PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, ODISHA HELD ON 10TH JUNE 2024

The SEAC met on 10th June 2024 at 10:30 AM in the Conference Hall of Odisha State Pollution Control Board, Bhubaneswar under the Chairmanship of Sri Sashi Paul. The following members were present in the meeting.

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

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

ITEM NO. 01

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S ILIYAS GRANITES FOR BHAGABANPUR DECORATIVE STONE MINES OVER AN AREA 21.578 HA. OR 53.32ACRES IN VILLAGE - BHAGABANPUR UNDER TAHASIL - KUKUDAHANDI OF GANJAM DISTRICT OF SRI MOHAMMED IRFAN RAZZAK - 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 EIA Notification,2006 and amendment thereafter.
2. This proposal is for Terms of Reference for EIA study for M/s Iliyas Granites for Bhagabanpur Decorative Stone Mines over an area 21.578 Ha. or 53.32Acres in Village - Bhagabanpur under Tahasil - Kukudahandi of Ganjam District of Sri Mohammed Irfan Razzak.
3. **Category:** As per EIA Notification, 14th September 2006 followed by subsequent amendments, the proposed project falls under Category B1 – Item no. 1 (a) – Mining of Minerals (Minor mineral >5.0 Ha.).
4. Mining lease of Bhagabanpur Decorative Stone Mines over an area of 21.578 hectares in Village - Bhagabanpur under Tahasil - Kukudahandi of Ganjam District, Odisha has been granted for a period of 30 years vide Letter No - 11984, dated 22.12.2022, in favour of M/s Iliyas Granites.

5. The Mining Plan along was approved by Director of Mines and Geology, Steel & Mines Department, Govt. of Odisha, Bhubaneswar MXXII-(b)-04/2023/7869/ DoMG on dated 09.06.2023 for a period of five years.

6. This is a new mine and there are other 5 no. of mines located within 500radius of the proposed lease area. All the five mines of the cluster has obtained environment Clearance from SEIAA, Odisha.

Sl No.	Name of the Mine	Area (in Ha.)	Status of EC
1	Bhagabanpur Decorative Stone	40.198	EC granted vide letter no: 8001/SEIAA dated. 20.03.2020
2	Bhagabanpur Decorative Stone	17.547	EC Identification No: EC22B001OR125277 dated 07.04.2022
3	Bhagabanpur Decorative Stone	24.225	EC granted vide letter no: 774/SEIAA Dated 09.03.2021
4	Bhagabanpur Decorative Stone	7.547	EC granted vide letter no: 3342/SEIAA Dated 24.07.2017
5	Bhagabanpur Decorative Stone	31.808	EC Identification No: EC22B001OR151903 dated 13.04.2022

7. The Lease Area is 21.578 Ha. or 53.62Acres and the proposed project site is a non-forest waste land (Abada Ajogya Anabadi).

8. **The sairat source is in process of inclusion in approved DSR.**

9. **Location and connectivity**: The proposed project is situated at Village-Bhagabanpur, Tahasil-Kukudahandi, District-Ganjam, Odisha-State. The site falls under Toposheet No. E45A11. The geographical co-ordinates are Latitude - $19^0$20'04.10"N to $19^0$20'24.50"N & Longitude - $84^0$43'15.70"E to $84^0$43'33.10"E. The highest altitude at 260mRL & the lowest altitude at 145mRL are available in the area. The nearest Highway is SH 29 at 2.40 Km & NH 59 at 4.90 Km. Nearest Railway Station - Berhampur Railway Station: 9.0 Km, Nearest Air Port - Rangeilunda Airport: 17Km, Intersect Boundaries of Odisha – Andhra Pradesh at 20.0 Km, Nearest River - Ghoda River - 12.30Km, Nearest Canal - Ichhapuram Canal at 1.15Km, Nearest Reserve Forest - Ramguda Reserve Forest at 1.40Km, Nearest Sanctuary - Lakhari valley Wild life at 30.50Km, Ghodahada Dam-30.50km, Army Air Defence Centre at 19.60Km, Nearest City – Berhampur 9km.

10. **Total reserves and production**:

Geological Reserve of Rock mass:	127,09,060 m^3
Geological Reserve of Decorative stone:	37,85,807 m^3
Mineable reserve of Rock Mass:	78,15,908 m^3
Mineable reserve of Decorative Stone:	23,44,772 m^3
Proposed Production of Rock Mass:	20020 m^3
Proposed production of Decorative stone:	6006 m^3

11. **Production Plan:**

Year	Total Volume of excavation (m^3)	Volume of waste / rejects @ 70% (m^3)	Volume of Decorative Stone (Block & Khanda) @ 30% (m^3)
1st Year	20020	14014	6006
2ndYear	20020	14014	6006
3rd Year	20020	14014	6006

Year	Total Volume of excavation (m^3)	Volume of waste / rejects @ 70% (m^3)	Volume of Decorative Stone (Block & Khanda) @ 30% (m^3)
4th Year	20020	14014	6006
5th Year	20020	14014	6006
Total	1,00,100	70,070	30,030

12. **Method of Mining**: Opencast and semi mechanized method with the deployment of machines like jack hammer drill, compressor, hydraulic excavators & tippers. Blasting is not required for the production of blocks. Decorative stone will be detached from the country rock by using wire saw cutting. The drilling will be done in a regular pattern with a maximum depth of 3m. Removal of waste materials, block cutting, dressing, splitting, loading & transportation of blocks and waste disposal. Width and height of the bench will be 6m x 6m. Ultimate depth of mining will be 146 mRL.

13. **Transportation**: The loaded vehicles will travel 900m of haulage road to meet the Maa Mahuri Kalua road. Maa Mahuri Kalua road is directly connected to the SH-17 at a distance of 4.25km. The trucks will travel a total distance of 5.15km from the lease area to meet the SH-17.

14. **Waste generation and management**: During the proposed plan period, a total of 70070 m^3 of waste or 84084m^3 swollen (swell factor of 1.2) will be generated due to course of mining. Out of all waste, 80% of the waste /rejects i.e. 56,056m^3 will be utilized for maintenance and construction of the haul road, approach and existing roads in the surrounding areas periodically. The remaining wastes i.e. 14,014m^3 will be confined to be dumped temporarily on the demarcated area nearer to the southern boundary in the M.L. area over 0.493 hectares at an average of 3m height maintaining the overall slope of the dump at 220.

15. **Baseline Study Monitoring:** The Baseline Study has been conducted in the period March to May 2024.

16. **Water requirement**: Total water requirement for the project will be 5.2 KLD out of which 1.2KLD will be required for drinking and domestic purpose and 2 KLD for plantation and 2 KLD for dust suppression purpose. It is proposed to tap this quantity of water as per suitability.

17. **Power requirement**: No electricity connection within ML area. However solar lights will be employed for day today living purposes. Diesel requirement of 6000litters/month for operation of mining equipment and DG sets.

18. **Greenbelt**: They have proposed for green belt development of 3000 nos. saplings over an area of 1.642 Ha. along the periphery of the quarry lease area during the plan period.

19. **Manpower requirement**: Administrative & supervisory personal will be 5 nos. and 7 nos. of skilled, 24nos. of semi-skilled and 2 nos. of unskilled category will be employed under skilled, semi-skilled & un-skilled in the mine.

20. **Project cost**: The total project cost of the mining is 400 Lakhs. The capital cost of EMP will be 40 Lakhs.

21. **Environment Consultant**: The Environment consultant **M/s Kalyani Laboratories Private Limited, Bhubaneswar** along with the proponent made a presentation on the proposal before the Committee.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Kalyani Laboratories Private Limited, Bhubaneswar,** the SEAC prescribed the following specific ToRs in addition to standard ToRs as per **Annexure – A** for conducting detailed EIA study.

a) Submit the supporting documents/ DSR documents supporting the fact that the present lease has recently identified and was not included in the cluster of other 5 nearby mines previously with proper justification.

b) Submit the approved DSR after inclusion of the present sairat source in it.

c) Revised KML file showing all 5 nearby mines in cluster.

d) Submit a report from the Steel and Mines Deptt. regarding the total mineralized area in that region.

e) Submit waste disposal management system and its re-utilization process adopted.

f) Submit traffic study report vetted by Institute of repute.

g) For withdrawal of water through rain water harvesting system, a pit to be dug-out at the lowest elevation point and to be used for rain water storage. Submit a detail proposal for Rain Harvesting Method.

h) Certificate from concerned DFO that there is no involvement of Forest land.

ITEM NO. 02

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR BAITARINI SAND BED, GOVINDAPUR OVER AN AREA OF 5.26 HA. IN BAITARANI RIVER AT VILLAGE GOVINDAPUR UNDER HATADIHI TAHASIL, OF KEONJHAR DISTRICT OF SRI GAJENDRA KUMAR SAHOO - EC

1. This proposal is for Environmental Clearance for Baitarini Sand Bed, Govindapur over an area of 5.26 Ha. In Baitarani River at village Govindapur under Hatadihi Tahasil, of Keonjhar District of Sri Gajendra Kumar Sahoo.
2. **Category**: As per EIA Notification,2006 and its subsequent amendments, the proposed project falls under Category B1 under Item 1(a) - Mining of Minerals.
3. The lease is granted (Successful Bidder) in the name of Sri Gajendra Kumar Sahoo for a lease period of 5 (five) years vide letter. no. 6410 dtd 29.09.2020.
4. The Mining plan has been approved for a period of five years by the Joint Director of Geology, Keonjhar. Vide letter no – 2406/CZ, on dated 30.07.2020 in favour of Tahsildar, Hatadihi.
5. **TOR details**: Terms of Reference (ToR) was issued by SEIAA, Odisha on dated 27.12.2021.
6. **Public hearing details**: Public hearing was conducted on 22.09.2023 at 11.00 AM. Issues raised were: plantation to be carried out in haulage roads and on free places within govt. land, maintenance of village roads, safe transportation of minerals, local employment, development of peripheral village etc. and budget assigned is Rs. 12.60lakhs.
7. **Location and connectivity**: The lease area under reference featured in the Survey of India Toposheet no.73K/4 is on Khata No. 156, Plot No.494/1, Kissam - Nadi. The geo coordinates of the lease area is 21°03'25.86"N 86°12'28.25"E to 21°03'24.79"N 86°12'29.90" E. The Lease

area is accessible from Govindapur village road at a distance of 1.0 km, which is well connected to Dhakota Chhaka and then Highways. The nearest railway station is Sagadapata at distance 28 km from the lease area. The area is located 75km from District Headquarters Keonjhar and 190 Km from State Capital Bhubaneswar. Nearest railway station is at Dulakha Patana PH Railway Station at a distance of 6.20Km. Nearest Airport is Bhubaneswar Airport which is at a distance of 195.1 Km.

8. **Reserves and production**: As estimated, geological reserve of sand is 1,05,200cum and mineable reserve is 54,855cum. During the plan period, a total of 54,855cum sand will be extracted.

9. **Replenishment study details**: The Study was carried out by using UAV/ Drone method as per the SSMG, 2020 guidelines. The pre-monsoon data was conducted on 10.06.2023 and post monsoon data on 28.11.2023. As, per the calculation, 3,033m^3 sand has been replenished with an average thickness of 0.16 m.

10. **Baseline study details**: Baseline data carried out for Ambient Air Quality (AAQ) during period March 2022 to May 2022. **Ambient Air Quality results** - The PM_{10} ranges within 47-62 µg/m^3, $PM_{2.5}$ ranges within 25-47 µg/m^3, SO_2 ranges within 4.8-6.1 µg/m^3 & NO_x ranges within 9.6- 13.0 µg/m^3. **In noise levels results** – In residential areas daytime noise levels varied from 39 dB (A) to 52 dB (A) and night time noise levels varied from 30 dB (A) to 43 dB (A) across the sampling stations. The field observations during the study period indicate that the ambient noise levels are well within the prescribed limit by CPCB (55 dB (A) Day time & 45 dB (A) Nighttime). **Surface Water results** - The pH value ranges from 6.9 to 7.1 and within the limits (6.5-8.5) of IS 2296:1992. The sulphate content in the collected surface water ranges 3.2 mg/l to 4.8 mg/l. The chloride content in the collected surface water sample ranges from 9.5 mg/l to 10.0 mg/l. DO of the collected surface water sample ranges from 6.2 mg/l to 7.0 mg/l. BOD of the collected surface water sample ranges from 1.2 mg/l to 1.8 mg/l. **Ground Water results** - The ground water results of the study area indicate that the pH range varies between 6.9 and 7.3. It is observed that the pH range is within the limit of IS 10500:2012.The acceptable limit of the chloride content is 250 mg/l and permissible limit is 1000 mg/l. The chloride content in the ground water for study area ranges between 7.2 mg/l – 10.6 mg/l. It is observed that all are well within the permissible limit of IS 10500:2012.The acceptable limit of the sulphate content is 200 mg/l and permissible limit is 400 mg/l. The sulphate content of the ground water of the study area varies between 2.5 mg/l – 3.2 mg/l. It is observed that all the samples are within the permissible limit of IS 10500: 2012. **Soil Quality Analysis results** - The pH of the soil samples ranged from 6.2 to 7.3. Indicating that the soils are slightly acidic to moderately alkaline in nature, Nitrogen content ranged from 0.07 % to 0.10 %.,Potassium ranged from 0.14 % to 0.18 %.

11. **Mining method:** The open cast manual method and transportation through trucks and tractors. No mining activity will be undertaken during the monsoon season. So, the material will be replenished during the monsoon season every year. The proposed mined out areas will gradually get filled up by river sands transported with water from upstream direction. The mineral extraction will be done for a period of 200days in a year. Dumpers, tractors will be used for transportation.

12. **Waste generation:** There is no waste generation, However small amount of municipal waste will be generated; & disposed off in Municipal bins.
13. **Water requirement**: Water requirement for the project is 1.0 KLD for domestic, plantation & dust suppression which will be sourced from village Panchayat and nearby sources. Domestic Waste water will be disposed through septic tank. Will be cleaned in periodically.
14. **Power requirement**: No electricity is required for operations of the mining, the mining will be worked out during daytime only. The power required for the office is minimal, shall be taken from the General Electric supply of the area. However, if required for lighting in the project area at night power will be sourced from State Grid and for same it is estimate as 1.0 KVA.
15. **Greenbelt development**: About 250 no.of saplings of local species will be planted under the green belt (safety zone) and non-mineralized area for five years.
16. **Manpower requirement**: Total manpower requirement is 18nos. i.e., Supervisory 01 no. of person, Skilled 01no.s of person, Semi- skilled 2no.s & Unskilled labourer 14no.s of people.
17. **Project cost**: Total cost of the proposed project is 80.0 Lakhs. A capital cost of 16.60 lakhs is proposed as EMP cost & 4.25 lakhs/annum as EMP recurring cost. The CSR Budget is Rs.2.0Lakh/Annum.
18. **Environment Consultant**: The Environment consultant **M/s EHS 360 Labs Private Limited, Chennai** along with the proponent made a presentation on the proposal before the Committee.

Considering the information furnished and the presentation made by the consultant, **M/s EHS 360 Labs Private Limited, Chennai** with the project proponent, the SEAC decided to take decision after receipt of the following from the proponent.

a) NOC/Permission from concerned authority for usage of approach road for transportation of sand.

b) Detailed calculation of mineable reserve with layout map showing excluded portion i.e., safety zone and portion of lease covered with water.

c) Submit the pre-monsoon & post-monsoon elevation reading as observed during the drone survey.

d) Submit the RL of the river water surface, direction of the flow of river in the Replenishment Study Report.

e) The Replenishment Study Report submitted had several shortcoming w.r.t surface RL, River water RL and River bank RL is not there, etc, Error in drone survey is high, Revised Replenishment Study Report with inclusion of these data. Revised approved mining plan to be submitted after reconciling the details given in the approved mining plan such as mineable area, RL of the riverbed sand surface, depth of mining etc. needs with those mentioned in the replenishment study report.

f) The mineable reserve calculated in the Mining plan is much higher than mineable reserve calculated in the Replenishment Study Report.

g) The proponent shall submit an undertaking that no Court case is pending w.r.t mining lease, as alleged during public Hearing.

h) Submit the sand DSR approved by Competent Authority highlighting the proposed lease site.

i) Copy of Terms of Reference (TOR) Letter as not found in online documents.

ITEM NO.3

PROPOSAL FOR AMENDMENT OF ENVIRONMENTAL CLEARANCE FOR ORAGHAT IRON AND MANGANESE MINES OVER AN EXTENT OF 25.847 HA. IN KOIRA CIRCLE, DIST. SUNDERGARH OF MR. SYED ABDUL HALIM - MOD EC

1. The proposal is for amendment of Environmental Clearance for Oraghat Iron and Manganese Mines over an extent of 25.847 Ha. in Koira Circle, Dist. Sundergarh of Mr. Syed Abdul Halim.
2. Oraghat Iron & Manganese Mines of M/s S. A. Halim is an on-going mining project since 06.04.1998; under jurisdiction of Koira Forest Range of Bonai Forest Division.
3. Lesse Mr. Sayed Abdul Halim has been granted this Mining Lease for Iron & Manganese Ore in village - Oraghat of Sundargarh District, which was valid for 20 years from 06.04.1998 to 05.04.2018 vide Steel & Mines Department Order No.3/99-9542/SM Dt-1.10.1996.
4. Surface right has been granted by Collector, Sundergarh over 9.53 Ac.
5. The validity of Mining Lease as per present lease deed was upto 05.04.2018, which will be extended to another 30 yrs. i.e. up to 05.04.2048 as per MMDR Amendment Act, 2015.
6. **Location and Connectivity** - The proposed site is bounded by geographical co-ordinates of Latitude - 21° 55' 36. 52458" to 21° 55' 58. 00307" North & Longitude - 85° 18' 29. 06792" to 85 ° 18' 47. 92313" East and comes under Topo-sheet No: F45N5 (73 G/5). The site is approachable from Koira town of Sundergarh District at about 10 Kms and 20 Km from Joda town of Keonjhar District by NH 215. The area exhibits an undulated topography with a maximum elevation of 721 meters and minimum elevation of 645m AMSL. Presently, the mine is non-working due to want of statutory clearances.
7. **Total reserve & production:** The geological reserve of iron & manganese ore is estimated to be about 6,72,600.7 MT & 43,042.5 MT respectively. The present average production of iron & manganese is proposed to be about 72,864 TPA & 7,563 TPA respectively.
8. The Mining Lease area of 25.847 ha. comprises of 5.888 ha. of DLC forest and 19.959 Ha. of non-forest area.
9. The lessee has applied for diversion of 5.888 Ha. of DLC forest land, including 0.562 Ha. of forest land coming under Safety Zone and got "Stage -1 Clearance" on 20.04.2023 vide letter no 5-ORC412/2020-BHU from MOEFCC.
10. The DGPS map of the forest land proposed for diversion of the project has been duly vetted by ORSAC and authenticated by the Divisional Forest Officer, Bonai Forest Division, Bonai.
11. They have paid Rs 42,98,240/- to the DFO, Bonai towards payment of Net Present Value ("NPV") in respect of entire forest area (5.888 ha) vide D.D. no 129969 dt.10.06.2010.
12. They have already obtained the FRA.

13. In Previous EC letter, State Environment Impact Assessment Authority (SEIAA), Odisha has accorded Environmental Clearance for 72864 MTPA Iron ore and 7563 MTPA Manganese ore vide letter No. SEIAA/217/ENV dated 16.04.2011 valid upto 16.04.2016.

14. The Project Proponent has applied for extension of validity of EC on 14.01.2016. The proposal was recommended by SEAC vide SEAC proceedings dt. 24.04.2017.

15. Subsequently, SEIAA decided in its 177th meeting of SEIAA and conveyed vide Letter no-3066/SEIAA dt. 25.05.2017 that the revalidation of the EC up to life of the mines may be considered on submission of stage-1 forest clearance.

16. In the meantime, they have obtained the stage -1 forest clearance vide letter no 5-ORC412/2020-BHU dtd.20.04.2023.

17. The project proponent has requested for extension for validity of Environmental Clearance for a period of 30yrs from the date of issue of the grant.

19. The proponent, Mr. Sayed Abdul Halim made a presentation on the proposal before the Committee.

Considering the information furnished and the presentation made by Mr. Sayed Abdul Halim, project proponent, the SEAC decided to reiterate its earlier recommendations taken in SEAC Meeting held on dated 24.04.2017.

ITEM NO. 04

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S BEEKAY UTKAL STEEL PRIVATE LIMITED FOR GREENFIELD PROJECT FOR PRODUCTION OF 500,000 TPA ROLLED PRODUCTS AT KALINGANAGAR INDUSTRIAL COMPLEX, VILLAGE – JAKHAPURA, TAHASIL – DANAGADI, DISTRICT – JAJPUR OF SRI VIKAS BANSAL - EC

1. This proposal is for Environmental Clearance of M/s. Beekay Utkal Steel Private Limited for Greenfield project for Production of 500,000 TPA Rolled Products at Kalinganagar Industrial complex, Village – Jakhapura, Tehsil – Danagadi, District – Jajpur of Sri Vikas Bansal.

2. **Category:** As per the EIA Notification S.O. 1533, dated 14th September 2006 and subsequent amendments, this proposed project falls under Category B1 in Schedule in Item 3(a) - Metallurgical Industries (ferrous & nonferrous).

3. The **Terms of Reference (TOR)** was granted for the proposed project vide letter no. SIA/OR/IND1/424154/2023 Dated 07.07.2023.

4. **Public Hearing** for the proposed project was held on dtd. 04.10.23, at Danagadi Bhawan, Trijanga. As per guidelines by MoEF&CC, a budget of Rs. 285 lakhs (i.e., 1.5% of the project cost- Rs.190 crores) has been proposed towards issues raised during Public Hearing. The issues were mainly – Employment, Air & water pollution control, Local environment & periphery development, Plantation etc.

5. **Statutory Clearances:**

   - Land Document granted by IDCO vide letter no. 041/ALO/JRD dtd. 21.01.2023 for total land (64.86 Acres/ 26.248 Ha.) acquired from Odisha Industrial Infrastructure Development Corporation (IDCO).

- Water Withdrawal of 216 KLD granted by IDCO Water Supply vide File no- HO: P&C/EST/E-5122/01/2015 dtd. 18/04/2023.
- Approval for Electricity from TPNODL vide Ref no- 3314092300337 for 12.5 MVA through 33 KV feeder.
- No Forest Land certificate from DFO, Cuttack Forest Division vide letter no. 1356/6F dtd. 17/02/2023. The land has been diverted for purpose of Iron Ore based industries.

6. Total land (64.86 Acres) acquired from Odisha Industrial Infrastructure Development Corporation (IDCO) vide Letter no. 041/ALO/JRD, Date- 21.01.2023.

7. **Location and connectivity:** The project site is located at Khata No.-130/1, 130/2, 130/3, 130/26 & Plot no. 169/938, 169/944,169/966/1, 169/966/2, Khata No. – 419 & Plot No. - 860 (P), 865 (P), Khata No. – 206 & Plot No. - 864 (P), Khata No. – 419/34 & Plot No. – 865/3383 (P), Khata No. – 419/33 & Plot No. - 865/3377 (P), Village - Kalinganagar Industrial Complex (Jakhapura), Tehsil - Danagadi, District-Jajpur. Kisam- Patita. It is bounded by geographical co-ordinates of latitude - 20°55'28.25"N to 20°55'47.96"N & longitude - 86° 3'11.01"E to 86° 3'18.41"E bearing toposheet no. F45N16, F4504, F45T13 & F45U1. The Nearest Railway Station is Jakhapura Junction at 1.46 km, SE. Nearest Highway - Industrial Corridor road of Kalinga Nagar Industrial Complex (0.03 km, E), NH 200 (4.02 km, WSW), Nearest Airport-Bhubaneswar International Airport (79, SSW), Nearest Town - Danagadi (3.6 km, NE). No national parks, Wildlife Sanctuaries, Biosphere Reserves are present within 10 km radius. The nearest protected forest is Danagadi PF - 4.88 km, (NE). Nearest Water Body - Seasonal Nala (0.14 km, West), Brahmani River (4.09 km, South) & Ganda Nala (3.43 km, East)

8. **Land use as per project site at the end of plan period and at conceptual stage:**

Sl. No.	Particulars	Total Area after Expansion		
		Acres	Hectares	%
1	Security Room	0.0099	0.0040	0.0153
2	DG Room	0.0037	0.0015	0.0057
3	Weigh Bridge & Scale Room	0.1038	0.0420	0.1600
4	Administrative Building	0.2471	0.1000	0.3809
5	Car Parking	0.1557	0.0630	0.2400
6	Canteen	0.2471	0.1000	0.3809
7	Electrical Store – 1	0.32	0.1295	0.4933
8	Work Shop – 1	0.5362	0.2170	0.8266
9	Work Shop – 2	0.5362	0.2170	0.8266
10	Guide Store	0.147	0.0595	0.2266
11	Electrical Store – 2	0.2768	0.1120	0.4267
12	Roll Store	0.2768	0.1120	0.4267
13	Rolling Mill Store - 1	0.2768	0.1120	0.4267
14	Rolling Mill Store - 2	0.3632	0.1470	0.5599
15	Mill Area	13.7119	5.5490	21.138
16	Truck Parking	1.7843	0.7221	2.7507
17	Internal Road	8.939	3.6175	13.78
18	Under Ground Water tank - 1	0.5968	0.2415	0.9200
19	Under Ground Water tank - 2	0.5968	0.2415	0.9200
20	Electrical Substation	1.6062	0.6500	2.4761
21	Rain water Harvesting Pit	0.0474	0.0192	0.0731

22	Hazardous Room	0.0049	0.0020	0.0076
23	Electrical Maintenance & Fire Fighting Room	0.0148	0.0060	0.0228
24	Effluent Treatment Plan	0.0148	0.0060	0.0228

9. **Baseline data monitoring:** The baseline data has been collected for the period December 2022 to February 2023. Following are the observations as mentioned in table.

AAQ parameters	PM_{10}= 51.9 to 84.4µg/m^3 $PM_{2.5}$= 26.3 to 43.3 µg/m^3 SO_2= 6.5 to 20.3µg/m^3 NOx= 10.1 to 26.5µg/m^3 CO= 0.21 to 0.68mg/m^3
Ground Water quality	Colour- Less than 1 hazen, pH – 7.44 to 7.72, Alkalinity – 30 to 65 mg/l, Chloride – 20 to 35 mg/l, Total Hardness – 89 to 122 mg/l, TDS – 125 to 166 mg/l.
Surface water quality	Color – 5-15 Hazen, pH – 6.98 to 7.4, DO – 4.9 to 6 mg/l, BOD – 0.7 to 1.2 mg/l, COD – BDL.
Soil quality	pH varies between 5.8 to 6.63, Conductivity - 55 to 308 µs/cm, Moisture% - 6.9 to 8.8%, Potassium – 678 to 813 mg/kg.
Noise levels Leq (Day & Night)	Ambient noise reaches 44.4 to 71.7 dB (A) during daytime and 35.5 to 63.6 dB(A) during night time.

10. **Product Generation:** As it is a rolling mill project, Capacity of 500000 TPA, the main raw material is billet and the final product is TMT bar. The production will be Rolling products (TMT bar). The rolling operation takes a solid piece of metal and breaks it down successively in several steps into different shapes such as flats, rounds, and sections etc. prior to which the billet pass through Reheating furnace capacity of 90TPH (2 x 45 TPH). During rolling, metal is subjected to high compressive stresses as a result of the friction between the roll and the metal surface. The Billets charging will pass through mechanical pusher type and be pushed into the rolling mill to produce rolled products such as TMT Bar.

Input	Specific consumption T/T of product	Quantity in TPA	Output	Specific consumption T/T of product	Quantity in TPA
Billet	1	515465	Rolled Products	0.97	500000
-	-		Scrap & End cuttings	0.02	10457
			Mill scale	0.01	5008
Total	1	515465	Total	1	515465

11. **Water requirement**: Total makeup water requirement for the project will be 216 KLD which will be sourced from IDCO.

12. **Wastewater management:**

Process Unit	Wastewater Qty. (KLD)	Source	Wastewater Management
Industrial Wastewater	34	Cooling Tower Blow Down	Used in Road Sprinkling for suppression of dust
Domestic Wastewater	23.5	Domestic use for the plant (Toilet,Washing)	After treatment in STP, will be used in Greenbelt.

13. **Rain water harvesting:** Rainwater harvesting would be carried out & 60 KLD harvested water will be reused for plant purpose.

14. **Power requirement:**

Sl No	Facilities	Proposed	Proposed Power consumption in MW	Total Power consumption in MW
1	ROLLING MILL	500,000 TPA	11.5	11.5
2	Miscellaneous		1	1
		TOTAL	12.5 MW	12.5 MW
1	Supply from Captive Power Plant in MW		-	-
2	Grid Load in MW (Source- TPNODL)		12.5 MW	12.5 MW

15. **Greenbelt:**

Sl no.	Year wise plantation program	Area covered (Ha.)	No. of saplings to be planted	Budget proposed for plantation of greenbelt with maintenance cost in ₹.
1.	1st Year	2.865	7600	2432000
2.	2nd Year	3	10000	3200000
3.	3rd Year	3	10000	3200000
	Total	8.865	27600	8832000

16. **Solid Waste Management:**

Solid Waste			
Facility	**Waste**	**Quantity (TPA)**	**Management**
Rolling Mill	Scrap (End-Cuts)	10,457	Will be disposed through trucks & sold to SMS Plant.
	Mill Scale	5008	Will be disposed through trucks & sold to Sinter Plant.
Hazardous Waste			
Waste	**Category as per HWM Rules, 2016 and its amendments**	**Quantity (TPA)**	**Management**

Used/Spent oil	Cat. 5.1	7.5	Storage in impervious containers under cover shed followed by disposal through actual users having valid authorization from SPCB, Odisha.
Oil Residue	Cat. 5.2	2.5	Storage in containers over impervious floor under well-ventilated covered shed followed by disposal through actual users having valid authorization from SPCB, Odisha.

17. **Manpower requirement:**

Particulars	Total
Managerial	14
Supervisory	20
Skilled	83
Semiskilled	45
Unskilled	71
Total(direct)	233
Indirect	500

18. **Project cost**: Total estimated project cost is Rs. 190 crore with EMP cost- 9.18 crore & CER cost- 2.85 crore.

19. **Environment Consultant**: The Environment consultant **M/s Visiontek Consultant Services Private Limited, Bhubaneswar** along with the proponent made a presentation on the proposal before the Committee.

Considering the information furnished and the presentation made by the consultant **M/s Visiontek Consultant Services Pvt. Ltd, Bhubaneswar** along with the project proponent, the SEAC recommended the following:

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

a) Submit the KML file of the proposed lease site.

b) Certificate from the concerned DFO that the project doesn't have any forest / DLC land.

c) Brief note on the waste management plan for the end cuttings and mill scales generated during the manufacturing process.

d) Quality check of ETP sludge for SO_2 values should be done, and it should be within safe limit before disposal.

e) Details of solar energy to be installed in project site. It should be upgraded to a minimum of 5%.

f) Submit the details of parking area with a layout.

g) Brief note on the handling of fuel i.e., LSHS and its sludge disposal practice to be followed as it is hazardous.

h) Details of the rainwater harvesting pits to be provided.

i) Submit the dimensions of the day tank size and amount of fuel can be stored. Details of providing dykes of adequate volume around the day tank for storing LSHS needs to be provided for ensuring complete containment of stored LSHS in the dyke in the event of any unforeseen circumstances. The details of draining the day tank for cleaning the accumulated sludge at periodic intervals along with their handling and disposal methodologies in subsequent stages also needs to be furnished.

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

a) Environmental settings of the project site.

b) Extent of construction activity and operational status of all the units.

c) Road connectivity to the project site.

d) Drainage network at the site.

e) Greenbelt development in the existing plant.

f) Solid waste management practice of the existing plant.

g) Vacant land available.

h) Any other issues including local issues.

ITEM NO. 05

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S FEDDERS ELECTRIC AND ENGINEERING LIMITED FOR PROPOSED INSTALLATION OF 1.5MTPA IRON ORE BENEFICIATION PLANT OVER AN AREA 24.635 ACRES (9.969HA) AT VILLAGE-SANINDIPUR, KOIDA, DIST.- SUNDARGARH OF SRI DINESH SHARMA - EC

1. This proposal is for Environmental Clearance for M/s Fedders Electric And Engineering Limited for proposed Installation of 1.5MTPA Iron Ore Beneficiation Plant, over an area 24.635 acres (9.969Ha.) at village - Sanindipur, Koida, Dist. - Sundargarh of Sri Dinesh Sharma.
2. **Category:** As per the EIA Notification S.O. 1533, dated 14th September 2006 and subsequent amendments, this proposed project falls under Category "B", Project or Activity 2 (b) - Mineral Beneficiation.
3. The **Terms of Reference (TOR)** was granted for the proposed project vide letter no. SIA/OR/IND1/446440/2023 dtd 06.01.2024.
4. **Public Hearing** for the proposed project was held on 28th Feb., 2024 at 10:30 am at Weekly Hata Padia of Village Sanindpur under Koira Block in District of Sundargarh. Issues raised during public hearing - Employment, Environmental Pollution, Education, Infrastructure Development, Plantation, Health, etc. Under CER Budget Rs. 135 lakhs has been proposed towards issues raised in Public Hearing.
5. **Location and connectivity**: The project site is located at Village - Sanindipur, Tahasil – Koira, District-Sundargarh, State – Odisha. It is bounded by geographical co-ordinates of latitude 21°55'16.05"N to 21°55'4.67"N & Longitude 85°18'6.61"E to 85°18'4.12"E bearing Topo sheet No. - F45N1, F45N5, F45N8. The nearest Village – Sanindpur at 0.4 Km in South direction, Nearest Town - Koida at 6 Km in West direction, Nearest State/National Highway is NH-520 at 6

Km in North West direction, Nearest Railway Station/Railway line - Barsuan Railway station at 30 Km in West Direction, Nearest Airport - Veer Surendra Sai Airport, Jharsuguda at 130 Km in West direction, Water Bodies nearby are - Karo nadi at 7.9 Km in West direction, Sunanadi at 0.7 Km in East direction, Tehri nala at 2.4 km in South direction. No Protected Forest present within 10 Km radius of study area, however 6 Reserved forests are present (Mendhamaruni RF at 1.2 Km in West direction, Siddhamath RF at 4.2 Km in NE direction, Kathamal RF at 5.28 Km in West direction, Bhabani Paharah RF at 6.8 Km in South direction, Karo RF at 7.3 Km in West direction, Khajurdihi RF at 8.5 Km in SSW direction).

6. **Total production:**

Sl.No	Mineral	Quantity (TPA)	Source (Near Plant)	Road Distance from Site in Km	Mode of Transport
1.	Iron Ore Fines	1.5 MTPA	Nearby Iron Ore Mines	5 - 10 Km from the Project Site	By Road

7. **Land use pattern:**

Sl. No.	Type of land use	Net area considered for financial assurance.	At conceptual stage
1	Area of excavation	0.477	1.874
2	ROM stock yard	0.331	0.331
3	Waste dump	0.184	0.184
4	Stock yard blocks	0.290	0.290
5	Stock yard presently non-salable	0.155	0.155
6	Processing Yard	0.152	0.152
7	Parking	0.122	0.122
8	Roads	0.155	0.155
8	Infrastructure, (first aid, rest shelter Etc.)	0.250	0.250
9	Workshop	0.037	0.037
10	Safety zone	0.709	0.709
11	Total area utilized	2.740	4.137
12	Backfilled /reclaimed area	0.000	3.023
13	Un-utilized area	2.221	3.847
	Total Area	4.961	4.961

8. **Waste generation and management:** There will be generation of solid wastes in the form of Tailings. These will be collected in tailing storage area of 2.021 Acres & disposed to low lying areas available in the locality. A total of 0.45 MTPA hazardous wastes in the form of Oil

residues (Cat 5.2) containing oil will be generated at a maximum of about 2.5 tonnes per annum.

9. **Mitigation Measures of wastes produced:** A total of 0.45 MTPA Tailing wastes will be produced. It is proposed that the tailings will be stacked in a safe and scientific manner and as and when an opportunity arises, the tailing material will be used for making roads, filling low lying areas, etc. Disposal of tailings to the nearby cement industries, tiles, paver manufacturers is envisaged. Part of the generated tailing will also be used for brick making. The generated used oil will be stored in containers over impervious floor under well-ventilated covered shed followed by disposal through actual users having valid authorization from SPCB, Odisha.

10. **Baseline Study Monitoring:** The baseline study was carried out on March to May 2023 (Summer Season).

AAQ parameters	PM_{10} –49.8 to 74.6 µg/m^3 $PM_{2.5}$ –25.1 to 38.1 µg/m^3 SO_2 – 7.1 to 15.9 µg/m^3 NO_x – 9.1 to 15.8 µg/m^3 CO – 0.31 to 0.67 mg/m^3
Ground Water quality	pH – 7.42 to 7.69, Alkalinity – 54 to 73 mg/l, Chloride – 28.4 to 33.6 mg/l, Total Hardness – 97 to 138.4 mg/l, TDS – 169 to 187 mg/l.
Surface water quality	Color - Below 5 Hazen, pH – 7.74 to 7.59, DO – 6.3 to 7.5 mg/l, BOD – 2.3 to 3.7 mg/l, COD – 11.5 to 18.5 mg/l.
Soil quality	pH – 5.86 to 6.9, Conductivity - 47 to 143 µs/cm, Moisture% - 6.3 to 10.1%, Potassium – 630 to 812 mg/kg, Nitrogen – 27.6 to 41.3 mg/kg
Noise levels Leq (Day & Night)	Ambient noise reaches 43.4 to 59.9 dB (A) during daytime and 35.9 to 45.2 dB (A) during night time.

11. **Water requirement**: About 25 KLD water is required for the construction Phase. The source of water for the proposed green-field project will be from SUNA River flowing at a distance of 0.7 km. The water requirement for the proposed green-field project is estimated at 1200 m3/day (50 m3/ hr). The company has applied for water drawl permission for 1200 KLD from the Department of Water Resources, Govt., of Odisha with applicant Number 2024031941000636 dated 19th March, 2024.

12. **Wastewater management:** The domestic water required for the project is 4.8KLD out of which waste water of about 4KLD will be generated. This 4 KLD waste water will be treated in STP of 5KLD capacity & will be reused in greenbelt area & for dust suppression purpose. As the project is proposed to have Zero Liquid Discharge (ZLD), no negative impact is envisaged on any surface water bodies in nearby areas.

13. **Rainwater harvesting:** Rainwater runoff available from the rooftop and paved land will be collected & gathered in the settling Tank during retention period after that it will be sent to harvesting pit which will be contribute to ground water recharge purpose. Estimated Rain water harvesting potential is 47770 m^3 for the project area. So, annually harvested rain water of volume 47770 cum can be recharged to the ground water.

14. **Power requirement**: Total 3.5 MW of power will be required for the proposed green-field project which will be sourced from Nearest Grid. Permission will be taken from competent authority. There will be installation of 1 DG set of 500 KVA for backup during power failure. It has been proposed to install solar lights around the plant boundary & internal road of the plant area, with the view of green energy production and easiness of operation and lower cost in a few specific cases.

15. **Greenbelt**: Out of the total plant area of 24.635 acres.,8.576 acres (3.47 ha) (i.e., 34.087%),) area will be developed as green belt/plantation all around the plant boundary, roadside, office, building & stretches open are within the premises. Gap plantation will be carried out to meet the requirement of 2500 trees per Hectares.

16. **Manpower requirement**: The manpower requirement will be about 60 contractual persons during the construction phase and 73 persons during the operation phase. Preference will be given to the locals as per their eligibility.

17. **Project cost**: The overall cost of the project is Rs.98 Crores. Total capital Cost for Environmental Pollution Control Measures Rs. 0.672 Crores. Recurring cost per annum for Environment Pollution Control Measures Rs. 0.134 Crores. Budget allocated for PH Compliance is Rs. 135.5 lakhs.

18. **Environment Consultant**: The Environment consultant **M/s Visiontek Consultant Services Private Limited, Bhubaneswar** along with the proponent made a presentation on the proposal before the Committee.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Visiontek Consultant Services Private Limited, Bhubaneswar** the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent.

a) Submit the holding capacity of the slime ponds provided and the proposed phase wise development.

b) The proponent shall use only one slime pond at one time and keep another slime pond. However, the project proponent has mentioned that the slime pond will be used only for emergency purpose.

c) Detailed note on the mass balance for input & output grade of the iron fines, total production and waste generated. Material Balance should depict the whole process along with grade of iron i.e. Input grade, output grade, cut-off grade, reject grade and final product grade.

d) Brief note on the management & utilization of Tailings.

e) Submit traffic study report vetted by institute of repute.

f) Total solar energy to be generated in project it should be at least 10% of total power demand.

g) Detailed report on the total surface runoff and Surface Runoff Treatment System.

h) Chemical analysis report of the pressed filter cake produced.

i) List of suppliers for raw materials with supporting documents.

j) Slime generation and management details may be provided.

ITEM NO. 06

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR BABUPALI STONE QUARRY OVER AN AREA OF 20.63 ACRES OR 8.35 HECTARES BEARING KHATA NO. 44 & 45 PLOT NO. 41,199,214, 216, 274 IN THE VILLAGE BABUPALI, TAHASIL JUJOMURA, DISTRICT SAMBALPUR OF SRI MURARILAL AGRAWAL- EC

1. The SEAC in its meeting held on dated **02-12-2023** observed that the proposed Babupali Stone Quarry lease area consists of 4 nos. patches away from each other at significant distance. The distance between these 4 patches is more than 500meters as observed in kml file. The SEAC opined that the 4 nos. of patches having significant distance from each other cannot be considered as a single lease. Hence, it is decided to defer the proposal and consider the proposal for presentation after submission of clarification from concerned authority i.e. Tahasildar Jujomura/ Dept. of Steel and Mines regarding why these 4 small patches shall be considered as one single lease and not in cluster, as the distance between the 4 small quarries is more than 500meters.

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

   i) The mentioned stone quarry was auctioned as a new source after due inclusion in DSR. The source is spread over four patches bearing khata No. 44 & 45. Plot No. 41, 199, 214, 216,234 in village Babupali under Jujomura Tahasil of Sambalpur District, Odisha. The Public Hearing was conducted on 17.01.2023.

   ii) Finally, after completion of the required official procedure, the application for Environmental Clearance was made before the SEIAA, Odisha (File No-SIA/OR/MIN/424302/2023) and the date for the presentation for the EC was fixed. During the presentation, the point was raised regarding the inclusion of the four patched under one lease keeping in view the distance between different patched crossing 500m limit. Regarding this objection the below points may kindly be perused that

   iii) These different patched have been declared as one sairat source by the controlling authority before auctioning due to limited exposures of the building stone and has been incorporated in the DSR as one sairat although the separating distance between the isolated patch in the north west part (Patch – 1) and the Patch – 2 in the south east is around 900.

   iv) As cluster of these four patched has been declared as one sairat, auction has been made for the total cluster and the applicant has become the successful bidder for the cluster of these four patches.

   v) Similarly, mining plan has been prepared and approved by the Authorized Officer for the cluster consisting of these individual four patches.

   vi) Thereafter, all procedures to be adopted for the cluster EC namely TOR, Public hearing etc. have been observed excepting the fact that the application has been made for a single source due to above mentioned reasons.

3. The SEAC in its meeting held on dated **30-01-2024** decided to call for a detailed presentation for the proposal.
4. The Project Proponent gave a detailed presentation on dated **10-06-2024**.
5. This proposal is for Environmental Clearance for Babupali Stone Quarry over an area of 20.63 acres or 8.35 Hectares bearing Khata No. 44 & 45 Plot No. 41,199,214, 216, 274 in the village Babupali, Tahasil Jujomura, District Sambalpur of Sri Murarilal Agrawal.
6. **Category**: As per the EIA Notification dated 14th September 2006 and its subsequent amendments the proposed project falls under category B of Schedule in Item 1 (a) – mining of minerals.
7. The Mining Lease has been granted vide letter no. 2118 dated 26.11.2020 to Successful Bidder-Sri Murarilal Agrawal.
8. The Mining Plan of Babupali Stone Quarry Mining Project has been approved by Joint Director of Geology, O/o The Joint Director of Geology, Jail Chowk, Sambalpur, Odisha vide Memo no 157 dated 27.01.2021.
9. Terms of Reference (TOR), was issued by SEIAA, Odisha, vide proposal Letter No.-1259/SEIAA dtd 09.04.2021.
10. **Public Hearing** was conducted on 17/01/ 2023 at At - Babupalli AWC, Mouza - Babupalli, R.I-Birshinghgarh, G.P Jhonkarpalli, Dist - Sambalpur, Odisha. The points of concern during the public hearing are employment opportunity, availability of raw materials/ construction materials, pollution due to mining, plantation near mining site & in village. A total amount of Rs. 80000 under CER Budget has been kept for issues raised during Public Hearing.
11. **Location and connectivity**: The mine lease area is located Babupali Stone Quarry lease located at Village- Babupali, Tahasil – Jujomora, District- Sambalpur, Odisha over an area of 8.35 ha. The ML has been allotted to Sri Murarilal Agrawal bearing Khata no. 44 & 45 plot no. 41,199,214, 216, 274. The geographical co-ordinates are Latitude -21°23'12.33"N to 21°23'19.90"N, Longitude - 84°04'04.02"E to 84°04'12.05"E. The Nearest approach road is 0.9 Km. Nearest National Highway is NH-42 is at a distance of 0.50 Km in SW. Nearest State Highway is SH-15 at a distance of 8.50 Km in NW. Nearest Airport- Bhubaneswar Airport, approx. 169 km in NE direction. Nearest River is Malti Jore River at a distance of 5.50 Km. in NW. Nearest reserve forest is Bandher Reserve Forest is at a distance of 0.75 Km in SE. Nearest Road Bridge is near Maneswar Road Bridge over Malti Jore River at a distance of 5.50 Km. in NW. The Nearest River Embankment is 5.50 Km in NW. Nearest Electric transmission line is 0.35Km from the Lease area. The Nearest Habitation is 0.2 Km in the N direction.
12. **Total reserves and production**: The total Geological Reserves is 547711.5 cum and Mineable Reserves is 377348 cum. The Proposed Production for the proposed project is 3431 cum /year.
13. **Year Wise Production and the Total Production:**

Year	Year Vol. of stone in (m^3)
1st	3431
2nd	3431

Year	Year Vol. of stone in (m^3)
3rd	3406
4th	3406
5th	3406
TOTAL	17080

14. **Method of Mining**: Mining will be carried out by opencast semi-mechanized method with adoption of drilling & blasting. Handling of rock mass will be done both manually & by excavators. The Proposed depth of mining is 1.5m as per approved mining plan.

Year	Year Vol. of stone in (m^3)
1st	3431
2nd	3431
3rd	3406
4th	3406
5th	3406
TOTAL	**17080**

15. **Water requirement and wastewater management**: The water requirement is only 11.0 KLD which will be drawn from Bore well and hand pump for drinking while from sump for dust suppression and afforestation purpose.

Activity	Calculation	Round off Figure in KLD
Drinking	@ 10 lpcd per labor 10*10/1000= 0.05 KLD	0.10
Dust Suppression	**Total approach road to be water sprinkled** = 720 m 350m*6m*0.5 lt water*2 times/1000= 2.1KLD	2.1
Plantation	4,230 plant (during plan period) @ 2 L/per plant= 4230*2lts= 8460/1000= 8.46KLD	8.5
Total		**10.7 or 11KLD**

16. **Baseline Study conducted** – Baseline study of the study area was conducted during Pre-monsoon from 1st March 2021 to 31st May 2021.

17. **Greenbelt**:

Year	Total Plantation	Plantation in safety barrier zone (2.3 ha)	Plantation along approach road and in buffer zone	Plantation in village consulting local authorities
1st	2,460	2,180	180	100
2nd	1,770	1500	170	100
3rd	Maintenance	Maintenance	Maintenance	Maintenance

Year	Total Plantation	Plantation in safety barrier zone (2.3 ha)	Plantation along approach road and in buffer zone	Plantation in village consulting local authorities
4th				
5th				
Total	4,230	3680	350	200

18. **Solid Waste Management:** A total of 7319cum waste/rejects is likely to be generated during the plan period out of which 30% waste (3,334.5 cu.m) will be dump in South side of ML. The proposed dump will cover an area of 0.0285 ha. and height of 2m. Retaining wall will be constructed around the dump to prevent wash off of dump. About 70% waste (5123.3 cu.m) will be used in backfilling and construction and maintenance of haulage road of the proposed quarry.

19. **Manpower requirement** About 10-15 people will be employed in the proposed plant.

20. **Project cost**: The approximate cost of the project comes around ₹40 lakh with EMP Cost of ₹ 12.4 Lakhs as capital cost and ₹ 4.6 Lakhs as Recurring expenses/annum. 2% of Project cost used as CER Budget which is about ₹0.8Lakh is used for the Development of Temple, ₹0.8Lakh is used for the Development as per the public hearing action plan proposed.

S.No	Particulars	Amount (Lakh)	
		Capital	Recurring
1	Dust suppression	2.0	0.5
2	Plantation and its protection *(@ Rs. 200/sapling- including fencing)*	8.5	1.0
3	Personal Protective Equipment *(@ Rs. 2000/PPE kit)*	0.2	0.2
4	Environmental Monitoring (Air, water, soil, noise)	-	1.2 (0.5 lakh, 0.4 lakh, 0.20 lakh, 0.10 lakh)
5	Garland drain & settling tank	1.0	0.5
6	Haul road construction/ maintenance *(Approach road, approx. 0.35 km)*	0.7 (@ Rs 2.0 Lakh/km)	1.2 (@ Rs. 300*200 days* 2 labor)
	Total	**12.4**	**4.6**

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

22. The Committee observed the following:

    a) The mining lease comprises of four patches in different locations and same cannot be considered as a single lease as boundary of the lease cannot be defined due to mineral deposit area is located in four different locations.

    b) This lease area can be separated as four leases and they have to apply afresh in cluster approach after obtaining approval from Steel and Mines Department for four different leases.

c) Public hearing for the proposal shall be exempted as same has been already conducted and decision on grant of Environmental Clearance will be considered based on revised EIA / EMP report submitted in cluster approach. **Public Hearing** was conducted on 17/01/ 2023 At - Babupalli AWC, Mouza - Babupalli, R.I-Birshinghgarh, G.P Jhonkarpalli, Dist - Sambalpur, Odisha. The details of ML areas based on which public hearing was conducted needs to be stated while submitting revised EIA/EMP report in cluster approach.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Cognizance Research India Pvt. Ltd., Noida,** the SEAC recommended to reject the proposal for the reason as pointed out at para 22 above.

MEMBER SECRETARY, SEAC

ANNEXURE – A

TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY AND INFORMATION TO BE INCLUDED IN THE EIA/EMP REPORT FOR M/S LLIYAS GRANITES FOR BHAGABANPUR DECORATIVE STONE MINES OVER AN AREA 21.578 HA. OR 53.32ACRES IN VILLAGE - BHAGABANPUR UNDER TAHASIL - KUKUDAHANDI OF GANJAM DISTRICT OF SRI MOHAMMED IRFAN RAZZAK - 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. Name and area of other mines within 500 meter of the lease area.
4. 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.
5. 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).
6. 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.
7. 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.
8. 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.
9. 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.
10. The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.

Jnayak
Environmental Scientist

11. 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.

12. 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. Proposal for Common Non-Mineralized Zone for dumping of rejects / OB.

13. 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.

14. 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.

15. 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.

16. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.

17. 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.

18. 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.

19. 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 in the study area, the necessary plan along with 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.

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

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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 modelling 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 modelling 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. Environment Impact Assessment / Environment Management Plan document shall be in accordance with the provisions & generic structure stipulated in the EIA Notification 2006 dated 14.09.2006 & subsequent amendments.

25. EIA-EMP document shall be based on the maximum achievable mineral extraction of the mine.

26. The general features such as surface drainage, mineral transportation and process flow of beneficiation plant, power and water supply shall be indicated.

27. The baseline environmental status within 10km radius from the boundary limit of mining lease area (buffer zone) and core zone with respect to air, water, noise and soil shall be covered.

28. Baseline data generation for one season (post monsoon) with respect to air, water, noise and soil shall be generated on the same sampling locations for obtaining EC

29. EIA-EMP document shall include land use pattern including agriculture, forest land, water bodies and settlements.

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30. Existence of National Park, Wild Life sanctuary, migratory routes of wild animals within 10 km of mine lease area shall be brought out.

31. Topographical map of study area (core & buffer zone -10 km from the boundary of core zone) showing major topographical features shall be included.

32. EIA-EMP document shall include biological environment (flora and fauna) and socio-economic environment within the study area.

33. EIA-EMP document shall include anticipated impacts on land, air, noise and water environment and the mitigation measures.

34. Environmental Monitoring Programme and the environment management plan shall also be covered measures of mine.

35. 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.

36. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.

37. 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.

38. 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.

39. 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.

40. 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.

41. 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.

42. 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.

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43. 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.

44. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.

45. 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.

46. 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.

47. 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.

48. 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.

49. 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.

50. 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.

51. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

52. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

53. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.

54. 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.

55. 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

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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.

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.

56. **The prescribed TOR would be valid for a period of four years for submission of the EIA/EMP report.**

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