

**PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE,  
ODISHA HELD ON 20<sup>TH</sup> APRIL, 2022**

---

The SEAC met on 20<sup>th</sup> April, 2022 at 10:30 AM in the Conference Hall of Odisha State Pollution Control Board, Bhubaneswar under the Chairmanship of Sri B. P. Singh. The following members were present in the meeting.

1. Sri B. P. Singh	-	Chairman
2. Dr. K. Murugesan	-	Secretary
3. Dr. D. Swain	-	Member
4. Prof. (Dr.) H.B. Sahu	-	Member
5. Sri J. K. Mahapatra	-	Member
6. Sri K. R. Acharya	-	Member
7. Prof. (Dr.) B.K. Satpathy	-	Member
8. Prof. (Dr.) P.K. Mohanty	-	Member
9. Dr. K.C.S Panigrahi	-	Member
10. Dr. Sailabala Padhi	-	Member

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

**ITEM NO. 01**

**PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF NAYAGARH IRON ORE MINES OF M/S K.C PRADHAN FOR ENHANCEMENT IN PRODUCTION CAPACITY FROM 80,000 TONNES / ANNUM TO 3,00,135 TONNES /ANNUM OF IRON ORE WITH OPENCAST SEMI-MECHANIZED MINING METHOD OVER ML AREA 24.570HA. LOCATED AT VILLAGE NAYAGARH, DIST – KEONJHAR OF SRI SIDHARTH PRADHAN (POWER OF ATTORNEY HOLDER) – EC**

1. The proposal is for Environmental Clearance of M/s K.C Pradhan for Nayagarh Iron Ore Mines for enhancement in production capacity from 80,000 tonnes / annum to 3,00,135 tonnes /annum of Iron ore with Opencast Semi-mechanized Mining Method over ML area 24.570ha. located at village Nayagarh, Dist – Keonjhar.
2. As per the EIA Notification 2006(and amendment thereof), the project fall activity wise under 1(a) and Category 'B' with area threshold limit.
3. Nayagarh Iron Ore Mine spreads over an area of 24.570 hectares in village Nayagarh under Champua sub-division in Kendujhar District, Odisha. Sri K.C Pradhan, Mining Lessee, Plot No.1262, Road-8, Unit-9, Bhubaneswar-751022 had been granted a prospecting license (P.L) over an area of 33.22 hectares for iron ore in Nayagarh village under Jhumpura Tahsil of Champua sub-division in Kendujhar District, Odisha for a period of two (2) years from 31.07.2000 to 30.07.2002. Subsequently, Lessee filed the application on 09.11.2000 for grant of Mining Lease over an area of 28.086 hectares out of 33.22 hectares. Department of Steel & Mines, Govt. of Odisha had issued the terms & conditions vide letter No.III(A)SM-4/2002-03 on 08.01.2004 for grant of M.L area for iron ore over 27.794 hectares out of 28.086 hectares.
4. Environmental Clearance was accorded In favour of Nayagarh Iron Ore Mine of Shri K.C Pradhan (ML area 24.570 Ha.) for 5 years vide no.598 dated 16.12.2010 for production @80,000 tonnes / annum of Iron Ore and subsequently same was extended for 30 years or life of the mine whichever is less vide letter No.3434/SEIAA dated 30.05.2015 from State Environment Impact Assessment Authority (SEIAA), Odisha.

Proceedings of the SEAC meeting held on 20.04.2022

**Environmental Scientist, SEAC**

5. Mining has been going on obtaining Consent to Establish order vide No.16760/IND-II-CON-4378 dated 25.07.2012 and Consent to Operate order from the State Pollution Control Board (SPCB), Odisha vide Consent Order No.1050/IND-I-CON-6398 dated 18.01.2017 for production of iron ore @80,000 tonnes / annum.
6. Meanwhile Mining Plan has been modified along with Progressive Mine Closure plan under Rule 23 of MCDR,2017 from IBM, Bhubaneswar vide letter no MPM/A/05-ORI/BHU/2020-21 date 15.07.2020 for production of 3,00,135 tonnes /annum Iron ore with Opencast Semi-mechanized Mining Method.
7. In order to comply the provision of EIA Notification 2006 and amendment thereof, ToRs to prepare the EIA/EMP report required for obtaining environmental clearance for the proposal of Enhancement in production capacity from 80,000 TPA to 3, 00,135 TPA of Iron ore with Opencast Semi-Mechanized Mining Method at Nayagarh Iron Ore Mines(ML Area 24.570 ha) of Sri K.C Pradhan at Village Nayagarh Dist- Keonjhar, Odisha
8. **Location and Connectivity** - The project is located in Village Nayagarh, Tahasil Jhumpura, District Keonjhar, Odisha. It is bounded by the latitudes from 21°51'30.87" to 21°51'53.46"N & longitudes from 85°25'03.67680" to 85°25'33.83328" E. It falls on part of Survey of India Toposheet bearing No.F45/N5. Nearest accessible Road is Joda via Jururhi around 18 km. Nearest Airport is Bhubaneswar Airport at 183 km and Railway Station is Nayagarh at 3.5 km from Mines. Nearest Town is Joda at 16.3 km and District Headquarters is Kendujhar at 31Km. Nearest water body is Baitarani river is at a distance of 3.5 km from the project.
9. **Method of Mining** - The Mining shall be carried over an area of 24.570 hectares with opencast method of mining for production of 3, 00,135 tonnes of iron ore per Annum @ 1000 tonne per day. Operation shall be carried out for 300 days per annum. The life of the mine is calculated to be 12 years after the modified review period. Method of Mining/Types of Machinery- Open cast method of mining will continue with the deployment of machines like 100mm dia DTH drill, 1.2m<sup>3</sup> capacity excavators, dumpers having carrying capacity of 25 tonnes etc. The mining shall be carried out as per the approved mining plan. Two quarries namely in-situ quarry and float quarry have been developed in the lease area so far but material from float quarry have been exploited out and mining shall be carried out only in situ quarry.
10. **Green Belt** - A total area of 2.465ha. is under safety zone area will be covered under green belt/plantation program.
11. **Blasting** - For conducting blasting operations Site Mix an emulsion /ANFO explosive is being used as column charge with cast booster/ slurry booster as primer.
12. **Waste Generation** - A total of 188,929m<sup>3</sup> overburden shall be generated. Out of these, 44,801m<sup>3</sup> waste generated in plan period will be disposed off in Dump-1 over an area of 5,490m<sup>2</sup> or 0.549 hectare at 12m height and remaining 144,128m<sup>3</sup> waste will be utilized for back-filling of float quarry over an area of 5.451 hectares at 3m (approx.) thick filling on an average. Well-connected garland drain & boulder wall followed by appropriate settling pond will be provided around it.
13. **Reclamation & Rehabilitation Measures** - Neither reclamation (back-filling & plantation) was proposed in 2018-19 and 2019-20 nor reclaimed during the completed years.
14. **Water Requirement** - Total water requirement of the project is 45000 Litres/day(45 KLD).
15. The Public Hearing meeting was held at the scheduled venue & time i.e on 10.12.2021 (11.00 am) at Mouza Nayagarh (khata. No 235 Plot no. 32/1) in Kendujhar District, Odisha. The meeting

Proceedings of the SEAC meeting held on 20.04.2022

Environmental Scientist, SEAC

was presided over by the Additional District Magistrate, Kendujhar, the representative of State Pollution Control Board, Odisha. Sri Manas Kumar Sahu Mine Manger addressed the committee members and assembled public and made brief presentation about the salient features of the proposed project and 32 persons delivered their views out of 145 attendants. The project was welcomed by the public seeking some developmental activities to be done by project proponent.

16. The Environment consultant **M/s Ardra Consulting Services Pvt. Ltd. A/79, Sahidnagar, Bhubaneswar – 751007** along with the proponent has 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 Ardra Consulting Services Pvt. Ltd. A/79, Sahidnagar, Bhubaneswar – 751007**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent.

- i. Chemical composition of subgrades of Iron ore extracted and its utility in existing plant and action plan for proposed project. Also quantity of topsoil and overburden shall be reported in tonnes.
- ii. Present status of forest area and Forest clearance status in the mining lease.
- iii. pH of water may be reanalyzed at a Govt Laboratory and certificate about its use may be submitted.
- iv. Brief note on existing de-siltation procedure and future procedure to be adopted. Present silt details (quantity, quality and management) may be provided.
- v. Comparative note on NEERI compliance compiled in existing unit and proposed for future and submit the photographs of the compliances of the physical features in the existing unit.
- vi. STP installation within premises.
- vii. Since fugitive emissions are in borderline, mitigation measures undertaken to prevent from exceeding the permissible limit.
- viii. Details calculation of Retaining walls dimensions how it arrived.
- ix. Increase of the pollution load due to increase production, if any with mitigation measures to be taken to control them.
- x. Brief note on how traffic will be affected within the area after expansion and its management based on findings and recommendation thereof from traffic study if undertaken/to be undertaken through an institute of repute.
- xi. Details of greenbelt in existing unit and proposed expansion with images.
- xii. Details of Rain water Harvesting system proposed and how it will balance or contribute to water balance. Also, possible reduction of quantity of water proposed (45KLD) by other methods like RWH etc.
- xiii. Detailed calculation on height & dimensions of dump proposed.
- xiv. Comparative matrix in reference to pollution and environmental parameters with corresponding physical features for existing and proposed expansion in production capacity be submitted.
- xv. Slope study (if undertaken) for OB dump for proposed expansion be submitted and if not, the same be undertaken through a reputed Institute and submitted.
- xvi. How physical features like dump height etc. are arrived at?
- xvii. Safety measures against flying Rock proposed.

Proceedings of the SEAC meeting held on 20.04.2022

**Environmental Scientist, SEAC**

- xviii. Safety contingency measures in case of water inundation in rainy seasons in mines pit proposed be submitted.
- xix. Waste utilization details for five years be submitted.
- xx. Compliances of EC from Regional office, MoEF&CC and CTO from SPCB be submitted (if not).

## **ITEM NO. 02**

### **PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S SHREE RAM CONSTRUCTION FOR COMMERCIAL BUILDING & MIG RESIDENTIAL APARTMENT (B+S+12) OVER TOTAL BUILT-UP AREA OF 33,841.83 SQM LOCATED AT MOUZA – PADMALAVA NAGAR, TAHASIL - BRANGA, PS - CUTTACK SADAR, CUTTACK, ODISHA OF SRI VINIT SETHIA – EC**

1. The proposal is for Environmental Clearance of M/s Shree Ram Construction for commercial building & MIG Residential Apartment (B+S+12) over total built-up area of 33,841.83 sqm located at Mouza – Padmalava Nagar, Tahasil - Branga, PS - Cuttack Sadar, Cuttack, Odisha.
2. The project falls under category “B” or activity 8 (a)-Building & Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. M/s Shree Ram Construction has awarded for development of commercial building & MIG Residential Apartment (B+S+12) At Mouza –Padmalava Nagar, Tahasil: Barang, PS: Cuttack Sadar, Cuttack, Odisha. In 7003.6 sqm of land at Plot No.: 301, 302, 308/1886, 308/1889, 308/1900, 308/1896, 308/1901, Khata No. 170/1153, 170/1152, 170/1145, 170/1144, 170/1146, 170/1164, 170/1147.
4. **Location and Connectivity** - The proposed site is located at at Mouza–Padmalava Nagar, Tahasil: Barang, PS: Cuttack Sadar, Cuttack, Odisha. The Geographical co-ordinates of the project site is Latitude 20°27’03.30”N, 20°27’01.60”N, 20°27’01.50”N, 20°27’01.11”N, 20°27’01.17”N, 20°26’59.88”N, 20°27’00.50”N, 20°27’01.76”N, 20°27’02.78”N, 20°26’03.14”N & Longitude 85°48’57.61”E, 85°48’55.81”E, 85°48’55.61”E, 85°48’55.51”E, 85°48’55.09”E , 85°48’54.57”E, 85°48’52.41”E, 85°48’53.08”E, 85°48’53.51”E and 85°48’53.73”E. The area comes under Survey of India Toposheet No.-F45T10, F5T11, F45T14 & F45T15. The project site is well connected with Banki-Cuttack Road; National Highway-16 is at the distance of 0.1 km from the project site. The nearest Railway station is Baranga Railway Station which is 1.7 Km from the project site. The nearest airport is Biju Patnaik International Airport at a distance of approximately 22.44 Km from project site. The site is located adjacent to the local landmarks such as Nandankanan, Dadhapatna, etc. There is no structure or encroachments on the site. The site is easily accessible from Banki-Cuttack Road.

#### **5. The Building Details of The Project:**

<b>Particular</b>	<b>Proposed</b>	<b>Permissible</b>
Project Name	Proposed commercial building & MIG Residential Apartment (B+S+12) for Shree Ram Construction.	
Locations	At Mouza –Padmalava Nagar, Tahasil: Barang, PS: Cuttack Sadar, Cuttack, Odisha- 754005	
Plot Area	7003.6 Sqm or 1.7306 AC. Net Plot Area: 6799.14 Sqm	--
Ground Coverage	2453.8 Sqm (0.36 % of plot area)	--
Total Built up Area	33841.83 sqm	--

Particular	Proposed	Permissible
Total FAR Area	25972.08 sqm	--
Maximum Height	39.3mtr	--
Road & Paved Area	2985.52 Sqm	--
Basement Parking	3776.7 sqm	--
Stilt Parking	3201.68 sqm	--
Parking Area	6978.38 sqm (Basement Parking+ Stilt floor parking)	6666.72 sqm
Green Belt Area	1427.82 sqm (21 % of Plot area)	1359.8 Sqm (20 % of Plot area)
Power/Electricity Requirement & Sources	Total: 1126 KW TPCODL	--
No. of DG sets	(2 x 500) KVA	--
Fresh Water requirement & Sources	136.89 KLD(Fresh) Source: Ground Water	--
Sewage Treatment & Disposal	STP Capacity - 200 KLD	--
Estimated Population- Residential, Floating/visitors	Residential: 1368 nos. Floating/visitors: 136 nos Commercial: 323 nos.	--

6. **Power requirement:** The daily power requirement for the proposed project is preliminarily assessed as 1126 KW source from TPCODL of Odisha State Electricity Board. In order to meet emergency power requirements during the grid failure, there is provision of 2 nos. of DG set having (500 x 2) KVA capacities for power back up in the Housing Project.
7. **Water requirement:** During the construction phase, total daily water requirement will be = 23230 liters /23.23 m<sup>3</sup>/day. This will be sourced by Private tankers. During operation phase water will be sourced from Ground Water. Total fresh water requirement will be 136.89 KLD.
8. **Firefighting Installations:** Firefighting system will be installed as per recommendation of the Firefighting Officer, Odisha and as per the guideline of NBC (part-4).
9. **Green Belt Development:** Green belt will be developed over an area of 1427.82 Sqm (21 %) of the plot area; by using the local species like Radhachuda, Nageswar, Akash Neem, Ashok, Polanga, Karang, Bela, Pijilu, Kaniara, Tagar, Hena, etc.
10. **Solid Waste Management:** From the proposed private Housing project solid waste in form of food wastes from kitchen and miscellaneous wastes will be generated @ 0.45 kg/person/day, which will be about 615.6 kg/day and waste generated from the commercial will be @0.15 kg/day, which will be 48.45 kg/day. The waste generated from floating population in residents will be @ 0.15 kg/day, which will be 20.4 kg/day.

Sl. No.	Category	Counts (heads)	Waste generated
1.	Residents	1368 @ 0.45 kg/day	615.6 kg/day
2.	Commercial population (including Floating Population)	323 @ 0.15 kg/day	48.45 kg/day
3.	Floating population in	136 @ 0.15 kg/day	20.4 kg/day

Sl. No.	Category	Counts (heads)	Waste generated
	residents		
4.	STP sludge		87.26 kg/day
<b>Total Solid Waste Generated</b>			<b>771.71 kg/day</b>

11. The estimated project cost is ` 61 Crores and cost for EMP is 3.05 crores.

12. The project proponent along with the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., Bhubaneswar** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., Bhubaneswar**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by visit of the sub-committee of SEAC to the site.

- i) Internal drain network with dimensions and layout plan be submitted with its connectivity to existing drain after treatment including permission from authority to take the additional load.
- ii) Solar calculation details with generation and consumption in terms of % of total power.
- iii) "Kissam" of the land is found to be other than "Gharabari" as per the documents submitted by the PP. As such, it needs to be converted to "Gharabari" before start of the construction work.
- iv) Fresh water requirement is stated to be Ground water. Possibility to availing river (supply) water to be explored. If it is denied by the authority (s) concerned, then necessary 'NOC' from CGWA & permission from W.R depts, Govt of Odisha to be submitted for drawl of required quantity of ground water.
- v) Provision of parking for four wheelers, two wheelers / Bicycles including for visitors / floating population to be submitted with parking layout drawing showing separate parking and separate entry and exit gates for commercial and residential respectively.
- vi) Traffic study report at intersecting points to be submitted.
- vii) DG set location need to be changed according to prevailing wind direction.
- viii) Recalculate and resubmit the rain water to be harvested.
- ix) Structure stability certificate to be submitted from the appropriate authority.
- x) Ownership or permission (in case of Govt land) of revenue land/plots where the drain will be laid down by PP to connect to municipality drain to be submitted.
- xi) Basis of STP capacity arrived at be submitted.
- xii) Basis of arriving population for residents, visitors and commercial complex be submitted and accordingly, water balance be submitted.
- xiii) Parking in terms of ECS was communicated as wrong during presentation and as such, needs to be revised & resubmitted.
- xiv) RWHPs have been calculated based on maximum hourly rainfall of 80mm/ hr which needs to be revised based on 30 years meteorological data for maximum rain fall.
- xv) Kissam of land in sabik and hal revenue record be submitted.
- xvi) Fire safety recommendation letter of State Fire services Department be obtained and submitted.

Proceedings of the SEAC meeting held on 20.04.2022

**Environmental Scientist, SEAC**

- xvii) Provision of Lift with light, Ventilation, Air blowers and Fire safety measures from lowest basement to terrace top roof be submitted in view of Safety and Environment health of users.
- xviii) Detail water circuit from drawl (Source) with WTP to overhead tank storage with capacity supply to Apartments, Treatment in STP and Waste water treatment facility, overhead tank for waste water storage for used in Toilet through dual plumbing system be submitted.

**ITEM NO. 03**

**PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S ODISHA BRIDGE & CONSTRUCTION CORPORATION LIMITED FOR CONSTRUCTION OF MULTILEVEL CAR PARKING PROJECT [LGF+UGF+1F+2F] ON KHATA NO. - 252 OVER AN BUILT UP AREA - 29641.52SQM AT MOUZA - PURI TOWN, UNIT NO.-21, BALAGANDI, NEAR JAIL ROAD, TAHASIL - PURI, DIST - PURI, ODISHA OF SRI PRABHAT KUMAR PANIGRAHY (GENERAL MANAGER) – EC**

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

**ITEM NO. 04**

**PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S MOTWANI CONSTRUCTIONS PVT. LTD. FOR RESIDENTIAL BUILDING PROJECT (S1+S2+S3+18) OVER AN BUILT UP AREA 72498.42 SQM., LOCATED AT MOUZA - KORADAKANTA AND JHARPADA, TAHASIL - BHUBANESWAR, DIST - KHORDHA OF SRI PANKAJ MOTWANI (DIRECTOR) – EC**

1. The proposal is for Environmental Clearance of M/s Motwani Constructions Pvt. Ltd. for Residential Building Project (S1+S2+S3+18) over an built up area 72498.42 sqm., located at Mouza - Koradakanta and Jharpada, Tahasil -Bhubaneswar, Dist - Khordha of Sri Pankaj Motwani (Director).
2. The project falls under category “B” or activity 8 (a)-Building & Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. The proposed project is a multistoried Residential Apartment Building comprising of S1+S2+S3+18 floors over an area of 12677.33 Sq.m or 3.131.5 Acres.
4. The proposed project site is located at Plot No- 566(P), 295 (P), 294 (P), Khata No- 459/382, 106, 99 in Mouza- Koradakanta and Plot No-2182(P), Khata No- 920 in Mouza- Jharapada of Khordha district, Odisha.
5. **Location and Connectivity** - The Project Site is a part of the Survey of India Toposheet No. 73H/15 & 73H/16. The geographical co-ordinates of proposed project site is bounded between Latitude 20°16'49.04"N to 20°16' 47.06"N and Longitude 85° 52' 27.21" N to 85° 52' 27.32" E. Nearest Railway station at 3.7km and nearest airport is Biju Pattnaik International Airport at 7km. Nearest town is Bhubaneswar at 6km. Nearest NH is NH-203 – 90m, and SH is SH-60 – 8km. The project is at a distance of 29km from Khorda district, 1.45km from Jharpada and 70m from Koradakanta.

**6. The Building Details of The Project:**

Parameters	Description
Plot Area	12906.06 sq meter
Plot No.	566(P), 295 (P), 294 (P), Khata No- 459/382, 106, 99in Mouza- Koradakanta and Plot No-2182(P), Khata No- 920

Proceedings of the SEAC meeting held on 20.04.2022

**Environmental Scientist, SEAC**

Parameters	Description
Project Cost	INR 120 Crores
Built-up Area	72498.42 m <sup>2</sup>
Green Area (19.29%)	2490.00 m <sup>2</sup>
Population	1863
Water Requirement	225 KLD
Fresh Water Requirement	149 KLD
Wastewater Generation	195 KLD
STP Capacity	300 KLD
RWH pits	10 pits
Total Municipal Waste	960 kg/day
Power Requirement	3023.75 KW
DG Sets	2 no. of DG sets of 200 & 250 KVA each

7. **Power requirement:** The connected power load is 2835 KVA. Total 2 no. of DG set of total capacity 450 kVA (200 KVA + 250 KVA) will be installed as power back up.
8. **Water requirement:** Total Domestic water requirement is 225 KLD. Fresh water requirement is 149 KLD. The waste water generation is about 195 KLD and capacity of STP is about 300 KLD. Treated water from STP will be used for flushing, Fire Fighting, DG cooling and horticulture purpose and rest will be used in Swimming pool make-up water, Car washing/Nearby construction site or discharge to municipal sewer line.
9. **Fire fighting Installations:** Fire fighting system will be installed as per recommendation of the Fire fighting Officer, Odisha and as per the guideline of NBC (part-4).
10. **Parking** - Adequate parking space of 14400.20 m<sup>2</sup> is provided for operational phase to the residents and visitors.
11. **Green Belt Development:** Green area of 1160.74 m<sup>2</sup> is being provided.
12. Total of 10 Nos. of Rain Water Harvesting pits are proposed for artificial ground water recharge.
13. **Solid Waste Management:** Total solid waste generation is 960 kg/day. The solid waste will be segregated at source & collected. Adequate number of colored bins (green, white & Black) separate for bio-degradable, non-biodegradable and Hazardous waste are proposed to be provided at the strategic location within site. Bio-degradable (will be composted through organic waste converter). Recyclable wastes will be disposed to govt. or SPCB approved third party vendors. Dewatered sludge can be buried underground in a sanitary landfill. It also may be spread on agricultural land in order to make use of its value as a soil conditioner and fertilizer. The Hazardous waste generated will be managed as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Horticultural Waste is composted and used for gardening purposes.

Sl.	Description	Occupancy	Waste Generated	Waste Generated
-----	-------------	-----------	-----------------	-----------------



No.			(Kg per capita / day)	(kg/capita/day)
1.	No. of Persons	1863	0.5 kg/day	931.5
2.	Horticultural Waste (approx.. 0.615 acres)	@ 0.2 kg/acre/day		0.123
3.	STP Sludge	Waste water x 0.35 x B.O.D difference/1000		27.3
<b>Total Solid Waste Generation = 958.92 say 960 kg/day</b>				

14. The estimated project cost is ` 120 Crores and cost for EMP is ` 104 lakhs.

15. The project proponent along with the consultant **M/s. P and M Solutions, Noida, UP** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s. P and M Solutions, Noida, UP**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by visit of the sub-committee of SEAC to the site.

- i) Layout of project site in google map clearly showing the distance from all sensitive places.
- ii) Layout map showing project details like greenbelt, DG sets, parking, STP location, RWH pits etc. Also, green belt details with calculation and stretch / dimension / trees of plantation & the species.
- iii) Provision of parking is too inadequate, besides necessity for provision for parking for two wheelers / Bicycles including for visitors / floating population. This needs to be revisited and re-submitted with details layout drawing.
- iv) Internal drain network with layout to be submitted along with dimensions and its connectivity to final existing drain after treatment along with permission of the authority to take the additional load to be discharged.
- v) Solar calculation details with generation and consumption interms of % of total power
- vi) "Kissam" of the land is found to be other than "Gharabari" as per the documents submitted by the PP. As such, it needs to be converted to "Gharabari" before start of the construction work.
- vii) Fresh water requirement is stated to be Ground water. Provision for supply water/ PHED water try to avail for the project to be explored. If it is denied / not agreed to by the authority (s) concerned, then necessary 'NOC' from CGWA & permission from W.R deptt, Govt of Odisha to be submitted for drawl of required quantity of ground water.
- viii) Structural Stability certificate to be submitted from appropriate authority.
- ix) pH of water to be reanalyzed and submitted from a Govt Laboratory about its portability.
- x) Traffic study at major intersecting points to public roads to be submitted from an institute of repute.
- xi) Increase in greenbelt to reduce lesser amount of water discharge to drain.
- xii) Kissam of land in sabik and hal revenue record be submitted.
- xiii) Fire safety recommendation letter of State Fire services Department be obtained and submitted.
- xiv) Provision of Lift with light, Ventilation, Air blowers and Fire safety measures from lowest basement to terrace top roof be submitted in view of Safety and Environment health of users.

Proceedings of the SEAC meeting held on 20.04.2022

**Environmental Scientist, SEAC**

- xv) Detail water circuit from drawl (Source) with WTP to overhead tank storage with capacity supply to Apartments, Treatment in STP and Waste water treatment facility, overhead tank for waste water storage for used in Toilet through dual plumbing system be submitted.

**ITEM NO. 05**

**PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S UTKAL BUILDERS LTD. FOR B+G+7 MULTISTORIED COMMERCIAL BUILDING “UTKAL SIGNATURE” OVER BUILT-UP AREA OF 25,747.93 SQM LOCATED AT MOUZA - PAHALA, BHUBANESWAR, KHORDHA, ODISHA OF SRI. SHARAD BAID (DIRECTOR) - VIOLATION TOR**

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. M/s Utkal Builders Ltd. Has applied for “Terms of Reference (ToR)” for B+G+7 Multistoried Commercial Building “Utkal Signature” over built-up area of 25,747.93 sqm located at Mouza - Pahala, Bhubaneswar, Khordha, Odisha of Sri. Sharad Baid (Director).
3. The proponent has already constructed the total project with built-up area 25,747.93 m<sup>2</sup> without obtaining Environmental Clearance. Hence, this is a violation case.
4. The category of the project is 8(a) as per EIA Notification, 2006 & its amendments.
5. **Location and Connectivity** - The site is located at Pahala, Bhubaneswar, Khordha, Odisha. The Geographical co-ordinate of the project site is: Latitude - 20° 20' 13.82” N & Longitude - 85° 53' 04.32” E. The project site is well connected with Cuttack Athgarh road which take towards National Highway-16 (AH-45) (Jharpokaria-Baleshwar-Cuttack-Vijaywada-Chennai.) at a distance of 0.13 km in West Direction. The nearest railway station is Bhubaneswar Railway station at a distance of approx 10.6 Km in South east direction. The nearest airport is Biju Patnaik Airport at a distance of approx. 13.4 Km in South West direction from project site.

**6. The Building Details of The Project:**

Particular	Proposed	Permissible
Project Name	B+G+8 Multistoried Commercial Building of <b>M/s. Utkal builders Ltd.</b>	--
Plot Area	9259.92 sqm.	--
Ground Coverage	2663.98 sqm (28.76 %)	--
FAR (Floor Area Ratio)	21755.75 (@2.34)	2.75
Built up Area	25747.93 sqm	--
Maximum Height	30.35 m	--
Road Area	2703.0 sqm	--
Parking Area	8738.55 sqm (40.16 % of FAR Area)	8702.3 sqm (40% of FAR Area)
Green Belt Area	1972.90 sqm (20.7 %)	1902.8 sqm (20 %)
Maximum No. of Floor	B+G+8	--
Power/Electricity Requirement & Sources	1671.24 KW	--

Particular	Proposed	Permissible
No. of DG sets	03 No. (Capacity: 2x1010 KVA+300 KVA)	--
Water requirement & Sources	65 KLD (Fresh)	--
Sewage Treatment & Disposal	STP Capacity 100 KLD	--
Estimated Commercial Floating/visitors Population-including	2175 nos.	--

7. **Power requirement:** The total consolidated electrical load estimate for proposed project is about 1671.24 KW. The power will be entirely supplied by 11 KV source of CESU of Odisha State Electricity Board. Also, in case of power cut, three nos. of diesel generator having capacities (2x1010 KVA) & (1x300 KVA) capacity is provided.
8. **Water requirement:** Fresh make up of 65 m<sup>3</sup>/day will be required for the project which will be sourced from Ground water. Waste water of 83.35 KLD will be treated in a STP of 100 KLD capacity, which includes primary, secondary and tertiary treatment.
9. Rain Water harvested through 3 nos. of Rain Water recharging pits.
10. **Fire fighting Installations:** Fire fighting system will be installed as per recommendation of the Fire fighting Officer, Odisha and as per the guideline of NBC (part-4).
11. **Parking** - Total Parking Area provided is 8738.55 m<sup>2</sup>/315 ECS (Basement Parking – 3992.19m<sup>2</sup>/125ECS + Open Parking – 4746.37m<sup>2</sup> / 190 ECS).
12. **Green Belt Development:** Green belt will be developed over an area of 1972.90 sqm which is 20.7 % of the plot area; by using the local species like Radhachuda, Nageswar, Akash Neem, Ashok, Polanga, Karang, Bela, Pijilu, Kaniara, Tagar, Hena, etc.
13. **Solid Waste Management:** From the Commercial project solid waste in form of food waste from miscellaneous waste will be generated @ 0.15 kg/person/day, which will be about 326.25 kg/day. The generated solid waste from the residential complex will be segregated as biodegradable and non-biodegradable. This will be collected in separate colored bins. Proper waste management practices will be adopted during the collection, storage and disposal of the generated solid waste and construction and demolition waste.

S. No.	Category	Counts (heads)	Waste generated
1.	Commercial	2175 @ 0.15 kg/day	326.25 kg/day
2.	STP sludge		41.68 kg/day
<b>Total Solid Waste Generated</b>			<b>367.93 kg/day</b>

14. The estimated project cost is ` 30 Crores and cost for EMP is 1.57 lakhs.
15. The project proponent along with the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., Bhubaneswar** made a detailed presentation on the proposal.
16. The SEAC observed that the proponent has already constructed the project without obtaining Environmental Clearance as per EIA Notification 14<sup>th</sup> Sept. 2006 and amendment thereafter.

The SEAC, after detailed deliberations on the proposal in terms of the provisions of the MoEF&CC, Govt. of India Notification dated 14<sup>th</sup> March, 2017, confirmed the case to be of violation of the EIA Notification, 2006 and recommended for the following:

- (i) The State Government / SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986, and further no consent to operate or occupancy certificate to be issued till the project is granted Environmental Clearance.
- (ii) Grant of Terms of Reference for undertaking EIA and preparation of Environment Management Plan (EMP) as enumerated in **Annexure-A**.
- (iii) The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of Environmental Clearance. The quantum shall be recommended by the SEAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the SEAC and approval of the regulatory authority.

#### **ITEM NO. 06**

**PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S. HINDALCO INDUSTRIES LTD. FOR PROPOSED EXPANSION OF EXISTING FRP PLANT FROM 1.35 LAC TPA [HOT ROLLED COIL (HRC) & COLD ROLLED COIL (CRC)] TO 5.85 LAC TPA HOT ROLLED COIL (HRC) INCLUDING EXISTING 1.35 LAC TPA COLD ROLLED COIL (CRC) AT VILLAGES - JAMDA AND JAMDA (NIMPALI), TAHASIL - HIRAKUD, DISTRICT SAMBALPUR (ODISHA) OF SRI. SURAJIT MITRA (ASST. VICE PRESIDENT & UNIT HEAD HIRAKUD FRP) – EC**

1. The proposal is for Environmental Clearance of M/s. Hindalco Industries Ltd. for Proposed Expansion of Existing FRP plant from 1.35 Lac TPA [Hot Rolled Coil (HRC) & Cold Rolled Coil (CRC)] to 5.85 Lac TPA Hot Rolled Coil (HRC) including existing 1.35 Lac TPA Cold Rolled Coil (CRC) at Villages - Jamda and Jamda (Nimpali), Tahasil - Hirakud, District Sambalpur (Odisha) of Sri. Surajit Mitra (Asst. Vice President & Unit Head Hirakud FRP)
2. The project falls under schedule 3 (a) "Metallurgical industries (ferrous & non ferrous)" Category-B as per the EIA notifications, 2006 amendments thereafter.
3. The project of Hindalco Industries limited located in Villages Jamda & Jamda (Nimpali), Tehsil Hirakud, District Sambalpur of Odisha State is for Expansion in existing FRP plant from 1.35 Lac TPA [Hot Rolled Coil (HRC) & Cold Rolled Coil (CRC)] to 5.85 Lac TPA Hot Rolled Coil (HRC) including existing 1.35 Lac TPA Cold Rolled Coil (CRC).
4. Hindalco Industries limited has made an application online vide proposal no. SIA / OR / IND / 66421 / 2021 along with the application in prescribed format (Form-I), copy of Pre-Feasibility Report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above.
5. The ToR Letter issued by SEAC, Odisha vide their letter no. 3488/SEIAA dated 18th November, 2021.
6. The proposed expansion project as per EIA Notification dated 14th Sept., 2006 and subsequent amendments, falls under Category "B", Project or Activity 3(a).
7. The existing area of FRP Plant is 19.401 Ha. Additional area of 4.63 Ha will be required for proposed expansion project. Total FRP Plant area after expansion will be 24.031 Ha. The same is under possession of the company. Out of the total FRP plant area i.e. 24.031 ha,

Proceedings of the SEAC meeting held on 20.04.2022

**Environmental Scientist, SEAC**

2.88 ha will be covered under green belt/plantation within the plant premises for the expansion project. Apart from the above, 5.1 ha of additional area (adjacent to the FRP plant area) will be covered under greenbelt/plantation to cover 33% (7.98 ha) of the plant area under the greenbelt. And 10.8 ha has already been covered under plantation outside the plant premises.

8. M/s. Hindalco Industries Limited has an existing Aluminium Smelter of capacity 2.16 Lac TPA, Casting Plant of capacity 2.6 Lac TPA and CPP of 467.5 MW capacity at Villages Jamda, Lambaduguri, Taranagar, Jamda (Nimpali), Larbhanga, Tehsil Hirkud, District Sambalpur (Odisha) operating as per the Environmental Clearance obtained for 3.60 Lac TPA smelter & captive power 967.5 MW from MoEFCC, New Delhi vide Letter No. J-11011/400/2006-IA II dated 6th February, 2008, further amended vide letter no. J-11011/144/2006-IA II (I) dated 19th October, 2009.
9. As per the EIA notification, 2006 as amended from time to time, stating that “In case of secondary metallurgical processing industrial units, those projects involving operation of furnaces only such as induction & electric arc furnaces, submerged arc furnaces & cupola with capacity more than 30,000 tons per annum (TPA) would require EC”. As no such furnaces were proposed in the FRP plant, therefore, No EC was required for the same and the FRP Plant is operating on the basis of CTE & CTO obtained for the same. The initial CTE for FRP Plant [(1.35 lac TPA (Stage I) and 1.50 Lac TPA (Stage II) as a part of Phase II expansion of Smelter Plant] was issued by SPCB, Orissa vide File No. 5288/Ind-II-Noc-4655 dated 27.03.2010. where, a Special condition no. 2 stated that “The unit shall inform MoEFF, GOI, about the incorporation of FRP plant in the above expansion proposal & shall take additional environmental protection measures required if any advised by MoEFF, GOI”. Apart from the above, as per common condition (3) of CTE stated that “Construction of stage-II of phase-II expansion shall commence after requisite land is acquired and environmental clearance is obtained from MOEF, Govt. of India.” Accordingly, intimation regarding FRP plant was submitted to MOEFCC vide letter dated 25.10.2010. The CTO was issued by OSPCB for Proposed FRP Plant (CRM) (1.35 Lac TPA) vide letter no.10958/Ind-I-Con -6394 dated on 30.05.12. The CTO was issued by OSPCB for Proposed FRP Plant (CRM, HRM) (1.35 Lac TPA) vide letter no. 6919/Ind-I-Con -6394 dated on 01.05.2014. The current CTO issued Vide letter no. 3212/IND-I-CON-6394 dated on 20.03.2018 further amended on 18.12.2020 (valid upto 31.03.2023). Further, CTE was obtained from SPCB, Orissa vide file no. 5747 /Ind-II-Noc-6280 dated on 13.06.19 for Modernization of Hirkud FRP unit [to enhance the value addition of the existing CRC by increasing the tension levelled and degreasing the production capacity and Hirkud FRP and enhance the capability to produce Coils of thickness of 0.4 – 4 mm (currently 0.6 – 3.18 mm) width of 2000 mm (currently 1600 mm) with Hard Alloy Coil as the focused product and establishment of Polycrack Converter of Capacity of 0.5 MT/day to make the plant site non -hazardous solid waste free]. As per General conditions A(1) of the CTE stated that “The proponent shall inform to the MoEFCC, GOI, about modernization of existing FRP plant as same was not part of the original proposal for which EC has been obtaining & shall take additional pollution control measures as advised by the MoEFCC, GOI” and General Condition A(3) stated that “Under no circumstances the proponent shall increase Flat Rolled Aluminum Productions beyond 135000 TPA as granted in the existing consent to operate (CTO)”. Accordingly, intimation regarding FRP plant was submitted to MOEFCC vide letter no. HFRP/ENV/2018-19/029 dated 23.09.2019; The modernization is under implementation phase as per CTE obtained.

10. As per NGT order issued on 12.02.2020 “regarding applicability of EC for Re-rolling / Cold Rolling Mills operating as per CTE & CTO”, para 10 states that “the Ministry has accepted the recommendations no. (iii). of EAC to allow those units, operating under the CTEs/CTOs obtained from the respective State Pollution Control Boards, for a period of one year. Further, it has been decided that the requirement of EC or not for such units is a policy decision. Hence, the Ministry will constitute an Expert Committee, other than an EAC, having metallurgical experts for their recommendations”.
11. Therefore, considering all the facts given above, HIL has proposed to obtain EC for the Proposed Expansion of Existing FRP plant from 1.35 Lac TPA [Hot Rolled Coil (HRC) & Cold Rolled Coil (CRC)] to 5.85 Lac TPA Hot Rolled Coil (HRC) including existing 1.35 Lac TPA Cold Rolled Coil (CRC) at villages Jamda, Jamda (Nimpali), Tehsil Hirkud, District Sambalpur, Odissa. Finished Product (CRC) from Hirkud FRP plant will remain 1.35 lac TPA. Rest of the 4.50 lac TPA semi-finished Product (HRC) will be sent to the FRP plant (CRC) proposed within the existing plant premises of Aditya Aluminium (A Division of Hindalco Industries Ltd.) at Lapanga, Tehsil Rengali, District Sambalpur (Odisha).
12. **Location and Connectivity** - Geographical co-ordinates of the Project is Latitude – 21°31'1.51"N to 21°31'28.71"N and Longitude -83°53'57.95"E to 83°54'21.29"E. Project site is falling in Survey of India Toposheet No F44R14 and F44R15, F45M1 & F45M2. Nearest national Highway is NH-6 at 2.5 km and State highway is SH – 10 at 8 km. Nearest Railway station are Hirkud Railway Station is 4 km and Sambalpur Railway station is 6.5 km and Sambalpur Road Railway Station is 8.5 km. Nearest airport is Sambalpur Airport at a distance of approximately 12 km. Nearest Reserve Forests are Lakshmi dungri RF is at 0.5 km, Lamdungri RF at 2 km and Jamarha RF is at 3 km. Nearest water bodies are Mahanadi River adjacent to plant, Hirkud Reservoir is at 2.25 km, Power channel reservoir is at 3 km, Rapta Nala is at 3.5 Km, Kharjor Nala is at 0.8 Km and a low lying area (in Northern corner of the additional land of FRP expansion project). No National Park, Wildlife Sanctuary, Biosphere Reserve, PFs falls within 10 km radius of the plant site.
13. The unit configuration and capacity of existing and proposed project is given as below: -  
HRC (Hot Rolled Coil): From 1 x 1.35 Lac TPA to 1 x 5.85 Lac TPA (Expansion)  
CRC (Cold Rolled Coil): 1 x 1.35 Lac TPA (No Change)
14. **Raw Materials** - The raw materials required for the proposed expansion project include - Ingots from Hirkud Smelter (1.85 LTPA) and Sheet Ingots from Aditya Aluminium (A Division of Hindalco Industries Ltd.) (4.50 LTPA including 3.40 LTPA Molten Aluminium & 1.10 LTPA Aluminium Scrap). Fuel required for the proposed expansion project include Premium LSHS/LDO (Sulphur <= 1.5%) (21450 KLA) from Oil Refineries at Barauni/ Haldia/ Vizag and PNG (86.32 Million SCM) by GAIL (India) Ltd. Premium LSHS/LDO shall be replaced with PNG in Melting-Holding furnaces, subject to the availability by GAIL (India) Ltd. The equipment will be capable of taking care of PNG fuel also.
15. **Water Requirement** - After expansion, total fresh water requirement will be 573 KLD (Existing 211.5 KLD & Additional 361.5 KLD). Water is being / will be sourced from Hirkud Reservoir via pipeline through existing CPP, permission for which been obtained by M/s Hindalco Ltd. for 14 cusecs water. The additional quantity will be within the approved water drawl permission for the complex. Permission for obtaining 14 cusecs water from Hirkud Reservoir has been obtained M/s Hindalco Ltd. Hirkud from Department of Water resources

vide letter no. 31007/WR, WR-MAJII-WRC-0007 – 2015 (OSWAS) Irr.-II-WRC-28/17 (Physical) dated 21.12.2017.

16. **Power Requirement** - The total power requirement for the expansion project will be 55 MW (including Existing 25 MW & Additional 30 MW). Power is being & will continue to be sourced from existing CPP of Hindalco Hirakud.
17. **Project Cost** - The total capital cost of the project is Rs. 1500 Crores. Capital cost for environment protection measures is proposed as Rs. 35.40 Crores and annual recurring cost as Rs. 2.79 Crores /annum. The total employment generation after the proposed expansion project will be 1493.
18. Baseline monitoring has been carried out as per Standard ToR during Summer Season (March to May, 2021).
19. Ambient air quality monitoring was carried out at 10 locations during March to May, 2021 and the baseline data indicates the ranges of concentrations as: PM2.5 ranges between 28.9 to 51.9 µg/m<sup>3</sup>, PM10 ranges between 61.6 to 90.5 µg/m<sup>3</sup>, SO<sub>2</sub> ranges between 5.6 to 17.3 µg/m<sup>3</sup> and NO<sub>2</sub> ranges between 12.3 to 28.7 µg/m<sup>3</sup>. The maximum CO concentration was found to be 0.98 mg/m<sup>3</sup> at Sambalpur & it was not detected at some locations. AAQ modelling study for point source as well as line source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 4.06 µg/m<sup>3</sup>, 1.62 µg/m<sup>3</sup>, 0.29 µg/m<sup>3</sup> & 1.81 µg/m<sup>3</sup> with respect to PM10, PM2.5, SO<sub>2</sub> and NO<sub>2</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
20. Public Hearing for the proposed project was conducted on 9th March, 2022 at District Auditorium, near Circuit House, Sambalpur by Odisha Pollution Control Board.
21. The major issues raised during the Public Hearing were regarding employment, environmental pollution, education & sports, health care facilities, CSR activities, etc. Company has allocated ` 30.612 Crores for implementation of the commitments made during Public Hearing, as per OM dated 30<sup>th</sup> Sept. 2020 & 20<sup>th</sup> Oct. 2020.
22. The project proponent has clarified that the project is not located within Severely Polluted Area (SPA) of IB valley and distance of Hirakud FRP unit is 16.5 KM away from the nearest CPIC area.
23. The project proponent along with the consultant **M/s J.M. Enviro Net Pvt. Ltd., Haryana** made a detailed presentation on the proposal.

Considering the information furnished and the presentation made by the consultant, **M/s J.M. Enviro Net Pvt. Ltd., Haryana** along with the project proponent, the SEAC recommended for grant of Environmental Clearance valid for 10 years with stipulated conditions as per **Annexure – B** with following specific conditions:

- i) Dross generation and Utilization plan for its complete and safe management.
- ii) Must have provision of 5 percent of solar power of the total demand of 55,000KVA.
- iii) This EC is recommended without prejudice to the fact that the operation of this unit without EC since order of the Hon'ble NGT dated 12/2/2020 shall be dealt with as will be decided by MOEF & CC and / or Hon'ble NGT or any other appropriate authority or court of law in the matter as to the requirement of EC or not for such units.

## **ITEM NO. 07**

### **PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S SGS MINES & INDUSTRIES PVT. LTD. FOR KUDUBADI PAHAD DECORATIVE STONE DEPOSIT OVER 38.077 HA IN VILLAGE - KUDUBADI PAHAD, TAHASIL – DASPALLA, DISTRICT – NAYAGARH, ODISHA OF SRI. AKASH AGARWAL (MANAGING DIRECTOR) - TOR**

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. M/s SGS Mines & Industries Pvt. Ltd. has applied for “Terms of Reference (ToR)” for Kudubadi Pahad Decorative Stone Deposit over 38.077 ha located in village - Kudubadi Pahad, Tahasil – Daspalla, District – Nayagarh, Odisha of Sri. Akash Agarwal (Managing Director).
3. The proposed project as per EIA Notification dated 14th Sept., 2006 and subsequent amendments, falls under Category “B”, Project or Activity 1(a).
4. The letter 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 for a period of 30 years w.e.f. execution of the Mining Lease. Total lease area of 38.77 ha is non-forest Govt. waste land of Parvat Kissam.
5. 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.
6. **Location and Connectivity** - The Kudubadi Pahad Decorative Stone Deposit is located in the village Kudubadi Pahad in Daspalla Tahasil of Nayagarh District of Odisha State. The area is featured in topo sheet no - F45 S/11 within latitude N 20° 19’ 26.60” to N 20° 19’ 48.30”and longitude E 84° 36’ 33.50” to E 84° 37’ 30.00”. The mine could be approach from Daspalla following Daspalla –Nayagarh NH Road, Kudubadi Pahad village at a distance of 9.0 km from NH-57. The nearest railway station is Nayagarh which is at a distance of 60 km from the Applied M.L. area.
7. **Method Of Mining** - As estimated the total geological reserve is about 93, 63, 773.12 cum, out of which 47, 99, 184.00 cum have been considered as mineable reserves. Opencast 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. Overall pit slope will be 450. Excavation & separation of decorative stone is done in two phases. One is removal of stone from the quarry face; it is the main block cutting stage. The second phase is splitting-sizing-shaping; this stage consists of cuttings & splitting of stone blocks as per the required size. Manual labors with hydraulic excavators will also be deployed for segregating the waste material from the useful blocks. There will be no other process of beneficiation of the Stone.
8. **Total Reserves & Production** - As per the estimation the geological reserve is found to be 93, 63, 773.12 m<sup>3</sup> & Mineable reserve for decorative stone is found to be 47, 99, 184 m<sup>3</sup>. The details of the proposed production during the plan are given below the table,

**Table No.1.1 Details of the proposed production during the Plan Period**

Year	Total volume of Rock	Volume of Marketable Ore (32%)	Volume of Blocks (80%)	Volume of Non-Saleable Blocks (20%)	Volume of Waste (68%)
	<sup>3</sup> (m )	<sup>3</sup> (m )	<sup>3</sup> (m )	<sup>3</sup> (m )	<sup>3</sup> (m )

Proceedings of the SEAC meeting held on 20.04.2022

Environmental Scientist, SEAC



Year	Total volume of Rock	Volume of Marketable Ore (32%)	Volume of Blocks (80%)	Volume of Non-Saleable Blocks (20%)	Volume of Waste (68%)
	<sup>3</sup> (m )	<sup>3</sup> (m )	<sup>3</sup> (m )	<sup>3</sup> (m )	<sup>3</sup> (m )
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
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>

9. **Waste generation and utilization** - Rock waste in the area is classified here as weathered rocks on the top of the rock mass, intermediate waste (which is removed from the rock mass available for decorative stone) and intercalated waste (which is removed during the recovery of blocks). These waste rocks are removed from the quarry in the form of off-standard blocks (granite stones of irregular size, blocks with cracks, fissures, joints etc. The volume of waste to be generated during the plan period will be 63750 cum. About 40% of generated waste i.e. 25500 m<sup>3</sup> of waste will be utilized for construction and maintenance of roads and remaining 38250 m<sup>3</sup> of waste will be dumped in the proposed temporary waste dump in the earmarked site .
10. **Green Belt** - There will be proposed for green belt development over an area of 2.310 Ha in and along the periphery of the quarry lease area of during the plan period by 760 nos. of saplings for rehabilitation.
11. **Water Requirement** - 10 m<sup>3</sup>/day (5m<sup>3</sup> for dust suppression, 3m<sup>3</sup> for Plantation & 2m<sup>3</sup> for drinking purpose). As the requirement of water is not so huge, the mine will draw water as per suitability in accordance to the existing guidelines.
12. **Power Requirement** - Power Requirement will be met through DG sets.
13. **Employment Potential** - The mining activity will generate employment for 20nos of from which 17nos under skilled worker, unskilled worker & 3nos managerial staffs.
14. **Baseline Data Collection** - Since the base line data should not be generated during the monsoon season, So, the data generation for pre-monsoon season has already been started from the 1st week of Mar' 2022.
15. The project cost is ` 200 lakhs. and a budget of 10.0 lakhs is proposed as EMP cost for the lease area. As per the norms, Lessee will spend towards CSR activities for the peripheral development towards education, Health check up camp and maintenance of roads etc.
16. The Environment consultant **M/s Srushti Seva Pvt. Ltd., Nagpur** along with the proponent has 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 Srushti Seva Pvt. Ltd., Nagpur**, the SEAC prescribed the following specific ToRs in addition to standard ToRs as per **Annexure-C** for mining project for conducting detailed EIA study.

Proceedings of the SEAC meeting held on 20.04.2022

**Environmental Scientist, SEAC**

- (i) Certificate from the concerned Tahasildar about the geo coordinates and other mines located within 500 meter from the periphery of the lease boundary.
- (ii) Distance of the nearest habitation / village (s) etc. from the lease boundary duly certified by the concerned Tahasildar.
- (iii) Details of waste management i.e., quantity to be used, stored and the waste composition.
- (iv) NOC from concerned competent authority for usage of road for transportation of minerals.
- (v) Plantation on both sides of approach road and its maintenance.
- (vi) Zero discharge from lease area to be maintained.
- (vii) In case village / any habitation is very nearby, plan to ensure safety of human life and livestock from accidents be submitted.
- (viii) Number and type of vehicles to be engaged per day and their frequency of plying.
- (ix) Certificate from the concerned DFO / Tahasildar that there is no DLC land involved in lease area. Distance of the mines from the boundary of the Notified Eco-Sensitive Zone / Wildlife Sanctuary if any.
- (x) Certificate from the concerned mining officer that the mine has not operated earlier and this is a new mine.
- (xi) NOC of BDO of Panchayat for usage of haulage road/Panchayat Road.
- (xii) In view of the likely revision of DSR for Nayagarh District in future the details of this Minor Mineral reserve to be ensured in the revised DSR.
- (xiii) Due to non-availability of exploration data, increase in production if any to be complied.

**ITEM NO. 08**

**PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR RAMAPATRAPUT DECORATIVE STONE MINES OVER AN AREA OF 3.680 ACRES OR 1.489 HECATRES AT VILLAGE RAMAPATRAPUT, TAHASIL - BORIGUMMA, DISTRICT - KORAPUT, ODISHA OF SRI PRAMOD KUMAR PANDA - EC**

1. The proposal is for Environmental Clearance for Ramapatraput Decorative Stone Mines over an area of 3.680 Acres or 1.489 Hectares at village Ramapatraput, Tahasil - Borigumma, District - Koraput, Odisha of Sri Pramod Kumar Panda.
2. The proposed project as per EIA Notification dated 14th Sept., 2006 and subsequent amendments, falls under Category "B2", Project or Activity 1(a).
3. The licensee has filed an application for the grant of mining lease over the same area of 1.489 hacters or 3.68 Acres. Based on the M. L. application made by the applicant, Department of Steel & Mines, Govt of Odisha have conditionally granted the mines for 20 years & issued the terms & conditions letter, vide letter no.1472/SM-MC2-MC-00032020 S & M, Bhubaneswar, Dt-08.02.2021 with condition obtaining Statutory Clearances including Environmental clearance within 6 months period .
4. The period of obtaining statutory clearances further extended for up to 8.8.2022.
5. The Mining Plan has been approved by the Joint Director of Mines, Directorate of Mines, Bhubaneswar, Odisha under section 2 of Rule 28 (4) of OMMC, 2016 as per clause 5.

Proceedings of the SEAC meeting held on 20.04.2022

**Environmental Scientist, SEAC**

6. **Location and Connectivity** - The lease area under reference featured in the Survey of India Topo sheet no. E44E12 is on Khata No 113; Plot No.215. The geo coordinates of the lease area is 19° 04' 36.60"N - 19° 04' 41.20"N and longitude 82° 41'55.00"E to 82° 41' 59.40"E. There is no forest land in the M.L. area. The entire area falls in waste land under the revenue class of "Pahada" of Abada Ajogya Anabadi category. Nearest Highway/ State Highway – SH -48 at 14.40 km and NH-26 at 16.20km. Nearest railway Station - Maligur at 15.0km. Nearest Major habitation at 0.50km Rampatpur. Nearest River is Indravati at 12km. The M.L. area under reference represents a hilly terrain with a small hillock. The highest and lowest elevations of the area are 599 mRL in the north-western part and 594 mRL in the south-eastern part of the M.L area respectively. The nearest airport is Bhubaneswar at a distance of 352 Km. All types of infrastructure facilities such as water, electricity, education etc. are available at Gumuda within a distance of 3.28Km.
7. **Method Of Mining** - The Rampatraput Decorative Stone Quarry is a Semi mechanized Opencast stone quarry project from which the decorative stone i.e. Charnockite will be excavated. The method of mining is Semi mechanized Opencast mining method and for transportation of minerals Hyva -Tipper shall be engaged. Total working days are 300 days in a year. The excavated Decorative Stone will be sold in domestic market for construction purposes. Total ROM excavated during the proposed Plan period = 5258.00m<sup>3</sup>. Maximum Production capacity 217 cum/annum with opencast semi-mechanized mining method with stripping ratio 1:026. The ultimate extent and size of the quarry will be 120m x100m. Ultimate pit slope at the time of closure of mine will be around 45°
8. **Life of Mine** - Considering the production of Charnockite@ 218.00Cum (Average) per annum Then the life of the mine will be = 24601.00/ 218.00=112 years.
9. **Employment Potential** - 22 nos. of person are to be employed which is of administrative, technical persons, supervisory staffs, skilled and un-skilled workmen to carry out the mining and allied activities.
10. **Water Requirement** - The total water requirement is 5KLD from Govt. water supply through water tanker for different purposes like Domestic, Dust suppression, Mining & Plantation purposes.
11. **Power Requirement** - No electricity connection within ML area. However solar lights will be employed for day to day living purposes. Diesel requirement will be 6000 l/month.
12. **Green Belt** - During Plan Period total 0.836 ha will be degraded; hence it is proposed to plant 900 nos. of saplings during plan period over an area of 0.27 ha.
13. The project cost is Rs 105 Lakhs. EMP Cost is Rs 8.0Lacs. EMP Recurring cost is 7.2 Lakh/Annum. CSR Budget is 8.60 lakh/Annum.
14. The project proponent has made a presentation on the proposal before the Committee.

Considering the information / documents furnished by the proponent, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent.

- i) Dump management with detail calculations of waste utilization / inventory / sale including its chemical composition and safety management of dump to avoid slope failure of dump.
- ii) Water management with details of rain water harvesting, its design & calculation along with zero discharge plan be submitted.

- iii) Silt management including procedure for silt management for de-silting of surrounding water body(s) / Agricultural land be submitted.
- iv) Reduction in cutting of tress and promote transplantation of tress on safety zone.
- v) NOC from the concerned BDO for use of Panchayat/ village road for transportation of minerals.
- vi) Certificate from the concerned Mining Officer that there is no other decorative mines within 500 meters from the boundary of the lease area.
- vii) Certificate from the concerned DFO that there is no DLC land involved in the lease area.
- viii) In view of the likely revision of DSR for Koraput District in future the details of this Minor Mineral reserve to be ensured in the revised DSR.
- ix) Due to non-availability of exploration data, increase in production if any to be complied.

### **ITEM NO. 09**

#### **PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR PODAPODAR DECORATIVE STONE MINES OVER AN AREA OF 10.20 ACRES OR 4.128 HECTARES AT VILLAGE - PODAPODAR, TAHASIL - BORIGUMMA, DISTRICT-KORAPUT, ODISHA OF SRI PRAMOD KUMAR PANDA - EC**

1. The proposal is for Environmental Clearance for Podapodar Decorative Stone Mines over an area of 10.20 Acres or 4.128 Hectares at village - Podapodar, Tahasil - Borigumma, District-Koraput, Odisha of Sri Pramod Kumar Panda.
2. The proposed project as per EIA Notification dated 14th Sept., 2006 and subsequent amendments, falls under Category "B2", Project or Activity 1(a).
3. Prospecting License was granted in favor of Sri Pramod Ku Panda, Sriram Colony, first line, Parabada, Jeypore, Koraput, Odisha-764001 vide letter No 2826 dated 18.02.2016 and PL deed executed on 21st May, 2016.
4. Based on prospecting report the mining lease was LOI issued in favour of Sri Pramod Ku Panda for a period of 20 years by Dept. of Steel & Mines vide letter no. 1476/SM-MC2-MC-0003-2020 S & M, Bhubaneswar, Dt. 08. 02. 2021 with condition obtaining Statutory Clearances including Environmental clearance within 6 months period.
5. Further a period of six months has been extended vide letter no. 1476/SM-MC2-MC-0004-2021 S & M, Bhubaneswar, Dt. 25. 11. 2021.
6. The Mining Plan along with PMCP has been approved by the Addl. Director of Mines, Office of Directorate of Mines, Bhubaneswar, Odisha under section 2 of Rule 28 (4) of OMMC, 2016 as per clause 5 on 08.12.2021
7. **Location and Connectivity** - The mining lease area comes under the Survey of Indian Topo sheet No. E44 E12. It is bounded by the latitude N 19<sup>0</sup>04' 59.9" to N 19<sup>0</sup> 05' 19.2" and longitude E 82<sup>0</sup> 41'23.3" to E82<sup>0</sup> 41' 29.5". There is no forest land in the M.L. area. The entire area falls in waste land under the revenue class of "Pahada" of Abada Ajogya Anabadi category. Nearest Highway/ State Highway – SH - 48 at 14.84 km and NH-26 at 15.06km. Nearest railway Station - Maligur at 15.3km. Nearest Major habitation at 0.71km Podapadar. Nearest River is Indravati at 13km. The M.L. area under reference represents a hilly terrain with a small hillock. The highest and lowest elevations of the area are 606 mRL in the north-western part and 594 mRL in the south-eastern part of the M.L area respectively. The nearest airport is Bhubaneswar at a

distance of 353 Km. All types of infrastructure facilities such as water, electricity, education etc. are available at Gumuda within a distance of 4.4Km.

8. **Method Of Mining** - The Podapodar Decorative Stone Quarry is a Semi mechanized Opencast stone quarry project from which the decorative stone i.e. Charnockite will be excavated. The method of mining is Semi mechanized Open cast mining method and for transportation of minerals Hyva -Tipper shall be engaged. Total working days are 300 days in a year. The excavated Decorative Stone will be sold in domestic market for construction purposes. Total mineable quantity in the M.L. area = 69832.00cum. Total ROM excavated during the proposed Plan period = 13550.00 m<sup>3</sup>. Maximum Production capacity 600 cum/annum with opencast semi-mechanized mining method with stripping ratio 1:4. The ultimate extent and size of the quarry will be 520m x48m. Ultimate pit slope at the time of closure of mine will be around 45<sup>0</sup>
9. **Life of Mine** - Considering the production of Charnockite @ 600.00Cum (Average) per annum Then the life of the mine will be = 69832.00/600= 116 years.
10. **Employment Potential** - 22 nos. of person are to be employed which is of administrative, technical persons, supervisory staffs, skilled and un-skilled workmen to carry out the mining and allied activities.
11. **Water Requirement** - The total water requirement is 9KLD from Govt. water supply through water tanker for different purposes like Domestic, Dust suppression, Mining & Plantation purposes.
12. **Power Requirement** - No electric power shall be required for operations as the equipments to be used in mining will be operated by Diesel and operation will be done in day time only. Minimal power required for lighting during night time. It is estimated 100 KVA of electricity shall be required for same purpose and shall be taken from the State Grid. Necessary permission shall be taken after commencement of the project. Diesel will be used for running of equipments during mining operation. It is estimated that 1 KLD of diesel will be required and same shall be procured from local pump station.
13. **Green Belt** - During Plan Period total 1.988 ha will be degraded; hence it is proposed to plant 1500 nos. of saplings during plan period over an area of 0.66 ha.
14. The project cost is Rs 120 Lakhs. EMP Cost is Rs 8.0Lacs. EMP Recurring cost is 7.2 Lakh/Annum. CSR Budget is 8.60 lakh/Annum.
15. The project proponent has made a presentation on the proposal before the Committee.

Considering the information / documents furnished by the proponent, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent.

- i) Dump management with detail calculations of waste utilization / inventory / sale including its chemical composition and safety management of dump to avoid slope failure of dump.
- ii) Water management with details of rain water harvesting, its design & calculation along with zero discharge plan be submitted.
- iii) Silt management including procedure for silt management for de-silting of surrounding water body(s) / Agricultural land be submitted.
- iv) Reduction in cutting of tress and promote transplantation of tress on safety zone.
- v) NOC from the concerned BDO for use of Panchayat/ village road for transportation of minerals.
- vi) Certificate from the concerned Mining Officer that there is no other decorative mines within 500 meters from the boundary of the lease area.
- vii) Certificate from the concerned DFO that there is no DLC land involved in the lease area.

- viii) In view of the likely revision of DSR for Koraput District in future the details of this Minor Mineral reserve to be ensured in the revised DSR.
- ix) Due to non-availability of exploration data, increase in production if any to be complied.

  
Secretary, SEAC

Approved  
  
Chairman, SEAC

## ANNEXURE-A

**TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT FOR PROPOSED EXPANSION OF RESIDENTIAL CUM COMMERCIAL COMPLEX 'MANI TRIBHUVAN' (FORMERLY KNOWN AS "MANI TIRUMALA") AT MOUZA-KALARAHANGA, PS CHANDRASEKHARPUR, NANDAN KANAN ROAD, DIST- KHORDHA OVER TOTAL BUILTUP AREA OF 1,46,550.86M<sup>2</sup> (EXISTING: 76050.80 + PROPOSED EXPANSION: 70500.06 M<sup>2</sup>) – SUBMITTED UNDER VIOLATION CASE. (TOR).**

---

1. Project description, its importance and the benefits,
2. Project site details (location, toposheet of the study area of 10 km, coordinates, google map, layout map, land use, geological features and geo-hydrological status of the study area, drainage),
3. Land use as per the approved Master Plan of the area, Permission/approvals required from the land owning agencies, Development Authorities, Local Body, Water Supply & Sewerage Board, etc,
4. Land acquisition status, R&R details,
5. Forest and Wildlife and eco-sensitive zones, if any in the study area of 10 km - Clearances required under the Forest (Conservation) Act, 1980, the Wildlife (Protection) Act, 1972 and/or the Environment (Protection) Act, 1986,
6. Baseline environmental study for ambient air (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub> & CO), water (both surface and ground), noise and soil for one month (except monsoon period) as per MoEF&CC/CPCB guidelines at minimum 5 locations in the study area of 10 km,
7. Details on flora and fauna and socio-economic aspects in the study area
8. Likely impact of the project on the environmental parameters (ambient air, surface and ground water, land, flora and fauna and socio-economic, etc),
9. Source of water for different identified purposes with the permissions required from the concerned authorities, both for surface water and the ground water (by CGWA) as the case may be, Rain water harvesting, etc,
10. Waste water management (treatment, reuse and disposal) for the project and also the study area,
11. Management of solid waste and the construction & demolition waste for the project vis-a-vis the Solid Waste Management Rules, 2016 and the Construction & Demolition Rules, 2016,
12. Energy efficient measures (LED lights, solar power, etc.) during construction as well as during operational phase of the project,

Environmental Scientist, SEAC

13. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
14. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
15. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.
16. **The prescribed TOR would be valid for a period of four years for submission of the EIA/EMP report.**



**CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE OF M/S. HINDALCO INDUSTRIES LTD. FOR PROPOSED EXPANSION OF EXISTING FRP PLANT FROM 1.35 LAC TPA [HOT ROLLED COIL (HRC) & COLD ROLLED COIL (CRC)] TO 5.85 LAC TPA HOT ROLLED COIL (HRC) INCLUDING EXISTING 1.35 LAC TPA COLD ROLLED COIL (CRC) AT VILLAGES - JAMDA AND JAMDA (NIMPALI), TAHASIL - HIRAKUD, DISTRICT SAMBALPUR (ODISHA) OF SRI. SURAJIT MITRA (ASST. VICE PRESIDENT & UNIT HEAD HIRAKUD FRP)**

---

**I. Statutory compliance:**

- i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii) The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v) The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi) The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- vii) The proponent shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of project report.
- viii) All the compliances submitted/ committed by PP (s) shall be strictly adhered to by them

**II. Air quality monitoring and preservation**

- i) The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission and connect to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii) The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

- iii) The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)
- iv) The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality I fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v) Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources.
- vi) The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii) Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii) Recycle and reuse of collected material from pollution control devices and vacuum cleaning devices in the process.
- ix) The project proponent shall use leak proof trucks / dumpers carrying coal and other raw materials and cover them with tarpaulin.
- x) The project proponent shall provide covered sheds for raw materials.
- xi) The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
- xii) Design the ventilation system for adequate air changes at the melting furnaces.

### **III. Water quality monitoring and preservation**

- i) The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and connect to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii) The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii) The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

- iv) Adhere to 'Zero Liquid Discharge'.
- v) Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi) The project proponent shall provide the ETP for effluents.
- vii) Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
- viii) The project proponent shall practice rainwater harvesting to maximum possible extent.
- ix) The project proponent shall make efforts to minimize water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.

#### **IV. Noise monitoring and prevention**

- i) Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to SEIAA, Odisha and Regional Office of the Ministry as a part of six-monthly compliance report.
- ii) The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB (A) during day time and 70 dB(A) during night time.

#### **V. Energy Conservation measures**

- i) The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of melting furnaces.
- ii) Provide solar power generation on rooftops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- iii) Provide the project proponent for LED lights in their offices and residential areas.

#### **VI. Waste management**

- i) Used refractories shall be recycled as far as possible.
- ii) Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces
- iii) 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the SEIAA, Odisha and Ministry's Regional Office.
- iv) The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- v) Kitchen waste shall be composted or converted to biogas for further use (to be decided on case to case basis depending on type and size of plant)

## **VII. Green Belt**

- i) Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii) The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

## **VIII. Public hearing and Human health issues**

- i) Emergency preparedness plan based on the Hazard identification and Risk
- ii) Assessment (HIRA) and Disaster Management Plan shall be implemented.
- iii) The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iv) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- v) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

## **IX. Corporate Environment Responsibility**

- i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental/forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the SEIAA, Odisha and MoEF&CC, Govt. of India as a part of six-monthly report.
- iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the SEIAA,

Odisha and Regional Office of Ministry along with the Six Monthly Compliance Report.

- v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi) All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plants shall be implemented.

#### **X. Miscellaneous**

- i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv) The project proponent shall monitor the criteria pollutants level namely; PM10, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi) The project proponent shall submit the environmental statement for each financial year in Form- V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii) The project proponent shall inform the SEIAA, Odisha and Regional Office of the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the State Level Expert Appraisal Committee.
- x) No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA, Odisha.

- xi) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii) The SEIAA, Odisha may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii) The SEIAA, Odisha reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv) The Regional Office of MOEF&CC, Govt. of India shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

**TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY AND INFORMATION TO BE INCLUDED IN THE EIA/EMP REPORT FOR M/S SGS MINES & INDUSTRIES PVT. LTD. FOR KUDUBADI PAHAD DECORATIVE STONE DEPOSIT OVER 38.077 HA IN VILLAGE - KUDUBADI PAHAD, TAHASIL – DASPALLA, DISTRICT – NAYAGARH, ODISHA OF SRI. AKASH AGARWAL (MANAGING DIRECTOR) - TOR**

---

1. Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
2. A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
3. All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
4. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/Topo sheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
5. Information should be provided in Survey of India Topo sheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
6. Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
7. It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.
8. Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
9. The study area will comprise of 10 km zone around the mine lease from lease

**Environmental Scientist, SEAC**

periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.

10. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
11. Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
12. A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
13. Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
14. Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
15. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
16. A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
17. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
18. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found

**Environmental Scientist, SEAC**



in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.

19. Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
20. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
21. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
22. One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season) ; December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
23. Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
24. The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.

**Environmental Scientist, SEAC**

25. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
26. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
27. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
28. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
29. Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
30. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.
31. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
32. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
33. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
34. Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.

**Environmental Scientist, SEAC**

35. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
36. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
37. Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
38. Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
39. Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
40. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
41. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
42. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
43. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
44. Besides the above, the below mentioned general points are also to be followed
  - a) All documents to be properly referenced with index and continuous page numbering.
  - b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
  - c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.
  - d) Where the documents provided are in a language other than English, an English translation should be provided.
  - e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
  - f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.

**Environmental Scientist, SEAC**

- g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
  - h) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
  - i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.
45. **The prescribed TOR would be valid for a period of four years for submission of the EIA/EMP report.**

**Environmental Scientist, SEAC**