Not submitted Benchmarks and GCP details in ARRS report
- Details of grids.
- Areas of deposition and erosion for working out net area.

### APPROVED BY

  
Member Secretary, SEIAA

  
Member, SEIAA

  
Chairman, SEIAA





## Minutes of 153<sup>rd</sup> Meeting of SEIAA, Odisha held on 03.02.2024

### AGENDA NO.153.12

Proposal No.	SIA/OR/MIN/306447/2023
Date of application	13.11.2023
File no.	
Project Type	Proposal for Amendment of EC based replenishment study report of sand
Category	B2
Project/Activity including Schedule No.	1(a) Mining of minerals
Name of the Project	Proposal for Amendment of EC of Mahadia Brahmani Sand Quarry over an area of 11.80 Acre or 4.775 Ha under Odapada Tahasil of Dhenkanal District Odisha
Name of the company/Organization	Sri Ratikanta Rout
Location of Project	At Village Mahadia, tahasil-Odapada, Dist- Dhenkanal
ToR Date	N/A
Name of the Consultant	N/A

#### 1. Proposal in brief:

The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under:

- This is a proposal for amendment of EC of Mahadia Brahmani Sand Quarry over an area of 11.80 Acre or 4.775 Ha under Odapada Tahasil of Dhenkanal District Odisha.
- The project proponent has obtained EC from SEIAA, Odisha vide EC letter no. 1135/SEIAA dt. 30.03.2021 and E/c transfer on dt. 12.07.2023 for Mahadia Brahmani Sand Quarry over an area of 11.80 Acre or 4.775 Ha under Odapada Tahasil of Dhenkanal District Odisha.
- During EC application the PP has submitted required documents along with mining plan where it is mentioned that mineable reserve of the proposed sand was 18091 cum with depth of sand deposition was 1.0 meter and proposed for annual extraction-10000 cum.
- The SEIAA also granted EC for 1<sup>st</sup> year production 10000 cum with depth of mining 0.5 meter.
- There is an EC conditions point no. 9.1 to 9.2 in page no. 03 that "Pending carrying out of the study & submission of the report, this clearance is being granted in an adhoc manner and is liable to be revoked after one year i.e. after 15<sup>th</sup> May 2022 if satisfactory replenishment study report is not submitted."
- The PP has submitted EC compliance report and mentioned that 2500 cum sand already extracted from the source in 1<sup>st</sup> year.
- Transfer of EC granted by SEIAA in adhoc manner with allowing production quantity of 2500 cum for 2<sup>nd</sup> year.
- Now, the PP has submitted amendment of EC application and submitted replenishment study report by RQP Sri Sinu Sh. Sathua along with ORSAC empanelled agency with mentioned that pre-monsoon reserve is 33448 cum and post-monsoon reserve 38226 cum and 4778 cum of sand replenished in the said sand bed and proposed production for next year is 10000 cum.
- Any deficiencies/omission have been noticed in the above documents- Nil

**2. Whether SEAC recommended the proposal** – The proposal was placed in SEAC meeting held on 28.12.2023 and the SEAC observed that replenished sand volume is estimated to be 2867 cum which is comparable to the earlier permitted sand mining volume of 2500cum by SEIAA. Hence **2500cum sand mining may be permitted based on replenishment study report.**



## Minutes of 153<sup>rd</sup> Meeting of SEIAA, Odisha held on 03.02.2024

### Decision of Authority: Approved

After detailed deliberation in the matter, the Authority decided to allow amendment of EC as per the SEAC recommendation with the following specific stipulation:

- Maximum quantity of extraction of sand shall be allowed to **2500 cum per year** for the rest of the lease period i.e. for the 2<sup>nd</sup> year, 3<sup>rd</sup> year, 4<sup>th</sup> year and 5<sup>th</sup> year. The PP is required to carry out the Annual rate of replenishment study (ARRS) through ORSAC empanel agency in subsequent year and submit the report to SEIAA, Odisha.
- The EC is valid till the validity of DSR or validity of lease period whichever is earlier.

### APPROVED BY

  
Member Secretary, SEIAA

  
Member, SEIAA

  
Chairman, SEIAA





## Minutes of 153<sup>rd</sup> Meeting of SEIAA, Odisha held on 03.02.2024

### AGENDA NO.153.13

Proposal No.	SIA/OR/MIN/306695/2023
Date of application	13.11.2023
File no.	SEIAA-1362/02-2021
Project Type	Proposal for Amendment of EC based replenishment study report of sand
Category	B2
Project/Activity including Schedule No.	I(a) Mining of minerals
Name of the Project	Proposal for Amendment of EC of Galadari Devi River Sand Quarry over an area of 10.00 acres or 4.04 hectares in Village Galadari under Naugaon Tahasil in Jagatsinghpur District, Odisha.
Name of the company/Organization	Sri Akshaya Mohanty
Location of Project	village Galadari under Naugaon Tahasil in Jagatsinghpur District, Odisha
ToR Date	N/A
Name of the Consultant	N/A

#### 1. **Proposal in brief:**

The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.

- (i) This is a proposal for amendment of EC of Galadari Devi River Sand Quarry over an area of 10.00 acres or 4.04 hectares in village Galadari under Naugaon Tahasil in Jagatsinghpur District, Odisha.
- (ii) The project proponent has obtained EC from SEIAA, Odisha vide EC letter no. 2176/SEIAA dt. 10.08.2021 and EC transfer on 4225/SEIAA dt. 15.03.2022 for Galadari Devi River Sand Quarry over an area of 10.00 acres or 4.04 hectares in village Galadari under Naugaon Tahasil in Jagatsinghpur District, Odisha.
- (iii) During EC application the PP has submitted required documents along with mining plan where it is mentioned that mineable reserve of the proposed sand was 81000 cum with depth of sand deposition was 2.5 meter and proposed for annual extraction-9720 cum.
- (iv) The SEIAA also granted EC for 1<sup>st</sup> year production 9500 cum.
- (v) There is an EC conditions point no. 9.1 to 9.2 in page no. 03 that "Pending carrying out of the study & submission of the report, this clearance is being granted in an adhoc manner and is liable to be revoked after one year i.e. after 15<sup>th</sup> October 2022 if satisfactory replenishment study report is not submitted."
- (vi) Now, the PP has submitted amendment of EC application and submitted replenishment study report by My World Consultancy Services Pvt. Ltd. ORSAC empanelled agency with mentioned that pre-monsoon reserve is 2778 cum and post-monsoon reserve 6432 cum and 2841 cum of sand replenished in the said sand bed and proposed production for next year is 4631 cum.
- (vii) Any deficiencies omission have been noticed in the above documents- Nil

2. **Whether SEAC recommended the proposal** – The proposal was placed in SEAC meeting held on 28.12.2023 and After detailed discussion, the SEAC decided to recommend the proposal as per replenishment quantity i.e. **4631.04cum volume** of sand as mentioned in the Replenishment Study Report.



## Minutes of 153<sup>rd</sup> Meeting of SEIAA, Odisha held on 03.02.2024

### Decision of Authority: Approved

After detailed deliberation in the matter, the Authority decided to allow amendment of EC as per the SEAC recommendation with the following specific stipulation:

- Maximum quantity of extraction of sand shall be allowed to **4600 cum per year** for the rest of the lease period i.e. for the 2<sup>nd</sup> year, 3<sup>rd</sup> year, 4<sup>th</sup> year and 5<sup>th</sup> year. The PP is required to carry out the Annual rate of replenishment study (ARRS) through ORSAC empanel agency in subsequent year and submit the report to SEIAA, Odisha.
- The EC is valid till the validity of DSR or validity of lease period whichever is earlier.

### APPROVED BY

  
Member Secretary, SEIAA

  
Member, SEIAA

  
06.02.24  
Chairman, SEIAA



# Minutes of 153<sup>rd</sup> Meeting of SEIAA, Odisha held on 03.02.2024



## AGENDA NO.153.14

Proposal No.	SIA/OR/MIN/306572/2023
Date of application	21.11.2023
File no.	
Project Type	Proposal for Amendment of EC based replenishment study report of sand
Category	B2
Project/Activity including Schedule No.	1(a) Mining of minerals
Name of the Project	Proposal for Amendment of EC of Teterkela River Sand Bed over an area 11.52Ac or 4.662Hec in Teterkela village under Biramitrapur tahasil of Sundargarh district Odisha.
Name of the company/Organization	Sri Biranchi Singh
Location of Project	Teterkela village under Biramitrapur tahasil of Sundargarh district Odisha
ToR Date	N/A
Name of the Consultant	N/A

### 1. Proposal in brief:

The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.

- This is a proposal for amendment of EC of Teterkela River Sand Bed over an area 11.52Ac or 4.662Hec in Teterkela village under Biramitrapur tahasil of Sundargarh district Odisha.
- The project proponent has obtained EC from SEIAA, Odisha vide EC Identification No. - EC22B001OR186693 dt. 03.06.2022 and EC transfer on 5045/SEIAA dt. 02.08.2022 for Teterkela River Sand Bed over an area 11.52Ac or 4.662Hec in Teterkela village under Biramitrapur tahasil of Sundargarh district Odisha.
- During EC application the PP has submitted required documents along with mining plan where it is mentioned that mineable reserve of the proposed sand was 59474 cum with depth of sand deposition was 1.5 meter and proposed for annual extraction-12000 cum.
- The SEIAA also granted EC for 1<sup>st</sup> year production 6100 cum with depth of mining 0.75 m.
- There is an EC conditions point no. 7.1 to 7.2 in page no. 03 that "Pending carrying out of the study & submission of the report, this clearance is being granted in an adhoc manner and is liable to be revoked after one year i.e. after 30<sup>th</sup> November 2022 if satisfactory replenishment study report is not submitted."
- Now, the PP has submitted amendment of EC application and submitted replenishment study report by RQP Sri Zinu Sh. Sathua along with ORSAC empanelled agency with mentioned that pre-monsoon reserve is 38738 cum and post-monsoon reserve 43208 cum and 4470 cum of sand replenished in the said sand bed and proposed production for next year is 12000 cum.
- Any deficiencies/omission have been noticed in the above documents- Nil

- Whether SEAC recommended the proposal** – The proposal was placed in SEAC meeting held on 28.12.2023 and after detailed discussion, recommended sand mining limiting to Replenishment sand volume of 4470.00cum per annum.

## Minutes of 153<sup>rd</sup> Meeting of SEIAA, Odisha held on 03.02.2024

### Decision of Authority: Approved

After detailed deliberation in the matter, the Authority decided to allow amendment of EC as per the SEAC recommendation with the following specific stipulation:

- Maximum quantity of extraction of sand shall be allowed to **4470 cum per year** for the rest of the lease period i.e. for the 2<sup>nd</sup> year, 3<sup>rd</sup> year, 4<sup>th</sup> year and 5<sup>th</sup> year. The PP is required to carry out the Annual rate of replenishment study (ARRS) through ORSAC empanel agency in subsequent year and submit the report to SEIAA, Odisha.
- The EC is valid till the validity of DSR or validity of lease period whichever is earlier.

  
Member Secretary, SEIAA

APPROVED BY

  
Member, SEIAA

  
06.02.24  
Chairman, SEIAA





## Minutes of 153<sup>rd</sup> Meeting of SEIAA, Odisha held on 03.02.2024

### AGENDA NO.153.15

Proposal No.	SIA/OR/MIN/306152/2023
Date of application	16.11.2023
File no.	EC22B001OR179454
Project Type	Proposal for Amendment of EC based replenishment study report of sand
Category	B2
Project/Activity including Schedule No.	1(a) Mining of minerals
Name of the Project	Proposal for Amendment of EC of Banka Sand Quarry over 12.350acres or 4.997hec in village Khariar road town unit no.3 Banka under Nuapada tahasil of Nuapada district Odisha
Name of the company/Organization	Sri SAILISH VASANI
Location of Project	village Khariar road town unit no.3 Banka under Nuapada tahasil of Nuapada district Odisha
ToR Date	N/A
Name of the Consultant	N/A

#### 1. **Proposal in brief:**

The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.

- This is a proposal for amendment of EC of Banka Sand Quarry over 12.350acres or 4.997hec in village Khariar road town unit no.3 Banka under Nuapada tahasil of Nuapada district Odisha.
- The project proponent has obtained EC from SEIAA, Odisha vide EC Identification No. - EC22B001OR179454 dt. 30.07.2022 and EC transfer on 5300/SEIAA dt. 29.08.2022 for Banka Sand Quarry over 12.350acres or 4.997hec in village Khariar road town unit no.3 Banka under Nuapada tahasil of Nuapada district Odisha.
- During EC application the PP has submitted required documents along with mining plan where it is mentioned that mineable reserve of the proposed sand was 30384 cum with depth of sand deposition was 1.0 meter and proposed for annual extraction-10000 cum.
- The SEIAA also granted EC for 1<sup>st</sup> year production 5000 cum with depth of mining 0.5 m.
- There is an EC conditions point no. 7.1 to 7.2 in page no. 03 that "Pending carrying out of the study & submission of the report, this clearance is being granted in an adhoc manner and is liable to be revoked after one year i.e. after 30<sup>th</sup> November 2023 if satisfactory replenishment study report is not submitted."
- Now, the PP has submitted amendment of EC application and submitted replenishment study report by RQP Sri Manas Ranjan Mohanta along with ORSAC empanelled agency with mentioned that pre-monsoon reserve is 19116 cum and post-monsoon reserve 24115 cum and 4999 cum of sand replenished in the said sand bed and proposed production for next year is 10000 cum.
- Any deficiencies/omission have been noticed in the above documents-Nil

**2. Whether SEAC recommended the proposal** – The proposal was placed in SEAC meeting held on 28.12.2023 and after detailed discussion, the SEAC opinion that as per replenishment study the Geological Replenishment volume is 4999 cum and mineable replacement volume is 4999cum. After detailed discussion, the SEAC decided to recommend the proposal for replenishment quantity



## Minutes of 153<sup>rd</sup> Meeting of SEIAA, Odisha held on 03.02.2024

### Decision of Authority: Approved

After detailed deliberation in the matter, the Authority decided to allow amendment of EC as per the SEAC recommendation with the following specific stipulation:

- Maximum quantity of extraction of sand shall be allowed to **4999 cum per year** for the rest of the lease period i.e. for the 2<sup>nd</sup> year, 3<sup>rd</sup> year, 4<sup>th</sup> year and 5<sup>th</sup> year. The PP is required to carry out the Annual rate of replenishment study (ARRS) through ORSAC empanel agency in subsequent year and submit the report to SEIAA, Odisha.
- The EC is valid till the validity of DSR or validity of lease period whichever is earlier.

### APPROVED BY

  
Member Secretary, SEIAA

  
Member, SEIAA

  
03.02.24  
Chairman, SEIAA



## Minutes of 153<sup>rd</sup> Meeting of SEIAA, Odisha held on 03.02.2024

### AGENDA NO.153.16

Proposal No.	SIA/OR/MIN/306207/2023
Date of application	16.11.2023
File no.	1235/01-2021
Project Type	Proposal for Amendment of EC based replenishment study report of sand
Category	B2
Project/Activity including Schedule No.	1(a) Mining of minerals
Name of the Project	Proposal for Amendment of EC of Chingarasara River sand Bed over an area of 5.00 ha or 12.35 acres at village-Chingarasara, tahasil-Nuapada, Dist-Nuapada
Name of the company/Organization	Sri Ramesh Lal sahu
Location of Project	village-Chingarasara, tahasil-Nuapada, Dist-Nuapada
ToR Date	N/A
Name of the Consultant	N/A

#### **1. Proposal in brief:**

The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.

- (i) This is a proposal for amendment of EC of Chingarasara River sand Bed over an area of 5.00 ha or 12.35 acres at village-Chingarasara, tahasil-Nuapada, Dist-Nuapada.
- (ii) The project proponent has obtained EC from SEIAA, Odisha vide EC letter no. 1571/SEIAA dt. 01.07. for Chingarasara River sand Bed over an area of 5.00 ha or 12.35 acres at village-Chingarasara, tahasil-Nuapada, Dist-Nuapada.
- (iii) During EC application the PP has submitted required documents along with mining plan where it is mentioned that mineable reserve of the proposed sand was 39736 cum with depth of sand deposition was 1.0 meter and proposed for annual extraction-5500 cum.
- (iv) The SEIAA also granted EC for 1<sup>st</sup> year production 5500 cum with depth of mining 1.0 m.
- (v) There is an EC conditions point no. 9.1 to 9.2 in page no. 03 that "Pending carrying out of the study & submission of the report, this clearance is being granted in an adhoc manner and is liable to be revoked after one year i.e. after 15<sup>th</sup> May 2022 if satisfactory replenishment study report is not submitted."
- (vi) Now, the PP has submitted amendment of EC application and submitted replenishment study report by RQP Sri Manas Ranjan Mohanta along with ORSAC empanelled agency with mentioned that pre-monsoon reserve is 26138 cum and post-monsoon reserve 39936 cum and 8280 cum of sand replenished in the said sand bed and proposed production for next year is 5500 cum.
- (vii) Any deficiencies/omission have been noticed in the above documents-Nil

**2. Whether SEAC recommended the proposal** – The proposal was placed in SEAC meeting held on 28.12.2023 and after detailed discussion, the SEAC opinion that the replenishment study conducted revealed that the Geological Reserve has 13798 CUM and minable reserve has been replenished with 8280 CUM volume. But the PP has asked for the same quantity as earlier as the Mining Plan and SEIAA recommendation i.e. 5,500Cum.

After detailed discussion, the SEAC decided to recommend for extraction of sand of quantity 5500 cum as requested by the proponent.

## Minutes of 153<sup>rd</sup> Meeting of SEIAA, Odisha held on 03.02.2024

### Decision of Authority: Approved

After detailed deliberation in the matter, the Authority decided to allow amendment of EC as per the SEAC recommendation, with the following specific stipulation:

- Maximum quantity of extraction of sand shall be allowed to **5500 cum per year** for the rest of the lease period i.e. for the 2<sup>nd</sup> year, 3<sup>rd</sup> year, 4<sup>th</sup> year and 5<sup>th</sup> year. The PP is required to carry out the Annual rate of replenishment study (ARRS) through ORSAC empanel agency in subsequent year and submit the report to SEIAA, Odisha.
- The EC is valid till the validity of DSR or validity of lease period whichever is earlier.

  
Member Secretary, SEIAA

APPROVED BY

  
Member, SEIAA

  
Chairman, SEIAA





**AGENDA NO.153.17**

Proposal No.	SIA/OR/INFRA2/451442/2023
Date of application	16.11.2023
File no.	451442/126-INFRA2/11-2023
Project Type	Proposal for I/C
Category	B2
Project/Activity including Schedule No.	8(a) Building & Construction Project
Name of the Project	Proposal for Environmental Clearance of M/s. Archid Builders Private Limited for Commercial cum Hotel Building project. The total land area is 5,301.381 sq.m (1.31 acres) and the total proposed built-up area is 30,390.0 sq.m at Mouza- Pahal, Tehsil- Bhubaneswar, District- Khurda of Sri Bandan Mohanty.
Name of the company/Organization	ARCHID BUILDERS PRIVATE LIMITED
Location of Project	Mouza- Pahal, Tehsil- Bhubaneswar, District- Khurda of Sri Bandan Mohanty.
ToR Date	N/A
Name of the Consultant	M/s Grass Roots Research & Creation India

**Proposal in brief:**

The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.

1. This proposal is for Environmental Clearance of M/s. Archid Builders Private Limited for Commercial cum Hotel Building project. The total land area is 5,301.381 sq.m (1.31 acres) and the total proposed built-up area is 30,390.0 sq.m at Mouza- Pahal, Tehsil- Bhubaneswar, District- Khurda of Sri Bandan Mohanty.
2. **Category:** The project falls under category "B" or activity 8 (a)-Building & Construction Project under EIA Notification dated 14<sup>th</sup> September 2006 as amended from time to time.
3. **Location and connectivity:** M/s Archid Builders Pvt. Ltd. proposes a Commercial cum Hotel Project (2B + G + 14). The project site is located at Rev. Plot No - 284, Khata No - 209 and Rev. Plot No- 286, Khata No - 352/1438, Mouza - Pahal, Tehsil- Bhubaneswar, District- Khurda, Odisha on a land measuring 1.31 acres or 5,301.381 m<sup>2</sup> bounded by Latitude 20°20'24.94"N and Longitude 85°53'02.41"E. The connecting road is N. H. Sub Road towards front side of the project site. The Nearest Highway is SH-16 which is approx. 20 m in west direction from the project site, NH 316A/SH 60 is approx. 1.9 km (NE) away, NH-316 is approx. 3.7 km (S) away from the project site. The nearest Railway Station is Patia P. H. Railway Station is about 4.4 km (W) away from the project site. Biju Patnaik International Airport is at 11.3 km (SW) from project site.
4. **Project Area statement:** The total plot area is 5,301.381 sqm. Total Built up area for the project will be 630,390.0 sqm. The total population of project after proposed will be 2,723 persons.

S. No.	Particulars	Area (m <sup>2</sup> )
1.	Total Plot Area	5301.381
	Area affected by NH widening.	121.18

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	Net Plot Area	5180.201
2.	Permissible Ground Coverage (@40 % of the net plot area)	2072.08
3.	Proposed Ground Coverage (@34.95 % of the plot area)	1810.48
4.	Permissible FAR (@7.0 of the net plot area)	36,261.407
5.	Proposed FAR (@3.745 of the net plot area)	19,402.0
6.	Non FAR Area (Fire Tower, Basements, Services/AHU)	10,988.0
7.	<b>Built-up Area (5+6)</b>	<b>30,390.0</b>
8.	Landscape Area (@10.7% of the net plot area)	556.7
9.	Maximum Height of the Building (m)	65.05

5. **Water Requirement and Wastewater details:** The total water requirement for the project will be approx. 437.5 KLD out of which domestic water demand is 234 KLD. The freshwater requirement will be 201.5 KLD including make-up water for water bodies & swimming pool, boiler feed, air washer and water for WTP backwash. It is expected that the project will generate approx. 201 KLD of wastewater. The wastewater will be treated in onsite STP of 245 KLD capacity. The treated effluent will be reused for flushing, horticulture and HVAC which leads to Zero liquid discharge.

S. No.	Description	Occupancy	Rate of water demand (LPCD)		Total Water Requirement (KLD)		
A.	Domestic Water	--	Fresh	Flushing	Fresh	Flushing	Total
<b>FIXED POPULATION</b>							
	Hotel Guest Rooms	188	280	60	48.88	11.28	60.16
	Hotel Staff	141	25	20	3.53	2.82	6.35
<b>RETAIL AREA</b>							
	Staff	233	25	20	5.83	4.66	10.49
	Visitors	933	5	10	4.66	9.33	13.99
<b>FLOATING POPULATION</b>							
	Staff (Restaurant + Banquet)	246	5	10	1.23	2.46	3.69
	Visitors (Restaurant + Banquet)	982	55	15	54.01	14.73	68.74
	Laundry	---			40		40
	Kitchen	---			30		30
					188 KLD	46 KLD	234 KLD
<b>Total Domestic Water = 234 KLD</b>							
B.	Horticulture	556.7 m <sup>2</sup>	6 l/sq. m.		4 KLD		



C.	Swimming Pool and water bodies (Turn over period = 6 hrs; based on 1.5% losses and 30 min backwash/day)	160 sq. m.		5 KLD
D.	HVAC Make up water	1000 TR		186 KLD
E.	Air washer make up water			2 KLD
F.	Boiler feed			1.5 KLD
G.	WTP Backwash			5 KLD
<b>Grand Total (A + B + C + D + E + F + G) = 437.5 KLD</b>				

**Table: Waste Water Calculation**

Domestic Water Requirement	234 KLD
Fresh	188 KLD
Flushing	46 KLD
Backwash water from WTP	5 KLD
Wastewater [ $\approx 80\%$ fresh + $100\%$ flushing + Backwash]	$150.4 + 46 + 5 = 201$ KLD
STP Capacity (20% higher than wastewater)	245 KLD

6. **Rainwater harvesting details:** 1 Rain Water tank is proposed for rainwater collection from roof top area will be provided considering peak hourly rainfall has been considered as 160 mm/hr. Capacity of RWH tank =  $l \times b \times d = 8.1 \times 6.5 \times 5 = 263.25 \text{ m}^3$ . Roof-top area = Ground Coverage =  $1,810.48 \text{ m}^2$ . Runoff Load: Roof-top Area =  $1,810.48 \times 0.16 \times 0.90 = 260.7 \text{ m}^3/\text{hr}$ . Capacity of RWH tank =  $l \times b \times d = 8.1 \times 6.5 \times 5 = 263.25 \text{ m}^3$ .
7. **Parking details:** For Commercial Area (50% of Proposed F.A.R) =  $11,129 \times 50/100 = 5,564.5 \text{ m}^2$  and for Hotel Area (30% of Proposed F.A.R) =  $8,273 \times 30/100 = 2,481.9 \text{ m}^2$ . Thus, total Parking required Area =  $5,564.5 + 2,481.9 = 8,046.4 \text{ m}^2$ . Total parking proposed is  $8,360.0 \text{ m}^2$ .
8. **Power Requirement and solar details:** The power supply will be supplied by TP Central Odisha Distribution Limited (TPCODL). The requirement load for the project will be 1500 kVA.

S. No.	DESCRIPTION	SAVINGS (kVA)
1.	Solar based Lighting will be done in the common areas, stair cases, landscape areas, signage, entry gates and boundary walls etc. (5% from total power load) Norms for Rooftop PV systems Installation: Solar power back of a minimum generation capacity of 5% of the connected load (OR) 20 Watts/sq.feet on available roof space, whichever is less.	75 kVA
2.	LEDs will be used in all dwelling units ( $\approx 4\%$ ).	60 kVA
3.	Outdoor and common area lighting shall be LED ( $\approx 1\%$ ).	15

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	kVA
Total Energy Saved	150 kVA
Total Power load = 1500 kVA Energy saved through various provisions = 150 kVA <b>TOTAL ENERGY SAVING = 10%</b>	

9. **Power Backup:** There is provision of 3 nos. of DG sets of total 750 kVA (250 kVA each) capacity for power back up. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.

10. **Solid Waste Generation** - The total solid waste generation will be 564 kg/day.

S. No.	Description	Occupancy	Norms (kg/capita/day)	Waste Generated (kg/day)
1.	<b>Domestic Solid Waste:</b>			
	Hotel Guest Rooms	188	0.5	94
	Hotel Staff	141	0.25	35.25
	Visitors (Restaurant & Banquet Hall)	1,915	0.15	287.25
	Staff (Restaurant & Banquet Hall)	479	0.25	119.75
2.	Horticultural Waste (0.14 acre)		@ 0.2 kg/acre/day	0.028
3.	STP Sludge		Sludge generated x 0.35 x B O.D difference/1000	27.44
<b>Total Solid Waste Generation= 564 kg/day</b>				

11. **Greenbelt:** Total green area measures 556.7 m<sup>2</sup> i.e. 10.7 % of the net plot area. Evergreen tall and ornamental trees have been proposed to be planted inside the premises. No. of trees required = 1 tree/80 sq.m. of plot area = 5301.38/80 = 66 Nos. **Total no. of trees proposed = 70 trees.**

12. **Project cost:** Total Project cost is INR 87.50 Cr. Including land and development cost, EMP cost includes capital cost of Rs.38.39 lakhs and recurring cost of 18.72 lakhs.

COMPONENT	CAPITAL COST (INR LAKH)	RECURRING COST (INR LAKH/YR)
Sewage Treatment Plant	24.5	6
Rain Water Harvesting System	3	1
Solid Waste Management	0.56	0.14
Environmental Monitoring	-	9
Green Area/ Landscape Area	0.33	0.08
Others (Energy saving devices, miscellaneous)	10	2.5
<b>Total</b>	<b>38.39</b>	<b>18.72</b>

13. **Environment Consultant:** The environment consultant M/s Grass Roots Research & Creation India (P) Ltd. Noida along with the proponent made a presentation on the proposal before the Committee on 02.12.2023.



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14. The SEAC recommended the following:

**A. The proponent may be asked to submit the following for further processing of EC application:**

- i) The green area provided is 10.7%. The project proponent shall increase the greenbelt area up to 20% of the total area.
- ii) Structural stability certificate vetted by institute of repute.
- iii) Traffic Study report to be vetted by institute of repute.
- iv) NOC/Permission from the concerned authority for discharge of storm water into nearest NH drain.
- v) Detailed drainage plan supported by drainage layout to be submitted.
- vi) Permission from Water Resource department for usage of ground water.

**B. The proposed site shall be visited by Sub-Committee of SEAC to verify the followings**

- i) Environmental settings of the project site.
- ii) Extent of construction activity.
- iii) Road connectivity to the project site.
- iv) Drainage network at the site.
- v) Discharge point for discharge of treated water and distance of the discharge point from the project site.
- vi) Greenbelt area.
- vii) Any other issues including local issues.

5. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
a.	The green area provided is 10.7%. The project proponent shall increase the greenbelt area up to 20% of the total area.	We want to inform you that our landscape area is exactly 20% of plot area i.e., 1,060.27 m <sup>2</sup> . Landscape plan is attached as <b>Annexure-I</b> .	Revised landscape area is exactly 20% of plot area i.e., 1,060.27 m <sup>2</sup> .
b.	Structural stability certificate vetted by institute of repute.	The structural stability has been obtained from IIT, Guwahati and a copy of certificate is attached as <b>Annexure- II</b> .	-
c.	Traffic Study report to be vetted by institute of repute.	Traffic Study report has been vetted by KIIT university. Copy of the same is attached as <b>Annexure- III</b> .	As per the traffic study report LOS is "C" with or without project.
d.	NOC/Permission from the concerned authority for discharge of storm water into nearest NH drain.	NOC/Permission from the concerned authority has been obtained for discharge of storm water into nearest NH drain. Copy of the same is attached as <b>Annexure-IV</b> .	NOC for disposal of storm water to natural drainage has been granted by BMC.
e.	Detailed drainage plan supported by drainage layout to be submitted.	Drainage layout plan showing the discharge point is attached as <b>Annexure-V</b> .	Drainage layout plan submitted.
f.	Permission from Water Resource department for usage of ground water.	Permission from Water Resource department for usage of ground water has been obtained from competent authority.	NOC from CGWA for 30.63KLD valid till 2028.

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Copy of the same is attached as **Annexure-VI.**

### Reply to Site visit points

1. Environmental settings of the project site.	ESZ boundary of Chandaka Dampara WLS is at the distance of 7.5 km towards west direction and ESZ boundary of Nandankanan WLS is at the distance of 8.1 km towards NW direction from the project site. DEO NOCs w.r.t. both the WLS are enclosed as <b>Annexure- VII.</b> There is no other ecologically sensitive location near the project site.	----
2. Extent of construction activity.	No construction activity has been initiated at project site.	----
3. Road connectivity to the project site.	The connecting road is N. H. Sub Road towards front side of the project site. The Nearest Highway is SH-16 which is approx. 20 m in west direction from the project site. NH 316A/SH 60 is approx. 1.9 km (NE) away, NH-316 is approx. 3.7 km (S) away from the project site.	----
4. Drainage network at the site.	Details provided above in point no. 4 and point no. 5.	----
5. Discharge point for discharge of treated water and distance of the discharge point from the project site.	Details provided above in point no. 4 and point no. 5.	----
6. Greenbelt area.	Details provided above in point no. 1.	----
7. Any other issues including local issues	No other issues.	----

6. The proposed site was visited by the sub-committee of SEAC on **21.12.2023**. Following are the observations of the sub-committee.

- The Project site is located at Pahala adjacent to Bhubaneswar Cuttack Road. PP was present and explained the layout.
- There is no construction at present, it is empty land. It is for Hotel project.
- The PP needs to obtained permission from the authority for discharge of excess treated water and storm water to the nearby drain along with drainage plan approved by the authority.
- PP was advised to increase the RWH pit from one to two to take care of storm water during excess rain. Also, to plan the terrain to avoid flooding of water during rainy season.

Considering the information furnished and the presentation made by the consultant, **M/s Grass Roots Research & Creation India (P) Ltd., Noida, U.P.** along with the project proponent,

**Whether SEAC recommended the proposal** – The proposal was placed in SEAC meeting held on 28.12.2023 and the SEAC recommended for grant of Environmental Clearance valid for 10 years with stipulated conditions as per **Annexure – I** in addition to the following specific conditions.



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- i) The Proponent before implementation of the project shall convert the land to Gharabari and shall take the ownership of the land if not already taken.
- ii) 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.
- iii) The proponent shall use solar energy at least to the tune of 5% of total power requirement as proposed.
- iv) The proponent shall obtain permission from concerned Fire Safety Authority.
- v) Trees located within the project area shall be transplanted to alongside the boundary green development area.
- vi) The proponent shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of project report.
- vii) The project proponent shall maximise utilisation of treated water in flushing, plantations and ground washings etc. as per need to reduce water discharge to drain. This shall be verified in future compliance report.
- viii) All compliances submitted/ committed by PP(s) shall be strictly adhered to them in addition to all the conditions/ specific conditions of EC.
- ix) The proponent shall obtain permission from Water Resources department, Odisha for use of ground water for commercial use only.

### Decision of Authority: Approved

After detailed deliberation in the matter, the authority decided to grant EC for this project having total built up area of 30,390 sqm with standard and SEAC recommended specific conditions.

### APPROVED BY

  
Member Secretary, SEIAA

  
Member, SEIAA

  
Chairman, SEIAA

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## AGENDA NO.153.18

Proposal No.	SLA/OR/INFRA2/441148/2023
Date of application	28.08.2023
File no.	441148/119-INFRA2/08-2023
Project Type	Proposal for EC
Category	B2
Project/Activity including Schedule No.	8(a) Building & Construction Project
Name of the Project	Proposal for Environmental Clearance for M/s Evos Buildcon Pvt. Ltd. of Residential project "Evos Amani" Plot area 17,342.50 Square Meter (4.285 Acre), Proposed Built up Area – 92,774,928 sqm, Dwelling Units (414 nos.), 4 blocks/Towers at Village - Chandaka, Tahasil-Bhubaneswar, District-Khurda of Sri Kalinga Keshari Rath
Name of the company/Organization	EVOS BUILDCON PRIVATE LIMITED
Location of Project	Village - Chandaka, Tahasil-Bhubaneswar, District-Khurda.
ToR Date	N/A
Name of the Consultant	M/s Grass Roots Research & Creation India

### Proposal in brief:

The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.

1. This proposal is for Environmental Clearance for M/s Evos Buildcon Pvt. Ltd. of Residential project "Evos Amani" Plot area 17,342.50 Square Meter (4.285 Acre), Proposed Built up Area – 92,774,928 sqm, Dwelling Units (414 nos.), 4 blocks/Towers at Village - Chandaka, Tahasil-Bhubaneswar, District-Khurda of Sri Kalinga Keshari Rath.
2. **Category:** This project falls under Category "B". Project or Activity 8(a) Building and Construction projects as per EIA Notification dated 14th Sept, 2006 as its amendments.
3. **Location and connectivity:** The project site is located at Plot no. 2157, 2161/7460, 2161/7461, 2161/7462, 2161/7463, 2161/7464, 2161/7465, 2161/7466, 2161/7467, 2162, 2164, 2210, 2212, 2209/8684, 2209/4303 & 2209/4304, Khata No. 697, 603/5485, 603/5486, 603/5487, 603/5488, 603/5489, 603/5490, 603/5491, 603/5492, 603/1253, 312, 603/825, 603/6905 & 603/564 in Village - Chandaka, Tahasil- Bhubaneswar in Khurda district, Odisha bounded by Latitude: 20°22'8.66"N and Longitude: 85°46'8.99"E. The project site is well connected by Chandaka Nandankanan Road. The nearest highway is NH-16 approx. 10.0 km in SSE direction. The nearest railway station is Bhubaneswar New Junction approx. 7.0 km in ENE direction from the project site and Biju Patnaik International Airport is at a distance of approx. 11.7 km in S direction from the project site.
4. The Plot area measures 17,342.50 m<sup>2</sup> (4.285 Acre) and proposed Built-up area = 92,774,928 m<sup>2</sup>.
5. **Area Statement:**

S. No.	PARTICULARS	AREA (sq.m.)
i)	Plot area as per possession	17,342.50
ii)	• 15 mt land left adjacent to existing drain	2,794.10





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	• Road widening affected area	1,446.70
iii)	Net Plot Area	13,101.70
iv)	Permissible Ground coverage (@40% of the net plot area)	5,240.68
v)	Proposed Ground coverage (@39.99 % of the net plot area)	5,240.53
vi)	Permissible FAR (@5 of the Net plot area)	65,508.5
vii)	Proposed FAR (@ 4.88 of Net plot area)	63,954.44
viii)	Area of Public Washroom	19.426
ix)	ICT Room Built up Area and Security RM	20.872
x)	Non-FAR area	28,780.19
xi)	<b>Total Built-up Area (6+7 + 8 +9)</b>	<b>92,774.928</b>
xii)	Required Parking area (30% of FAR)	19,186.33
xiii)	Proposed Parking area (36.04 % of FAR)	23,048.551
xiv)	Landscape area (30.95%)	<b>4055.00</b>
xv)	Height of the Building (m)	83.30

5. **Water requirement:** The total water requirement approx. 373 KLD out of which domestic water requirement is 348 KLD. The total freshwater requirement is approx. 237 KLD which will be met from ground water augmented with rain water.

S. No.	Description	Occupancy	Rate of water demand (LPCD)		Total Water Requirement (KLD)		
A.	Domestic Water		Fresh	Flushing	Fresh	Flushing	Total
i)	Residents	2490	90	45	224.1	112.05	336.15
ii)	Staff (total)	159	25	20	3.975	3.18	7.155
iii)	Visitors	249	5	10	1.245	2.49	3.735
		2898			229.32	117.72	347.04
Total Domestic Water = 348 KLD							
B.	Horticulture		4055 m <sup>2</sup>	4l/sqm	17 KLD		
C.	Swimming Pool make-up				7.5		
Grand Total (A+B+C) = 373KLD							

7. **Wastewater details:** It is expected that the project will generate approx. 302 KLD of wastewater. The wastewater will be treated in an onsite STP of 360 KL capacity. The treated effluent will be reused for Flushing and Horticulture. Surplus treated effluent will be discharged to external sewer 137KLD in Summer Season and 151KLD in Monsoon season with due permission of Development Authority.

Domestic Water Requirement	348 KLD
• Potable	230 KLD
• Flushing	118 KLD
Waste water [(80% fresh + 100% flushing)]	184 + 118 = 302 KLD
STP Capacity	360

8. **Rainwater harvesting details:** Total 2 nos. of Rainwater Collection Sump tanks will be provided for storage of rain water. Peak hourly rainfall has been considered as 140 mm/hr.

9. **Parking Proposed:** Total parking proposed is 731 ECS (583 ECS basement +148 ECS Stilt).

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10. **Power Requirement:** The power supply will be supplied by TPCODL. The load requirement for the project will be 3.170 kVA. There is provision of 3 nos. of DG sets of 750 kVA capacity for power back up. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.

11. **Solid waste generation:** The total solid waste generation will be 1,366 kg/day for the proposed project.

S. No.	Category	Norms (Kg/capita/day)	Waste generated (kg/day)
i)	Residents (2490)	@ 0.5 kg/day	1245
ii)	Staff (159)	@ 0.25 kg/day	40
iii)	Visitors (249)	@ 0.15 kg/day	38
iv)	Landscape waste (1,002acre)	@ 0.2 kg/acre/day	0.2
v)	STP sludge	Waste water x 0.35 x B.O.D difference/1000	43
<b>TOTAL SOLID WASTE</b>			<b>1,366 kg/day</b>

12. **Greenbelt:** Total green area measures 4055.00 m<sup>2</sup> (30.95% of Net plot area). Evergreen tall and ornamental trees have been proposed to be planted inside the premises. No. of trees required = 1 tree/80 sq.m. of plot area = 13,101.70 / 80 = 163.87 say 164 Nos. Total no. of trees proposed = 200.

13. **Project cost:** Total estimated cost of the proposed project is INR 438.44 Cr. including land and development cost. EMP cost includes a capital cost of 54.13 lakhs and recurring cost of 20.2 lakhs.

**TABLE: Cost of Environmental management Plan**

COMPONENT	CAPITAL COST (INR LAKH)	RECURRING COST (INR LAKH/YR)
Sewage Treatment Plant	36	9
Rain Water Collection System	3	0.75
Solid Waste Management	2.73	0.683
Environmental Monitoring	0	9
Green Area/ Landscape Area	2.4	0.608
Others (Energy saving devices, miscellaneous)	10	0.15
<b>Total</b>	<b>54.13</b>	<b>20.2</b>


14. **Environment Consultant:** The Environment consultant M/s Grass Roots Research & Creation India (P) Ltd., Noida along with the proponent made a presentation on the proposal before the Committee on 22.09.2023.

15. The SEAC in its meeting held on dated 22-09-2023 recommended the following:

A. **The proponent may be asked to submit the following for further processing of EC application:**

- Land documents and Khasra of land.
- A natural nallah is passing beside the plot area. Submit the internal drainage map and connecting drain to public/natural drain with due permission/NOC for discharge of excess treated water and storm water into the natural drain from concerned authority. The project proponent also to confirm unhindered access to the proposed point of storm water / excess sewage treated water drain discharge from its project site.



- 
- iii) The Project Proponent shall revisit the water balance and have provision to reduce the discharge of treated water by increasing greenbelt.
  - iv) Surface runoff/storm water management.
  - v) Submit Reduced Level (RL) of ground water and place where STP is installed during summer and rainy season.
  - vi) Ensure that the differences between the reduced level of the bottom of rainwater harvesting pits and the reduced level of ground water during rainy season are adequate for effective recharge of collected rainwater and submit the report for the same.
  - vii) The PP shall increase the greenbelt from 20.15 % to 25% as proposed.
  - viii) The SEAC suggested the PP to explore the possibility of using synthetic sand for construction purposes.
  - ix) Details of PV Panel and solar generation from Solar power.
  - x) Traffic study report duly vetted by a reputed institution.
  - xi) Municipal Solid Waste Management practice and agency to take the municipal solid waste.
  - xii) Certificate from concerned DFO that the project is not located within the Eco-Sensitive Zone of Chandaka-Dampada Wildlife Sanctuary and Nandankanan Sanctuary.
  - xiii) Copy of permission from Airport Authority of India w.r.t. height of the building.
  - xiv) Document in support of land gifted for widening of road and access to land to be submitted.

**B. The proposed site shall be visited by Sub-Committee of SEAC to verify the followings**

- a) Environmental settings of the project site.
- b) Extent of construction activity if any.
- c) Road connectivity to the project site.
- d) Drainage network at the site.
- e) Discharge point for discharge of treated water and distance of the discharge point from the project site.
- f) Greenbelt area.
- g) Any other issues including local issues.

**16. The proposed site was visited by the sub-committee of SEAC on 29.09.2023. Following are the observations of the sub-committee.**

- a) The Project site is located near Chandaka Thana adjacent to the Road. The Layout plans were explained by the Project proponent Team.
- b) It was observed that there are no construction activities in the land. The land is connected to the main road in the North Side which is about 60 ft wide and it is learnt that this road width would be further expanded.
- c) The PP explained that they have gifted a part of their land to Govt authority which is going in road expansion. Necessary document in support of the same may be given. There is a Nala adjacent to North-East and Eastern side of the land.
- d) The PP explained about the drain network and explained that the excess storm water and treated water (if any) will be discharged to the Nala through pipeline passing by their land. PP may be asked to submit document/permission in support of drainage connection to the adjacent from the appropriate Govt. Authority in the side Nala. The PP will try to maximise using the treated water for plantation.
- e) As the land is close the Nala, the PP needs to develop structural stable elevation to protect water ingress and land sliding in case of heavy rain.

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f) The stack height to be maintained as per CPCB norm. All statutory clearance to be taken before project implementation.

g) All other points covered during presentation to be complied.

17. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
i)	Land documents and KISSAM of land.	Land documents with details of KISSAM of Land is attached as <b>Annexure I</b> .	Land documents submitted
ii)	A natural nallah is passing beside the plot area. Submit the internal drainage map and connecting drain to public/natural drain with due permission/NOC for discharge of excess treated water and storm water into the natural drain from concerned authority. The project proponent also to confirm unhindered access to the proposed point of storm water / excess sewage treated water drain discharge from its project site.	Internal drainage connecting to the STP then excess treated water will be discharge into the nearest nalla. EIDP letter and layout for the same are enclosed as <b>Annexure -II</b> and <b>Annexure III</b> .	EIDP letter and layout of drainage submitted.
iii)	The Project Proponent shall revisit the water balance and have provision to reduce the discharge of treated water by increasing greenbelt.	We will do plantation in buffer area (2794.10m <sup>2</sup> ) abutting the drain. The surplus treated water from STP will be used for horticulture in the buffer area thereby reducing the quantity of discharge from 137 KLD to 126 KLD in summer season. Revised water balance Chart is enclosed as <b>Annexure -IV</b> .	Revised water balance shows 126KLD in summer season and 149KLD in monsoon season treated water discharge to drain.
iv)	Surface runoff /storm water management.	Surface runoff/storm water management plan is enclosed as <b>Annexure -V</b> .	submitted
v)	Submit Reduced Level (RL) of ground water and place where STP is installed during summer and rainy season.	RL of the RWH tanks bottom is 3.15 m bgl. Ground water table for pre monsoon is 4.99 m bgl and post monsoon is 4.2 m bgl.	-
vi)	Ensure that the differences between the reduced level of the bottom of rainwater harvesting pits and the reduced level of ground water during rainy season are adequate for effective recharge of collected rainwater and submit the report for the same.	RL of the RWH tanks bottom is 3.15 m bgl. Ground water table for pre monsoon is 4.99 m bgl and post monsoon is 4.2 m bgl.	-



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vii)	The PP shall increase the greenbelt from 20.15 % to 25% as proposed.	We have increased the green are: Total Green Belt Area provided = 5,672.00 sqm (43.38% of the net plot area). Total green belt provided on mother earth = 4,267.00 sqm (32.58 % of the Net Plot Area) Total green area provided on podium floor = 1,415.00 sqm (10.48 % of the Net Plot Area). Revised landscape plan is enclosed as <b>Annexure -VI</b> .	Revised Green Belt Area provided = 5,672.00 sqm (43.38% of the net plot area) i.e. green belt - 32.58 % + 10.48 % green area
viii)	The SEAC suggested the PP to explore the possibility of using synthetic sand for construction purposes.	We will explore the possibility of using synthetic sand for construction purposes.	-
ix)	Details of PV Panel and solar generation from Solar power.	The power supply will be supplied by TPCODL. The electrical load for the project will be 3.170 KVA. 5% (158.5 KVA) energy will be generated through Solar. Solar energy saving calculations is enclosed as <b>Annexure-VII</b> .	submitted
x)	Traffic study report duly vetted by a reputed institution.	Traffic study from KHI Bhubaneswar is been enclosed as <b>Annexure-VIII</b> .	submitted
xi)	Municipal Solid Waste Management practice and agency to take the municipal solid waste.	Solid waste management plan is enclosed as <b>Annexure-IX</b> .	submitted
xii)	Certificate from concerned DFO that the project is not located within the Eco-Sensitive Zone of Chandaka-Dampada Wildlife Sanctuary and Nandankanan Sanctuary.	Certificate from concerned DFO that the project is not located within the Eco-Sensitive Zone of Chandaka- Dampada Wildlife Sanctuary is enclosed as <b>Annexure-X(A)</b> and copy of acknowledgment w.r.t Nandankanan Sanctuary is enclosed as <b>Annexure - X(B)</b> .	submitted
xiii)	Copy of permission from Airport Authority of India w.r.t. height of the building.	NOC from AAI w.r.t height if building same is enclosed as <b>Annexure-XI</b> .	submitted
xiv)	Document in support of land gifted for widening of road and access to land to be submitted.	Document in support of land gifted for widening of road and access to land is enclosed as <b>Annexure-XII</b> .	submitted

**SITE VISIT REPORT :**



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1.	Environmental settings of the project site.	The project site is 1.75 km outside the ESZ of Chandaka Dampara Wildlife Sanctuary and outside the ESZ of Nandakanan Wildlife Sanctuary. Certificate from concerned DFO that the project is not located within the Eco-Sensitive Zone of Chandaka-Dampada wildlife Sanctuary is enclosed as Annexure-X (A) and copy of acknowledgment w.r.t Nandakanan Sanctuary is enclosed as Annexure-X(B). There is no other ecologically has been initiated at project site.	
2.	Extent of construction activity if any.	No construction activity has been initiated at project site.	
3.	Road connectivity to the project site.	The project site is well connected by Chandaka - Nandakanan Road. NH-16 is approx. 10.0 km in SSE direction.	
4.	Drainage network at the site.	Internal drainage connecting to the STP then excess treated water will be discharged into the nearest nalla. EIDP letter and Layout for the same are enclosed as <b>Annexure-II</b> and <b>Annexure-III</b> .	
5.	Discharge point for discharge of treated water and distance of the discharge point from the project site.	Internal drainage connecting to the STP then excess treated water will be discharged into the nearest nalla. EIDP letter and Layout for the same are enclosed as <b>Annexure-II</b> and <b>Annexure-III</b> .	
6.	Greenbelt area.	We have increased the green area: Total Green Belt Area provided = 5,672.00 sqm (43.38% of the net plot area), Total green belt provided on mother earth = 4,267.00 sqm (32.58% of the Net Plot Area) Total green area provided on podium floor = 1,415.00 sqm (10.48% of the Net Plot Area). Landscape plan is enclosed as <b>Annexure-VI</b> .	



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7. Any other issues including local issues

No other issues.

Considering the information furnished and the presentation made by the consultant, M/s Grass Roots Research & Creation India (P) Ltd., Noida, U.P. along with the project proponent,

**Whether SEAC recommended the proposal** – The proposal was placed in SEAC meeting held on 28.12.2023 and the SEAC recommended for grant of Environmental Clearance valid for 10 years with stipulated conditions as per **Annexure – F** in addition to the following specific conditions.

- The Proponent before implementation of the project shall convert the land to Gharabari and shall take the ownership of the land if not already taken.
- 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.
- The proponent shall use solar energy at least to the tune of 5% of total power requirement as proposed.
- The proponent shall obtain permission from concerned Fire Safety Authority.
- Trees located within the project area shall be transplanted to alongside the boundary green development area.
- The proponent shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of project report.
- The project proponent shall maximise utilisation of treated water in flushing, plantations and ground washings etc. as per need to reduce water discharge to drain. This shall be verified in future compliance report.
- All compliances submitted/ committed by PP(s) shall be strictly adhered to them in addition to all the conditions/ specific conditions of EC.
- The Sub-Committee of SEAC during its visit observed that the land is close to the Nala, the PP needs to develop structural stable elevation to protect water ingress and land sliding in case of heavy rain.**

### Decision of Authority: Approved

After detailed deliberation in the matter, the authority decided to grant EC for this project having total built up area of 17,342.50 sqm with standard and SEAC recommended specific conditions.

Member Secretary, SEIAA

APPROVED BY

Member, SEIAA

Chairman, SEIAA

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### AGENDA NO.153.19

Proposal No.	SLA/OR/INFRA2/432365/2023
Date of application	15.06.2023
File no.	432365/117-INFRA2/06-2023
Project Type	Proposal for EC
Category	B
Project/Activity including Schedule No.	8(a) Building & Construction Project
Name of the Project	Proposal for Environmental Clearance of M/s SJD- Presidency Homes LLP for Residential Project "Royal presidency" over an built up area 31862.910 m <sup>2</sup> at Plot No. -755,755/4117, Raghunathpur, P.S. Nandankanan, Bhubaneswar, District - Khurda of Sri Bhabani Shankar Rath
Name of the company/Organization	SJD - PRESIDENCY HOMES LLP
Location of Project	Raghunathpur, P.S. Nandankanan, Bhubaneswar, District - Khurda of Sri Bhabani Shankar Rath
ToR Date	N/A
Name of the Consultant	M/s Grass Roots Research & Creation India

#### Proposal in brief:

The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.

1. This proposal is for Environmental Clearance of M/s SJD- Presidency Homes LLP for Residential Project "Royal presidency" over an built up area 31862.910 m<sup>2</sup> at Plot No. -755,755/4117, Raghunathpur, P.S. Nandankanan, Bhubaneswar, District - Khurda of Sri Bhabani Shankar Rath.
2. **Category:** The project falls under category "B" or activity 8(a)-Building and construction project under EIA Notification dated 14<sup>th</sup> September 2006 as amended from time to time.
3. The project area comes under Khurda Municipal Council and building approval is approved by Bhubaneswar Development Authority vide letter no 12746 dated 21.04.2023.
4. **Location and connectivity:** The proposed project is located at Plot No. 755, 755/4117, Mouza - Raghunathpur, P.S. - Nandankanan, Bhubaneswar, Dist.- Khordha, Odisha bounded by Latitude: 20°23'20.53"N and Longitude: 85°49'30.12"E bearing Toposheet No. F45T15. The Nearest Highway is NH-16 is approx. 5.9 km in East direction. The nearest railway station is Bhubaneswar New Junction approx. 1.2 km in south east direction from the project site and Biju Patnaik International Airport is at a distance of approx. 13.9 km in south direction from the project site.
5. **Area details:** The total area of project site is 6,879,594 m<sup>2</sup> (1.7 acres).

S. No.	PARTICULARS	AREA (SQ.M.)
1.	Total Plot area	6879.594
2.	Road affected area	1358.35
3.	Net Plot Area	5521.24
4.	Permissible Ground coverage (@40% of the net plot area)	2,208.498
5.	Proposed Ground coverage (@29.25 % of the net plot area)	1615.430



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6.	Permissible F.A.R (@6.0 of the Net plot area)	33,127.464
7.	Proposed F.A.R (@ 4.003 of Net plot area)	22,104.530
8.	Non F.A.R	9758.380
9.	<b>Total Built-up Area (7 + 8)</b>	<b>31,862.910</b>
10.	Height of the Building (m)	93.75
11.	Landscape area (18.56 % of Net plot area)	1025.280

**6. Building details:** The maximum height of the building will be 88.34 m. The total plot area is 6,879.594 sqm. The permissible ground coverage will be 2,208.498 sqm (40% of the plot area) and proposed Ground Coverage will be 1615.430 (29.25 % of the plot area). The permissible FAR will be 33127.464 sqm (@6.0 of plot area) and proposed FAR will be 22104.530 sqm (@ 4.0 of plot area). The Non-FAR for the project will be 9758.380sqm. Total built up area for the project will be 31862.9103 sqm. The total population of project after proposed will be 1173 persons.

**7. Water Requirement:** The total water requirement approx. 119 KLD out of which total domestic water requirement is 104 KLD. The total freshwater requirement is approx. 71 KLD which will be met from ground water augmented with rain water.

S. No.	Description	Occupancy	Rate of water demand (lpcd)		Total Water Requirement (KLD)		
A.	Domestic Water		Fresh	Flushing	Fresh	Flushing	Total
1.	Residents	675	90	45	61	31	92
2.	Staff	75	25	20	2	2	4
3.	Visitors	423	5	10	3	5	8
		1173			66	38	104
Total Domestic Water = 104 KLD							
B.	Horticulture	1025.280 m <sup>2</sup>	7 l/sqm		7 KLD		
C.	Make up water for Swimming Pool				5 KLD		
D.	Filter Back Wash water				2.5 KLD		
Grand Total (A+B+C+D) = 119 KLD							


**8. Wastewater details:** The project will generate approx. 94 KLD of wastewater. The wastewater will be treated in an onsite STP of 115 KLD capacity. The treated water (85 KLD @ 90% of total wastewater) will be reused for flushing (38 KLD), horticulture (7 KLD) and Swimming pool (1 KLD). Surplus treated effluent will be discharged to external sewer with due permission of Development Authority.

<b>Domestic Water Requirement</b>	<b>104 KLD</b>
• Fresh	66 KLD
• Flushing	38 KLD
<b>Waste water [@80% fresh + 100% flushing + 100% Filter Backwash]</b>	<b>52.8+38+2.5 = 94 KLD</b>
<b>STP Capacity</b>	<b>115KLD</b>

**9. Rainwater harvesting:** Total 07 Rainwater storage tanks at different locations will be constructed.

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Peak hourly rainfall has been considered as 140 mm/hr.

	Area	Area (m <sup>2</sup> )	Coefficient of run-off	Peak hourly rainfall intensity (mm)	Rainwater collection potential/hour (m <sup>3</sup> /hr)
	Roof-top area	1615.430	0.95	0.140	214.85 m <sup>3</sup> /hr
<b>Total Runoff Load = 214.85 m<sup>3</sup>/hr</b>					
Taking 20 minutes retention time, total volume of storm water will be = 214.85 /3				71.617 m <sup>3</sup> say 72 m <sup>3</sup>	
<b>Rainwater storage tanks are proposed for rainwater collection</b>					

**10. Parking details:** Total Proposed Parking is 181+24+11 = 216 ECS. Total Proposed Parking Area is 6718.550 m<sup>2</sup> (including 668.644 m<sup>2</sup> for visitors).

**11. Power Requirement:** The power supply will be through TPCODL. The total maximum demand is estimated as 1400 kVA. There is provision of 2 nos. of DG sets of 1010kVA and 720 kVA total 1730 kVA capacity for power back up. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.

**12. Solid waste generation:** The total solid waste generation will be 435 kg/day.

S. No.	Category	Norms (Kg/capita/day)	Waste generated (kg/day)
1.	Residents (675)	@ 0.5 kg/day	338
2.	Staff (75)	@ 0.25 kg/day	19
3.	Visitors (423)	@ 0.15 kg/day	64
4.	Landscape waste (0.2533 acre)	@ 0.2 kg/acre/day	0.06
5.	STP sludge	Waste water x 0.35 x B.O.D difference/1000	13
<b>TOTAL SOLID WASTE</b>			<b>435kg/day</b>

**13. Greenbelt:** Total green area measures 1025.280 m<sup>2</sup> i.e. 18.56 of the plot area. Evergreen tall and ornamental trees have been proposed to be planted inside the premises. No. of trees required = 1 tree/80 sq.m. of plot area = 5521.24 /80 = 69.01 say 69 Nos. Total no. of trees proposed is 75. The plantation matrix adopted for the green belt development includes pit of 0.3 m x 0.3 m size with a spacing of 2 m x 2 m. Peripheral plantation comprising of medium height trees (7 m to 10 m) and shrubs (5 m height) are proposed for the green belt.

**14. Project cost:** Total Project cost is INR 95 Cr. Including land and development cost. The capital cost for environmental management of the proposed project is estimated to be Rs. 33.47 lakhs. Rs. 15.01 lakhs per year will be required as annual recurring expenses to meet the recurring expenditure for implementing the measures

**Table: COST OF ENVIRONMENT MANAGEMENT PLAN**

COMPONENT	CAPITAL COST (INR LAKH)	RECURRING COST (INR LAKH/YR)
Sewage Treatment Plant	11.5	2.88
Rain Water Harvesting System	10.5	2.6
Solid Waste Management	0.87	0.22



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Environmental Monitoring	0	9
Green Area/ Landscape Area	0.6	0.16
Others (Energy saving devices, miscellaneous)	10	0.15
<b>Total</b>	<b>33.47</b>	<b>15.01</b>

**Table: Environmental monitoring cost (operation phase)**

S. No.	Particulars	Parameters	Frequency	Approx. Recurring Cost /Annum (INR Lakh)
1.	Ambient Air Monitoring	PM <sub>2.5</sub> , PM <sub>10</sub> , SO <sub>2</sub> , CO & NO <sub>2</sub>	Once in Every Three Months	2.0
2.	Stack Emission Monitoring	PM <sub>2.5</sub> , PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub> , CO HC	Every Six Months	2.0
3.	Treated Effluent Monitoring	pH, BOD, COD, Oil, Grease & Total Suspended solids	Daily	2.0
4.	Noise Level Monitoring	24 Hrs. Noise Level	Every Three Months	1.0
5.	Water Quality Monitoring	Drinking Water Specifications as per IS 10500	Once in three months	2.0
	<b>TOTAL</b>			<b>9.0 Lakh</b>

**15. Environment Consultant:** The Environment consultant M/s Grass Roots Research & Creation India (P) Ltd, Noida along with the proponent made a presentation on the proposal before the Committee.

**16. The SEAC in its meeting dated 05-07-2023 recommended the following:**

**A. The proponent may be asked to submit the following for further processing of EC application:**

- a) Calculation of parking area details along with percentage.
- b) Provision for increase in greenbelt minimum up to 20% and accordingly, detailed calculations to be submitted
- c) Undertaking by the Project Proponent that the commercial complex will be used for residents of the apartment only.
- d) Source of water used for construction purposes.
- e) Width of fire fighting corridor.
- f) Details of arrangement for proper drainage of storm water and excess treated water
- g) RL of ground water during summer and rainy season along with the RL of the bottoms of the proposed rainwater collection tanks.

**B. The proposed site shall be visited by Sub-Committee of SEAC to verify the followings**

- i) Environmental settings of the project site.
- ii) Construction activity, if any started at the site.

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- iii) Road connectivity to the project site.
- iv) Drainage network at the site.
- v) Discharge point for discharge of treated water and distance of the discharge point from the project site.

vi) Any other issues including local issues.

17. The proposed site was visited by the sub-committee of SEAC on **14.07.2023**. Following are the observations of the sub-committee.

- i) PP and Consultant were present along with all team members.
- ii) The PP explained the site plan with all environment related parts. It was observed that a road (proposed) to pass through the site as per the BDA Master plan. The PP has already marked the area to be left out of construction and plan to construct a foot over bridge for crossing of the residents by walk. PP was asked to submit supporting documents in addition to discharge of excess treated water to drain from appropriate authority.
- iii) It was observed that the site is adjacent to the Jaydev Vihar Nandan Kanan Main Road having access to site and there is drain at side of the road.
- iv) Documents asked during presentation needs to be submitted and comply all environment conditions as per statutory requirement.

18. The proponent has furnished the compliance and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
a)	Calculation of parking area details along with percentage.	Detailed parking area calculation is enclosed as <b>Annexure I</b> .	parking area proposed - 6718.550 m <sup>2</sup> 216 ECS
b)	Provision for increase in greenbelt minimum up to 20% and accordingly, detailed calculations to be submitted.	Revised greenbelt area details and Landscape layout are enclosed as <b>Annexure II (a)</b> and <b>Annexure II (b)</b> .	Revised greenbelt area is 1104.25m <sup>2</sup>
c)	Undertaking by the Project Proponent that the commercial complex will be used for residents of the apartment only.	The commercial complex will be used for residents of the apartment only. Undertaking for the same is enclosed as <b>Annexure III</b> .	Undertaking submitted
d)	Source of water used for construction purposes.	Source of water during construction will be private tankers. Agreement letter with tanker agency is enclosed as <b>Annexure IV</b> .	Copy enclosed
e)	Width of fire fighting corridor.	The width of the firefighting corridor is kept as 7.5 m. road with a walkway passage attached for 1.5 m. with a turning radius pathway of 9.0 m.	-
f)	Details of arrangement for proper drainage of storm water and excess treated water	Layout of outlet point of excess storm water and treated water is enclosed as	Copy enclosed





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		<b>Annexure V (a).</b> EIDP Letter is enclosed <b>as Annexure V (b).</b>	
g)	RL of ground water during summer and rainy season along with the RL of the bottoms of the proposed rainwater collection tanks.	RL of the RWH pit's bottom is 3.15 m bgl. Ground water table for pre monsoon is 4.99 m bgl and post monsoon is 4.2 m bgl.	-

19. As per site visit report documents raised are:

- i) The PP explained the site plan with all environment related parts. It was observed that a road (proposed) to pass through the site as per the BDA Master plan. The PP has already marked the area to be left out of construction and plan to construct a foot over bridge for crossing of the residents by walk. PP was asked to submit supporting documents in addition to discharge of excess treated water to drain from appropriate authority -As per the ADS submitted the drainage plan is approved by Chief Engineer Drainage Cuttack under EIDP.

Considering the information furnished and the presentation made by the consultant, **M/s Grass Roots Research & Creation India (P) Ltd., Noida, U.P.** along with the project proponent

Whether SEAC recommended the proposal – The proposal was placed in SEAC meeting held on 28.12.2023 and the SEAC recommended for grant of Environmental Clearance valid for 10 years with stipulated conditions as per Annexure – D in addition to the following specific conditions.

- i) The Proponent before implementation of the project shall convert the land to Gharabari and shall take the ownership of the land if not already taken.
- ii) The Proponent shall obtain permission/NOC from Executive Engrg. (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.
- iii) The proponent shall use solar energy at least to the tune of 5% of total power requirement as proposed.
- iv) The proponent shall obtain permission from concerned Fire Safety Authority.
- v) Trees located within the project area shall be transplanted to alongside the boundary green development area.
- vi) The proponent shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of project report.
- vii) The project proponent shall maximise utilisation of treated water in flushing, plantations and ground washings etc. as per need to reduce water discharge to drain. This shall be verified in future compliance report.
- viii) All compliances submitted/ committed by PP(s) shall be strictly adhered to them in addition to all the conditions/ specific conditions of EC.
- ix) The Sub-Committee of SEAC during its visit observed that a road (proposed) to pass through the site as per the BDA Master plan. The PP has already marked the area to be left out of construction and plan to construct a foot over bridge for crossing of the residents by walk. The proponent shall start to construct a foot over bridge at priority before building construction

### Decision of Authority: Approved

After detailed deliberation in the matter, the authority decided to grant EC for this project having total built up area of 31,862.910 sqm with standard and SEAC recommended specific conditions.

**APPROVED BY**

**Member Secretary, SEIAA**

**Member, SEIAA**

**Chairman, SEIAA**



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### AGENDA No.153.20

Proposal No.	SLA/OR/MIN/455005/2023
Date of application	15.12.2023
File no.	455005/01-MIN/12-2023
Project Type	New proposal for ToR
Category	B1
Project/Activity including Schedule No.	1(a) Mining of minerals
Name of the Project	Proposal for ToR of Kalimati Manganese Block (Pre-Embedded Clearance) under Barbil Tahasil of Keonjhar District, Odisha for Mining and Ancillary Activities of PMU Directorate of Mines & Geology, Odisha over an area of 67.177 ha (55.44 Ha is coming under forest land).
Name of the company/Organization	Dr. Amarpalli Roy Deputy Conservator of Forests & Team Leader, PMU
Location of Project	Barbil Tahasil of Keonjhar District, Odisha
ToR Date	N/A
Name of the Consultant	M/s Ecomen Mining Pvt. Ltd. Lucknow

**Proposal in brief:** The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.

1. The proposal was considered by the committee to determine the "Terms of Reference (ToR)" for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendment thereafter.
2. This proposal is for Terms of Reference (ToR) For Kalimati Manganese Block (Pre-Embedded Clearance) Under Barbil Tahasil of Keonjhar District, Odisha For Mining And Ancillary Activities of PMU Directorate Of Mines & Geology, Odisha
3. **Category:** As per the EIA notification 2006 and its subsequent amendments, proposed project falls in category B under schedule of Item 1(a)-Mining of minerals.
4. **Project details:** The present proposal is a case of Pre-embedded Clearances. The mineral block will be put to auction after obtaining all statutory clearances. This is a pilot project of State Govt. seeking prior approval from Central Govt. to obtain Environmental Clearances (Pre-embedded) in respect of Kalimati Manganese Block for mining and allied activities.
5. **Location and connectivity:** The proposed project is located at Badakalimati and Balda village under Barbil Tehsil of Keonjhar District, Odisha bearing Topo sheet no F45N5 (73 G/5) of Survey of India. Nearest railway station is Jakhapura Railway station is at distance of 3.0Km from the mine and nearest airport is Biju Pattanaik International Airport- 166km. Nearest reserve forest are Nayagarh Reserve Forest: - 4.7 Km and Chamakpur Reserve Forest:-6.2Km.
6. There is no national park/wildlife sanctuary/biosphere reserve/tiger reserve/ elephant reserve/coastal zone, archaeological site/historical places, Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC in the core and buffer zone. The Similipal Sanctuary exists at a distance of 130Km from the Mining Block.



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7. As the lease area comprises of 55.44 Ha of forest land and 11.737 Ha of non-forest land, an application for Forest Clearance has been filed on 30/11/2023 vide Proposal no. 1P/OR/MIN-QRY/449153/2023 and the status of application is under process.

8. Mining Plan is approved by Indian Bureau of Mines, Bhubaneswar, vide its letter No. MCDR-MIFLOMn/8/2023-BBS-IBM-RO-BBS, dated 18.07.2023.

9. Pre-embedded Clearance in which mineral block will be put to auction after obtaining all statutory clearances of the concerned authorities:

Sr. No.	Date	No of Letter/order	Details of the Letter/Order
1	29/04/2020	OM No. F.No. 22-2/2020-IA.III	MoEF&CC issued guidelines with respect to Pre-embedded Clearances State Government / Union Territory administration might apply as Project Proponent (PP) for seeking EC, FC and other statutory clearances required to start the Mining Project.
2	03.06.2020	Notification no. 16/4/2020-M.VI	Central Govt., in exercise of the powers conferred under Sub-Section 2(i) of Section 20A of the Mine and Mineral (Development & Regulation) Act 1957, issued detailed guidelines of pre-embedded clearances and directed all the State Governments to set up a Project Monitoring Unit (PMU) with a view to get pre-embedded clearances for the mines which are ready for auction.
3	20/11/2020	Notification no. 9978/SM	Department of Steel & Mines, Government of Odisha notified that the Forest Diversion Cell, in the Directorate of Mines would act as Project Monitoring Unit (PMU) to carry forward the implementation of guidelines issued by the Central Govt. for auction of mineral blocks with pre-embedded clearances.
4	24/11/2020	Notification bearing no 10134S&M	Department of Steel and Mines, Government of Odisha issued notification stating that the State Government had decided to go for auction of the two blocks with pre-embedded clearances on pilot basis, namely Kalimati Manganese Block and Unchabali Iron and Manganese Block.

### 10. Land use as per mining plan:

Sr. No.	Particulars	Land use at present (in Ha.)	Land use at the end of the Mining Plan Period (in Ha.)	At the end of Conceptual period (Life of Mine) (in Ha.)

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1	Area under excavation	2.671	9.708	11.84
2	Overburden Dump	0.707	13.647	13.115
3	Mineral Storage	0.000	3.000	3.000
4	Road	0.726	1.541	1.541
5	Infrastructure facilities (weigh bridge, workshop, office, labor colony, HEMM parking, Magazine etc.)	0.000	4.993	4.993
6	Mineral Processing Plant	0.000	2.800	2.800
7	Ground Water Recharge	0.000	1.063	1.063
	Sub Total	4.103	36.752	38.352
8	Safety zone	3.016	3.016	3.016
9	Area under excavation and subsequently converted into mining and allied activities	60.068	27.409	25.809
	Total	67.177	67.177	67.177

11. Equal extent of non-forest Govt. land has already been identified and allotted for raising compensatory afforestation in lieu of proposed diversion of forest land involved in Kalimati Manganese Block in favor of Directorate of Mines and Geology, Steel and Mines Department, Govt. Of Odisha, by Office of the Collector and District Magistrate, Keonjhar, vide its letter no 1417/XIX-11/2023, dated 06/06/2023. (This also enlists the CA land for another Mine lease 'Unchabali Iron and Manganese Block').

12. **Reserves:** Manganese ore is a major mineral and following is the estimated reserve;

Type	Manganese ore (Mn)(in Tonnes)
Mineral Reserves (111, 121 and 122)	209,403 (122)
Mineral Resources (211, 221, 222, 331, 332, 333 & 334)	15126 (222)
<b>Total</b>	<b>224529</b>

13. **Products generated:**

Units	Products and By products	Existing	Additional	After Expansion	Remark
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Tonnes	Products	0	23238 Tonnes per annum	23238 Tonnes per annum	Fresh EC
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### 14. Year wise production details:

Manganese Ore Zone	Year	Handling (Tonnes)	Waste Quantity (Tonnes)	ROM Quantity (In Tonnes)	Saleable Mineral from ROM (In Tonnes)	Mineral Reject from ROM (In Tonnes)	Sub- Grade Mineral from ROM (In Tonnes)	3 to Ore Ratio Waste Quantity/ ROM Quantity (1/1)	Grade Range (%)
		556,515	44,059	12,456	11,239	1217	Nil	1:35.65	10.9% to 56.2%
		575,342	59,388	15,954	14,027	1927	Nil	1:41.33	
		620,710	60,126	20,584	17,897	2687	Nil	1:43.73	
		479,202	55,965	23,237	22,629	608	Nil	1:36.83	
		342,803	19,565	23,238	23,035	203	Nil	1:35.26	
	Total	774,572	79,103	95,469	88,827	6642	Nil	1:38.53	

**15. Mining method:** The manganese ore occurs in variegated shale. Stratigraphy controls the manganese ore mineralization. The occurrence is also discontinuous and isolated in nature. The mineralized area is spread over 44.347 Ha consisting of 6.799 Ha mineralized area already proved by the boreholes and remaining 37.548 Ha of mineralized area is shown on the geological plan as per the surface indication. Length and average width of ore zone proved by the boreholes is 520m(60S to 460N) and 131m (approx.) respectively. As per the boreholes logs, minerals occur upto 48m from the surface level. The strike of the mineral are northwest-southeast and is mostly deepening at an angle varying between 37° to 40° due to northeast. The recovery of manganese ore has been considered to be 65% with respect to the manganese ore zone. The manganese grade varied from +10.9% Mn to 56.2% Mn and the subgrade ore of +10% to 20% Mn have been considered as per the geological report of the Mining Plan. There are existing 4 quarries worked out during earlier mining activities by the earlier Lessee. Out of these, Quarry-4 will be developed for manganese ore which has been proved by the boreholes at 10m and 20m interval. The opencast semi-mechanized method of mining will be adopted on 8 hourly shift basis with the deployment of machines like 100mm dia DTH drill, 2.1m<sup>3</sup> capacity excavators, 18-30 ton capacity dumpers. The maximum height and minimum width of the benches will be kept at 6m and 9m respectively. The individual bench faces will be kept nearly vertical (75°) whereas the overall quarry slope angle (the angle between the line adjoining the toe of bottom bench and the crest of the top bench with the horizontal) is proposed to be maintained at around 30° with the horizontal.

**16. OB management:** Excavated OB/Waste will be transported to the waste dump. ROM manganese ore will be transported to the manual processing site for breaking, sorting and sizing. The processed Mn ore will be loaded by 1.5m<sup>3</sup> capacity loader and transported to the destination through contractual trucks. About 60% of the OB (i.e. 900126 Tonnes\* 60% = 540076 Tonnes) will be drilled and blasted and remaining 40% of the rock-mass will be excavated directly by the excavator without drilling and blasting.

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17. **Ground water details:** The ground water table based on observations from nearby water bodies are at 4m (at RL 555m) from general surface level (at RL 570m) in rainy season and 20m (at RL 550m) on dry season. As far as the present status of exploration is concerned, mining will be carried out up to 580m RL. Ultimately water table remains at 555m RL in rainy season. Therefore, mining will not intercept ground water regime. The mining activities will be carried out as per the Approved Mining Plan by Indian Bureau of Mines.
18. **Drilling and blasting details:** About 60% of the OB (i.e. 900126 Tonnes\* 60%=540076 Tonnes) will be drilled and blasted and remaining 40% of the rock-mass will be excavated directly by the excavator without drilling and blasting.
19. **Dumping details:** As per the Geological Report dumping is not proposed on the existing dumps as these are located within mineralized area. Fresh area to be utilized for dumping during first five years of the Mine Plan Period:- 12.94Ha., Max Height of the Dump4 :- 25m, Max Height of the Dump 5:- 55m.

Sr. No	Year	Dump ID	Type of Dump	Proposed Area (Ha)	Height (m)	Total Dump Quantity (m <sup>3</sup> )	Existing Dump Location
1	1 <sup>st</sup>	Dump-4	OB	3.169	10	222030	2419660N-2419815N /334624E-334838E
2	2 <sup>nd</sup>	Dump-4	OB	2.747	15	222030	2419681N-2419814N /334631E-334816E
3	3 <sup>rd</sup>	Dump-5	OB	6.313	10	222030	2420600N-2420848N /331934E-334106E
4	4 <sup>th</sup>	Dump-5	OB	1.806	10	222030	2420358N-2420775N /333824E-334095E
				2.317	20	277983	
5	5 <sup>th</sup>	Dump-5	OB	1.652	20	164600	2420341N-2420715N /333773E-334068E
				2.043	20	245182	
	Total					1839552	

20. **Greenbelt:** Mined out area will be reclaimed and rehabilitated after the exhaust the minerals. 7.5m wide strip along the inner side of the block boundary will be left as safety zone (area 3.016Ha.). At the conceptual stage 13.115Ha area covered under dumps will be rehabilitated with plantation, 2.53 Ha area covered by benches will be brought under plantation. Before the lease is abandoned, plantations will be created over additional exhausted quarry benches and floors, external over-burden dumps and backfill areas.





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Sr. No.	Year	Green Belt Location	Area proposed to be covered (in Ha.)	No. of plants proposed	Estimated Expenditure (in Rs.)
1	1 <sup>st</sup>	Safety Zone	0.300	750	60,000
2	2 <sup>nd</sup>		0.300	750	60,000
3	3 <sup>rd</sup>		0.300	750	60,000
4	4 <sup>th</sup>		0.300	750	60,000
5	5 <sup>th</sup>		0.300	750	60,000
			1.500	3,750	300,000

21. **Waste management:** Waste generated during the first five years of Mining Plan Period will be 1839552 m<sup>3</sup> which will be dumped over an area of 12.94 Ha fresh area creating new dump no 4, with max height of 25m and Dump no. 5 with maximum height of 55m. Backfilling is proposed to be undertaken at the Conceptual stage. Areas under excavation and OH dumps will be fully reclaimed/rehabilitated after cessation of mining operations.
22. **Baseline study:** The present study was carried out from March, 2023 to May, 2023 for three months. During the course of study primary data pertaining to the environmental components like air quality, water quality, noise levels and soil quality were generated. Secondary data was collected from various government sources in the district for Socio-economic and flora & fauna.
23. **Water requirement:** The total requirement of water is around 42 KLD which will be sourced from ground water and rain harvested water.
24. **Wastewater management:** The domestic wastewater generated from mine office will be disposed of in soak pits via septic tanks. Water separator/Oil and Grit chambers will be provided at the workshop. The oil will be removed and disposed through registered recycler. The water will be recycled for washing or gardening purposes.
25. **Power requirement:** The estimated peak power requirement for Mine Block is for the crushing plant and will be about 0.2 MW. It will be met from main power line passing through the Odisha Electricity Power Grid will be utilized for mineral processing and electrification of office, staff quarters etc.
26. **Manpower details:** Direct Employment of 35 persons and indirect employment of 45 persons is proposed for the project.
27. **Project cost:** Estimated capital cost of the Project is Rs. 35 Crores and FMP of Rs. 25 Lakhs per Annum, while CSR is RS. 10.0 Lakhs per Annum.
28. **Environment Consultant:** The Environment consultant **M/s Ecomen Mining Pvt. Ltd. Lucknow**, along with the proponent made a presentation on the proposal before the Committee.
29. Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Ecomen Mining Pvt. Ltd. Lucknow**.

**Whether SEAC recommended the proposal –** The proposal was placed in SEAC meeting held on 13.11.2023 the SEAC prescribed the following specific ToRs in addition to standard ToRs as per Annexure – A for conducting detailed EIA study.

- a) Complete details on layout of the mine and how much to be carved out to make a new mine.
- b) Note on material balance and mineralogical analysis of the ore.

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- e) PP should ensure to follow IBM guidelines for grade of over-Burden and its storage.
- f) The PP shall obtain CGWA permission for drawl of groundwater.
- g) Copy of wildlife conservation plan including impact on Karakampada Elephant Corridor and required mitigation measures.
- h) PP shall carry out regular health check up of workers and nearby villagers and school children who are exposed to the Manganese mining.
- i) PP shall monitor the manganese content of the water that are supplied to villagers for drinking purpose.
- j) Layout of the Garland Drain, and settling pit for the fines along with the slope study of the dump.
- k) Capacity and material balance of the crushing and screening plant.
- l) Layout of parking plaza along with its location.
- m) Details of adjacent mines and its boundaries.
- n) Estimate how much mine is to be left out and how much to be taken out.
- o) Note on Manganese -iron ore assessment.
- p) Protection measures to be taken as Karo river is at 1.2 km and an adjacent nalla is at 0.55 km.
- q) Study reports on pollution of water bodies due to washing of mining dust by storm water if any.

### Decision of Authority: Approved

After detailed deliberation in the matter, the authority decided to grant ToR (standard & specific) for EIA studies.

### APPROVED BY

  
Member Secretary, SEIAA

  
Member, SEIAA

  
06.02.24  
Chairman, SEIAA