PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, ODISHA HELD ON 14th DECEMBER, 2020

The SEAC met on 14th December, 2020 at 11:00 AM through video conferencing in Google Meet under the Chairmanship of Sri. B. P Singh. The following members were present in the meeting.

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

The agenda-wise proceedings and recommendations of the committee are detailed below.

ITEM NO. 01

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR EXISTING SPONGE IRON PLANT OF 100 TPD (2 X 50 TPD) SPONGE IRON PRODUCTION ALONG WITH 23 TPD DOLCHAR AND 3 TPD ESP DUST, WITH PROPOSED CHANGE IN PRODUCT MIX I.E. 64 TPD REDUCED MAGNETITE IRON ORE AND 107 TPD REDUCED MANGANESE ORE (ALONG WITH DOLCHAR) AND 3 TPD ESP DUST FROM THE SAME KILNS WITHIN THE EXISTING FACILITY BY CHANGE IN RAW MATERIAL MIX FROM IRON ORE TO LOW GRADE MN ORE ASSOCIATED WITH IRON ORE (25-30% FE & 25-30% MN) FOR M/S. SUMRIT METALIKS PVT. LTD. AT VILLAGE SOYABALI, DIST KEONJHAR - EC.

1. The proposal is for Environmental Clearance for existing Sponge Iron plant of 100 TPD (2 X 50 TPD) sponge iron production along with 23 TPD Dolchar and 3 TPD ESP dust, with proposed change in product mix i.e. 64 TPD reduced Magnetite iron ore and 107 TPD reduced Manganese ore (along with dolchar) and 3 TPD ESP dust from the same kilns within the existing facility by change in raw material mix from iron ore to low grade Mn Ore associated with iron ore (25-30% Fe & 25-30% Mn) for M/s. Sumrit Metaliks Pvt. Ltd. at village Soyabali, Dist Keonjhar, Odisha
2. The project falls under Category- B, under section-3 (a) as per the prevailing EIA Notification, dated 14th September 2006 and amendments thereafter. ToR for this project has been granted by SEIAA vide letter No. 8994/SEIAA dated 18.09.2020. Public hearing has been exempted under para-7(II) of EIA Notification, 2006 and amended thereafter.
3. M/s Sumrit Metaliks Private Limited has already existed Sponge Iron plant at village Soyabali, Dist Keonjhar, Odisha-758035 over an area of 12 acres (4.85Ha). The project area is bounded by Coordinates of Latitude & Longitude 22°04'35.93"N & 85°24'41.42"E respectively and Topo Sheet No.F45H8. The site is well connected with Rail, Road. The access road from Plant to Barbil Municipality road is 0.7 Km only. The Nearest railway station Barbil is at 4.7 KM.
4. This is an existing DRI Plant to manufacture sponge iron having capacity (2 x 50 TPD). Towards production of 100 TPD sponge, raw materials used are 150Ton/day Iron Ore (+62% Fe), 90 Ton/day Coal and 4 Ton/day Dolomite. So in totality the throughput is 244 Ton/day.

5. As there is variance in sponge iron market and further the cost of production and sale value of sponge per ton basis is almost equal, so SMPL has planned to change in product mix i.e. 64 TPD reduced Magnetite iron ore and 107 TPD reduced Manganese ore (along with Dolchar) and 3 TPD ESP dust from the same kilns within the existing facility by change in raw material mix from iron ore to low grade Mn Ore associated with iron ore (25-30% Fe & 25-30% Mn).
6. Magnetite iron ore and enriched manganese Ore will be transported to nearby steel and ferromanganese plant through covered trucks by road or in forms of briquette as per the customer requirement. The capital cost of the briquette unit is coming around Rs 10 Crores.
7. There are no such notified ecological sensitive area in the 10 KM bufferzone. Reserve Forests like Thakurani R.F. – 0.3 KM (N), Baitarani RF – 5.0 KM (SE), Sidhamath RF – 3.0 KM (SW), Uliburu RF – 6.5 KM (NW) and Water Bodies, Karo River – 6.0KM (NW), Suna Nadi – 4.5 KM(SE), Baitarani River –8.9 KM (SE) are located in the buffer zone.
8. The total water requirement is 100m3/day from 2 bore-well inside the plant. NOC from CGWA already granted for the existing plant facility and the same will be continued. PP submitted that agreement with State water resource department also made.
9. 7500KWH per day Power Consumption from State GRID is already granted for existing facility and the same will be continued. For the emergency power supply to the essential loads DG sets of 500 KVA and 300 KVA is already available.
10. As it is an existing project, there are already 105 persons (direct & indirect) workings for plant related activities.
11. Raw materials for proposed alternate process are Coal 45TPD, Dolomite 2 TPD & Low-grade Mn Ore associated with iron ore 197 TPD will be transported by road. The proposed change in product mix i.e. output will be Magnetite Iron Ore (50 Ton to 80 Ton), Mn Ore along with Dolchar (100 Ton to120 Ton) and ESP/bag dust 3 T so Total =174 T/day. There is no change in the unit operation with partial reduction in Kiln process. There will be hardly increase in additional 3 truck/day. So there will be no such load in traffic.
12. The existing unit has disposed the kiln accretion material at the earmarked solid waste dump area. Dump has been stabilized with grass and plantation and further retaining wall with garland drain at the toe of the dump. Fly ash has been stored at earmarked area inside plant premise. In the proposed alternate process there will be no solid waste in the form of Dolchar.
13. There will be decrease in the gaseous emission due to decrease in coal burning. Coal Consumption will decrease by 50%. Low grade ore shall be utilized, which is very important from the mineral conservation point. In this process Dolchar & ESP dust will mix with roasted enriched Mn ore which will directly use as raw material for Ferro Manganese plant. So there will be no generation of solid wastes. Dolchar (CaO) & ESP dust (SiO_2) will be given advantage for further process as flux during ferroalloy making. The green briquettes made by roasted fines carry these constituents inherently which reduces the carbon and dolomite requirement during smelting reduction.
14. Reduction in CO_2 emission for proposed alternate proposal considering 330 days operation is 12372.684. So there will be 32.71% of reduction of CO_2. PP informed that, domestic waste water generated from the unit is directed to soak pit via septic tank.

15. Green belt around the plant premises already existed towards prevention of fugitive dust particle to go outside, if any. Till the year 2019-20, 3930 no's of plantation already done covering 1.76 Ha i.e. 36% of the total land use.

16. Baseline study was carried out from December 2019 to February 2020 for Air, water, Soil, Noise etc.

17. The monitoring to study the present environmental condition in terms of its components at the location was carried out from December 2019 to February 2020 for Air, water, Sil, Noise etc. The Air quality parameters at all stations are well within the limits prescribed by MoEF&CC and CPCB. All the noise values are within the prescribed standard. All the baseline values for ground water, surface water is within the permissible limit as per the drinking water standard.

18. The comparison of Air Quality Modelling for PM10, PM2.5, SO2 & NOx shows that the pollution loads for proposed change in product mix relatively less than the existing one.

19. The project has already spent Rs 81.50 lakhs towards various pollution measures for the existing plant. An amount of Rs 17.85 lakhs has been proposed for yearly recurring cost.

20. The total project cost for Sponge Iron Plant was Rs. 12 Crore. For the present proposal additional 25.00 Lakh shall be invested for Augmentation.

21. The project has already spent Rs 16.12 lacs under CSR in the last three years for various socio-economic developments.

22. The project comes under brown field project, the project cost is less than Rs.100 crore, the total project cost is Rs.12 crore of 1% of CER budget is Rs.12 lakhs. However, Management has decided to spend Rs 24 Lacs.

23. The proposed change in the Product Mix with necessary change in raw material mix, the overall pollution load is reduced with a significant reduction in carbon foot print and reduction in solid waste along with optimization of the process to make the project economically viable.

24. The project proponent along with their consultant M**/s Ardra Consulting Services Pvt. Ltd., Bhubaneswar** made a detailed presentation on the proposal before the SEAC

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

(i) Copy of land conversion document of existing unit for industrial use.

(ii) Copy of latest certified compliance report to the conditions of Consent to Operate of existing unit from State Pollution Control Board, Odisha, Bhubaneswar.

(iii) Details of fly ash and kiln ash management including fly ash inventory/sale and disposal management.

(iv) Water balance diagram for monsoon period with quantities and waste water management.

(v) Details calculation and plant Layout showing location of rain harvesting recharging pits and quantity to be harvested and recharged (existing and proposed).

(vi) Documents supporting previous water consumption in the plant and records of Piezometer if existing in the premises.

(vii) Documents related to permission letter from WR Deptt, Govt. of Odisha respectively for drawl of ground water.

(viii) Material Balance of the process with details of chemistry/chemical equation and molecular weight of raw materials, product and losses at minimum, mean and maximum level.

(ix) Details of Distribution of saplings to local villagers under CSR activity.

(x) Study report on carbon dioxide estimation and social economic study by an institute of repute.

(xi) Details of greenbelt (existing and proposed) including plantation alongside haulage road.

(xii) Leachate management of reduced of Manganese ore stock as Dolochar is included in it.

(xiii) Details of renewable/solar energy and its percentage of total power consumption (existing and proposed)

(xiv) Measures proposed to arrest/reduce noise level in core zone.

(xv) Coal stock yard/storage management including retaining wall, drain management and stock yard coverage with sprinkling facility.

(xvi) DG sets start at with detail calculation including installation drawing of the layout.

(xvii) Runoff water management of the whole Plant – Existing and proposed.

(xviii) Reclamation of existing dumping yard of Dolchar.

(xix) Effect of reduction in Dolomite on reduction of pollution load.

(xx) Identification of occupational health hazards of both employees and neighboring habitats and proposed perennial remedial measures.

(xxi) Environment Management Capital and EMP in Physical terms vis-a-vis investment indicated in monitory terms.

(xxii) Status of physical condition and maintenance of approach roads.

ITEM NO. 02

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR CHROME ORE BENEFICIATION UNIT OF THROUGHPUT CAPACITY 18,500 TPA OVER AN AREA OF 2.54 ACRE AT VILLAGE: -BYREE, PO - BYREE, DIST- JAJPUR OF M/S A3 MINERALS AND EXPORT PVT LTD, SRI. AKSHAYA KUMAR SAMAL, PROPRIETOR - 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. The project is coming under category 'B2 'as the throughput capacity of the beneficiation plant is 18500 TPA (<20,000 TPA) and requires environmental clearance as per EIA notification 2006 and its amendment no. J-13012/12/2013-IA-II (I).
3. M/s A3 Minerals and Metal Export Pvt Ltd proposes for establishment of Chrome ore Beneficiation plant over an area of 2.545 Acres with throughput capacity of 18,500 TPA within the existing Chrome monolithic unit. The promoter of the project is M/s A3 Minerals and Export Pvt Ltd, and Proprietor of the project is Sri. Akshaya Kumar Samal.
4. The existing chrome monolithic unit obtained consent to establish vide letter no. 1198/IND-41 on dated 10.07.2020.
5. The existing Chrome monolithic unit was operating under the ownership of M/s R.C.

Metals Industries. The consent to operate was transferred in the name of M/s A3 Minerals on 23.10.2019 for production of 625 TPM monlithics and other refractories.

6. Further M/s R.C Metal Industries obtained consent to operate for production of 30 TPM chrome concentrate which was also transferred in the name of M/s A3 Mineral.
7. The proposed unit is bounded by Latitude: 20°38'25.0"N Longitude:86°01'38.5"E and is featured under the Toposheet No.- F45 T14/F45U2. Khata No- 1268/439, Plot no: 4149/4683, Khata no: 1268/433, Plot no: 4146, Khata no: 1268/432, Plot no: 4157/4872, 4156/4871, Khata no: 1268/431, Plot no: 4152, Khata no: 1268/436, Plot no: 4158, Khata no: 1268/437, Plot no: 4149, Khata no: 1268/438, Plot no: 4159 & Kissam - Gharabari and belongs to the project proponent located at Village - Byree, Po - Byree, Dist - Jajpur, Odisha. The land area required for the project will be 2.545 Acres.
8. The mining lease area is also accessible NH-5 through Kalkala Chatia road which pass near the project site. Bairi railway station is nearest at a distance of 1.2 km from the M.L area. Nearest airport is Biju Pattnaik Bhubaneswar Airport 50 Kms from project site. Nearest river/Jor is Bansi Jor at 2.5km, Mendhakhai river at 8 km & Birupa River at 10 km and. Nearest town is Chatia at 5 km. Nearest forest Dalijoda Reserve forest at 0.3km. Nearest habitation is within 3km from project site. Kapilash wild life sanctuary – 11km.There is no wild life sanctuary, corridor, National park, biosphere reserve located within 10 Km buffer zone of the project site.
9. Raw material linkage has been established for the proposed plant from sukinda chromite mines of OMC, M/s B.C. Mohanty and M/s Misrilal & Sons. which is located at a distance of 35 Km from the project site. The transportation of ore from the mines to the project site will be done through covered trucks.
10. The process is a beneficiation process of conversion of low grade chrome ore having content less than 40% of Cr2O3 into semi high grade ore having content 50-65% of Cr2O3.
11. Generation of solid waste (tailings generated =6500TPA having <10% Cr2O3) will be properly stored in an impervious platform in earmarked area and will be blended with chrome refractory mortar and sold. So there will be no waste generation from the proposed project. However taking into consideration of maximum storage for 1 year on an area of 0.08 Acres has been demarcated for tailing storage.
12. **Employment Potential -** Proposed employment generation from proposed project will be 12 direct employment and 50 indirect employment.
13. **Power Requirement** - The electricity load of 100 kVA will be procured from CESU, Odisha. Also proposed to install 125 KVA DG set.
14. **Water Requirement** - Total water Consumption for the proposed project will be 153 KL/ day out of which 13 KLD will be the makeup water. About 95% of the water will be recirculated in the process and only 5% of the will be makeup water. There will be no waste water generation from the project. Domestic waste water will be treated through soak pit via septic tank and industrial waste water generated will be treated by settling and reused in the process.
15. The project cost is estimated to be ` 283 lakhs.
16. The project proponent along with the consultant **M/s Kalyani Laboratories (Pvt) Ltd. Pahala, Bhubaneswar** made a detailed presentation on the proposal.
17. The Committee observed the following:

a) The proponent has applied to consider their project as Category-B2 as per MoEF&CC, Govt. of India O.M. No. J/13012/12/2013-IA-II(I), dated 24.12.2013 as throughput of Mineral Beneficiation activity is less than 20,000 TPA involving only physical beneficiation.

b) The MoEF&CC, Govt. of India O.M. No. J/13012/12/2013-IA-II(I), dated 24.12.2013 stipulates the Mineral Beneficiation activity listed in the schedule as Category-B will be treated as Category-B2 with throughput ≤ 20,000 TPA, involving only physical beneficiation.

Considering the information / documents furnished by the proponent and presentation made by the consultant, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by site visit of sub-committee of SEAC

1. Date and year of establishment of existing unit.
2. Copy of Consent to Establish and Consent to Operate from State Pollution Control Board, Odisha, Bhubaneswar for the existing plant (Chrome Monolithic Plant) to be submitted.
3. Copy of conversion of land for industrial use as this is an existing unit.
4. Details of Technology to be used for process of treatment of Hexavalent Chromium in waste water.
5. Detailed linkage of raw materials such as source and agreement copy with the party for supply of raw material i.e., low grade Chromite Ore.
6. Design of tailing pond and detailed life calculation of area 0.08 acres required for tailing storage including ETP.
7. Study of Waste Water Management.
8. Details of ore transportation to the plant.
9. Details of CSR activities already covered under the existing project.
10. Details of Zero discharge proposal.
11. Detailed Process Technology for Chrome Ore Beneficiation.
12. Water Balance for monsoon and non -monsoon period.
13. Details of leachate management.
14. Details of existing green belt and proposed with plant.
15. Revised Plant layout to scale for the proposed Plant super imposing the existing setups/infrastructures.

ITEM NO. 03

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR KHEMABEDA DECORATIVE STONE M.L. 56 (DOLERITE/BLACK GRANITE) MINES DEPOSIT OVER AN AREA OF 8.353 HECTARES/20.64 ACRES LOCATED IN VILLAGE KHEMABEDA NO.200, TAHASIL: BOIPARIGUDA, DISTRICT: KORAPUT, ODISHA. OF SMT DEVARA LATHA - 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. The Khemabeda mining lease area for decorative stone (Dolerite/Black Granite) over an area of 8.353 Ha or 20.64 Acre located in the village Khemabeda no 200, under Tahasil Boipariguda, District Koraput, Orissa, in favor of Smt. Devara Latha.
3. As per the EIA Notification S.O. 1533, dated 14th September 2006 and subsequent amendments, this project falls under Category B (B1).
4. The applied mining lease is granted by Department of Steel & Mines, Govt. of Odisha vide Letter No.5919/(IV (DS) SM-09/2017)/S&M, Bhubaneswar, on dated 13.08.2019 in favour of Smt. Devara Latha for 30 years.
5. Mining Plan for a period of five years was approved by Director of Mines, Odisha, Bhubaneswar vide letter no. MXXII-(a) 5/2020/5880/DM on dated 28.08.2020.
6. **Location and Connectivity -** The mining lease area is located in the Survey of India Toposheet no. 65J/6(E44K6), of latitudes 18°38'24.0"N to 18°38'30.1"N & longitudes 82°24'43.4"E to 82°25'01.1"E. The land use pattern of the mining lease area comes under the non-forest agricultural land (Abada Ajogya Anabadi), bearing Khata no. 315, Plot no. 1325 (2.226 Ha) & 1334 (6.127 Ha), Kissam: Parbata. The applied area is a part of the revenue village Khemabeda no 200 covers 8.353 Hectares or 20.64 Acres under Boipariguda Tahasil of Koraput District, Odisha. Nearest railway stations is Koraput Railway Station at an aerial distance of 37 Km. The lease area can be approached from SH: 25 & NH: 43 at a distance of 6.6 Km & 36 Km. Nearest Airport is Jeypore Airport which is at a distance of 85 Km. Kolab Reservoir at 20km, Dasmatpur RF at 5km. Nearest town is Boipariguda – 10km, Jeypore – 29km and Inter state boundaries is at 13km.The drainage pattern of the area is dendrite. As the region shows an undulated hilly topography, there is neither any seasonal nor any perennial nalla flowing within the applied mining lease area.
7. **Method Of Mining -** The method of mining belongs to Opencast semi-mechanized method using machineries such as Excavator, Line offset compressor, jack-hammer, wire ropes and drill rod etc. The height of the benches will be 3m & the slope of the benches will be maintained at 70^0-80^0. The overall slope of the quarry will be less than 45^0 with the horizontal. The gradient of the haul road will be maintained at 1:16 with more width than other benches for easy mobilization of man and machinery.
8. **Total Reserves & Production** - As per the estimation the geological reserve is found to be 1015494 m3 (proved 845143 m3, probable 127781 m3 & possible 42570 m3) & Mineable reserve for decorative stone is found to be 798911 m3 (proved 707414 m3, probable 91497 m3). respectively. During the total plan period (five years), it has been targeted to excavate 66604m3 of rock mass, total marketable decorative stone 20000m3, non-saleable – 3332m3 and remaining 47131m3 of waste/rejects. 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 Excavation (m^3)	Volume of Marketable Decorative stone (m^3)	Volume of Non-saleable Decorative Stone (m^3)	Volume of Waste (m^3)
1st Year	13312	4000	666	9267
2nd Year	13312	4000	666	10035
3rd Year	13312	4000	666	9114

4th Year	13334	4000	667	9552
5th Year	13334	4000	667	9163
Total	**66,604**	**20,000**	**3332**	**47,131**

9. **Waste generation and utilization -** During the total rock mass of 47131m3 of waste will be generated due to course of mining. These wastes will be utilized con-currently for construction and maintenance of road in the lease area and connecting road of 2.5 Km. Remaining wastes will be sold time to time for construction purpose, after obtaining required permission of Govt. authorities. For temporary storing of these wastes, an area of 0.124 Ha has been earmarked in the southern part of the M.L area. Further for storage of non-saleable stone an area of 0.011 Ha has been demarcated
10. Non-saleable stone of 3330 cu.m is likely to be generated during plan periond. This waste woll be dispatched concurrently to the processing unit and sold as small piece of decorative stone called as Khonda.
11. **Green Belt** - There will be proposed for green belt development over an area of 0.3719 Ha in and along the periphery of the quarry lease area of during the plan period by 594 nos. of saplings for rehabilitation.
12. **Water Requirement** - Total water requirement for the project will be 5 KLD out of which 2 KLD will be required for drinking and domestic purpose and 1.5 KLD for dust suppression and 1.5 KLD for plantation purpose. Source of domestic water will be nearby village well through tanker..
13. **Power Requirement** - Power Requirement will be met through DG sets.
14. **Employment Potential -** The mining activity will generate employment for 25nos of from which 08nos skilled worker, 12nos unskilled worker & 5nos managerial staffs.
15. The project cost is ` 200 lakhs.
16. The Environment consultant **M/s Kalyani Laboratories (Pvt) Ltd. Pahala, Bhubaneswar** 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 Kalyani Laboratories (Pvt) Ltd. Pahala, Bhubaneswar**, the SEAC prescribed the following specific ToRs in addition to standard ToRs for mining project for conducting detailed EIA study.

(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 Panchayat for usage of haulage road/Panchayat road.

ITEM NO. 04

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR STONE CHANDANPUR DECORATIVE STONE (GRANITE GNEISS) MINES DEPOSIT OVER AN AREA OF 9.696 HECTARES LOCATED IN VILLAGE CHANDANPUR, TAHASIL: LANJIGARH, DISTRICT: KALAHANDI, ODISHA. (CLUSTER APPROCH WITH CLUSTER AREA 13.298 HA) OF SRI AJAY AGARWAL, PROPRIETOR: JAY MINERALS - 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. As per the EIA Notification S.O. 1533, dated 14th September 2006 and subsequent amendments, this project falls under Category B (B1).
3. This is a proposal for Terms of Reference for Chandanpur Decorative Stone Mines over an area 9.696 ha and 3.602 ha (Total area under cluster- 13.298 ha) in Chandanpur Village, Tahasil- Lanjigarh in the District- Rayagada, Odisha of Sri Ajay Agarwal (Proprietor).
4. A cluster of Decorative stone mines at- Chandanpur, covering an area of 13.298 ha in village Chandanpur Village, Tahasil- Lanjigarh in the District- Rayagada owned by same lessee and leased out for 30yrs as follows.
   a) M/s. Jay Minerals, M L area allocated 9.696 Ha or 23.96 Acre, Khata no.101, Plot no.68, 260 and 271.
   b) M/s. Jay Minerals, M L area allocated 3.602 Ha or 8.90 Acre. Khata No- 101 Plot No-214.
5. The mining plan along with the PMCP of both quarries was approved by Joint Director of Mines, Director of Mines, Odisha, Bhubaneswar vide Letter No. 8/2020/5435/DM on dated 12.08.2020 and Letter No. MXXII-(a) 9/2020/5439/DM on dated 12.08.2020 for a period of five years. The total estimated Geological reserve for cluster is for 1464670 m3 and Mineable reserve is 1258699 m3. The production from plan period will be maximum 33613 m3 (recoverable) in plan period. Geologically the reserve is categorized as Granite gneiss known as Lavender Blue in the name of commercial granite.
6. The entire M.L area is in hilly waste land under the revenue class of Chatan and the tenant is "Abad Ajogya Anabadi" of Govt. of Odisha. The proposed mining is by open cast and semi mechanized method with deployment of machines like L/D bore machines, jack hammer drill, compressor, hydraulic excavators & tippers. The major activities of mining will include removal of waste material; block cutting/splitting, dressing, and loading & transportation. Decorative stone will be produced in the form of blocks/khanda stone. However, the proposed rate of production will be 13200Cum per annum of saleable decorative stone after the quarry is fully developed. The overall stripping ratio of decorative stone to waste/rejects will be 1:1.50. Individual benches will be kept at 6m

height (max) with minimum width of 6m. The overall slope angle will be at 45° with the horizontal. The mine working is proposed up to 372mRL for Chandanpur 9.696 Ha. and 376 mRL for Chandanpur 3.602 Ha.

7. The M.L area is covered in Survey of India Toposheet no E44F10 & E44F9 and bounded by Latitude -19°46'46.68"N to 19°46'59.86" N and Longitude - 83°25'47.74"E to 83°26'5.40" E and latitude - 19˚46’58.44” N to 19˚ 47’7.67”N and longitude 83˚26’0.60” E to 83˚26’11.60”E. Nearest railway stations is Ambadala Railway Station at an aerial distance of 6Km and about 11Km from Lanjigarh. The lease area can be approached from NH: 20 & NH: 59 at a distance of 30Km & 69 Km, SH: 6 at a distance of 3Km. Banshadhara River is located at a distance of 1.7Km. Nearest Airport is Bhubaneswar Airport which is at a distance of 377Km. Village Chandanpur is at a distance of 0.5km to the mining lease area where all the infrastructure facilities like hospital, school, bus service, market, etc. is readily available.
8. The details of the mines in the cluster are estimated to excavate a total ROM of 112,040cum, saleable stone – 33613 cum, non-saleable stone 78427 cum & waste 78427 cum.
9. **Water Requirement** – Total water requirement: 5 KLD (Each mines) 10 KLD for Cluster. Dust suppression: 3.0 KLD, Plantation: 3.0 KLD and Drinking/ Domestic: 4 KLD. Source is Tanker for Domestic purpose and RWH for dust suppression and plantation.
10. **Power Requirement** will be met through DG sets.
11. **Employment Potential -** Total number of employees will be around 28 which includes skilled, semi-skilled & unskilled category in the mine.
12. **Green Belt** – Cluster Mines has planned to develop green belt over an area of 2.002 ha in 7.5m safety zone along lease boundary at the end of plan period with 1000 trees consisting of Mango, Neem, Mahaneem, Chakunda, Accacia etc
13. The project cost of custer mines is ` 400 lakhs.
14. The Environment consultant **M/s Kalyani Laboratories (Pvt) Ltd. Pahala, Bhubaneswar** 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 Kalyani Laboratories (Pvt) Ltd. Pahala, Bhubaneswar**, the SEAC prescribed the following specific ToRs in addition to standard ToRs as per **Annexure – A** for conducting detailed EIA study in cluster approach.

(i) Detailed calculation of area for dump with dimensions and slope.

(ii) Detailed amount of maximum stock stored as waste along with composition of waste and its management.

(iii) Periodically testing of waste water.

(iv) Distance of haulage road from village road.

(v) Size of garland drain, retaining wall around waste dump with justification. Adequacy of area assigned for waste dump.

(vi) Undertaking by project proponent for not disturbing the general flow of seasonal nala.

(vii) Periphery of cluster, width of greenbelt proposed and no of plants to be planted be furnished

(viii) Mitigation measures to reduce impact on mining as water reservoir is close to project site.

(ix) Details of drainage plan proposed.

(x) Details of silt management be submitted.

(xi) Present use of land.

(xii) NOC of Panchayat for usage of haulage road/Panchayat road.

ITEM NO. 05

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR CHANDANPUR DECORATIVE STONE (GRANITE GNEISS) MINES DEPOSIT OVER AN AREA OF 3.602 HECTARES LOCATED IN VILLAGE CHANDANPUR, TAHASIL: LANJIGARH, DISTRICT: KALAHANDI, ODISHA. (CLUSTER APPROACH – TOR)

The proposal was considered in item no. 4 of the agenda above for issue of ToRs for undertaking detailed EIA study in cluster approach. Hence, no separate ToRs is required to issue for this proposal.

ITEM NO. 06

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR PRODUCTION OF GRAPHITE ORE 83000 TPA AT BIRIDA GRAPHITE MINE (LEASE AREA-45.753 HA) ALONG WITH PIT HEAD GRAPHITE BENEFICIATION PLANT (83000 TPA THROUGHPUT) VILLAGE-BIRIDA, TEHSIL- RAYAGADA SADAR, DIST-RAYAGADA (EC WAS GRANTED BY SEIAA VIDE LETTER NO:951/SEIAA DT.05.06.2014 FOR A PERIOD OF 5 YEARS AND THE DEEMED LEASE PERIOD OF THE MINE IS 50 YEARS (UPTO 25.12.2055) OF SIBANANDA PRADHAN – EXTENSION - EC

1. This proposal is for Extension of validity of Environmental Clearance of Birida Graphite Mines for Production of Graphite Ore 83000 TPA along with pit head Graphite beneficiation plant (83000 TPA throughput) over an area - 45.753 Ha. at Village- Birida, Tehsil- Rayagada Sadar, Dist-Rayagada of Sibananda Pradhan.
2. Environmental Clearance was granted by the State Environmental Impact Assessment (SEIAA), Odisha vide Letter no. 951/SEIAA dated 05.06.2014 for a period of 5 years.
3. The Birida Graphite Mining Lease was executed by the Govt. of Odisha in favour of Sri. Sibananda Pradhan on 26.12.2005 for a period 20 years. Subsequent to the execution of the mining lease, the project proponent has obtained surface right over 19.991 Ha. coming within the said land from the Collector, Rayagada and the Deputy Director of Mines, Koraput has handed over the said land to the Project Proponent.
4. The Department of Steel & Mines, had initiated proceedings against the mining lease for lapsing in the month of January, 2015. Post hearings before the Directorate of Mines, Department of Steel & Mines, vide order dated 21.12.2015 lapsed the said mining lease of the project proponent. Subsequently the Revisional Authority, Govt. of India vide order dated 11.05.2016 set aside the order of lapsing of the State Govt.
5. The Department of Steel & Mines, post multiple hearings with project proponent revived the lease on Dt: 05.02.2018.
6. However, the Indian Bureau of Mines (IBM), vide letter dated 23.08.2017 demanded additional Bank Guarantee in compliance of Rule 27 of the newly promulgated Mineral Conservation (Development & Regulation) Rules, 2017. Post submission of the said bank guarantee on 06.07.2019, the Project Proponent was permitted by the IBM to commence operations in the said mining lease. Subsequently, the IBM have approved the Mining

Scheme for the period FY 2021-22 to 2025-26 vide letter dated 09.11.2020.

7. The Mines obtained Consent to Operate on dt.01.07.2019 and Director General of Mines Safety (DGMS) have issued Mines Code as on 16.07.2020.
8. Meanwhile the Mines and Minerals (Development & Regulation) Act, 1957 has been amended w.e.f. 12.01.2015 wherein under section 8(A)(3), the tenure of all mining leases where Order of Grant of Mining Lease has been issued prior to the date of amendment has been deemed to be granted for a period of 50 years from the date of Grant order or date of execution whichever is later.

been deemed to be granted for a period of 50 years from the date of Grant order or date of execution whichever is later.

9. The Directorate of Mines, Department of Steel & Mines, Govt. of Odisha vide letter dated 21.10.2020 have clarified to the SEIAA that the tenure of the mining lease is subsisting till 25.12.2055.
10. The project proponent intends to request the State Govt. for execution of supplementary lease deed revising the tenure of the lease deed till 25.12.2055, post obtaining extension in the tenure of the Environment Clearance granted on 05.06.2014.
11. Though the EC was obtained on 05.06.2014 from SEIAA, but due to lapsing of mining lease, the mining operation could not be carried out.
12. The entire Mining Lease area of 45.753 hectares comprises of non-forest land.
13. There is no sensitive ecological habitat like National Parks, Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/Elephant reserves within 10 km radius of ML area. No Schedule I species are found within the study area.
14. The Environment consultant **M/s Visiontek Consultancy Services Pvt Ltd, Bhubaneswar** along with the proponent has made a briefing on the proposal before the Committee.

Considering the information / documents furnished by the proponent and presentation made by the consultant, the SEAC recommended for extension of validity of EC for a period of 30 years or life of the mine, whichever is earlier with following conditions:

(i) The proponent shall submit all the documents to SEAC, Odisha as per conditions stipulated in Environmental Clearance which if were not submitted (if any) till date to SEIAA and copies of the documents that they have submitted to SEIAA.

(ii) The mining plan to be expired in the year 2021. The proponent shall approve the mining plan for lease period including scheme of mines for 5 years with progressive mine closure plan and final mine closure plan.

(iii) An Undertaking in form of a legal affidavit shall be submitted by project proponent to the SEIAA, Odisha that no mining activity have been taken place till date and before issue of letter of extension of validity of Environmental Clearance as well.

24.12.2020

Secretary, SEAC

Chairman, SEAC

ANNEXURE – A

TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY IN CLUSTER APPROACH AND INFORMATION TO BE INCLUDED IN THE EIA/EMP REPORT

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.

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. 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.

21. 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).

22. 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.

23. 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.

24. 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.

25. 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.

26. EIA-EMP document shall be based on the maximum achievable mineral extraction of the mine and according to the impact of mines in cluster (within 500m) of the said mine.
27. EIA-EMP document shall include complete profile of the all the Project Proponent, implementing organization of mines in cluster (within 500m) of the said mine.
28. EIA-EMP document shall corer land description of project site (plot/survey / khasara number, village, tehsil, district, state & extent of land involved), of mines in cluster (within 500m) of the said mine.
29. EIA-EMP document shall include deposit conditions working depth mining scheme, details of machinery, backfilling of mine pit with type of blasting, drilling and explosives.
30. The general features such as surface drainage, mineral transportation and process flow of beneficiation plant, power and water supply shall be indicated.
31. 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 of mines in cluster(within 500m) of the said mine.
32. 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
33. EIA-EMP document shall include land use pattern including agriculture, forest land, water bodies and settlements.
34. Existence of National Park, Wild Life sanctuary, migratory routes of wild animals within 10 km of mine lease area shall be brought out.
35. Topographical map of study area (core & buffer zone -10 km from the boundary of core zone) showing major topographical features shall be included.
36. EIA-EMP document shall include biological environment (flora and fauna) and socio-economic environment within the study area.
37. EIA-EMP document shall include anticipated impacts on land, air, noise and water environment and the mitigation measures of mines in cluster (within 500m) of the said mine.
38. Environmental Monitoring Programme and the environment management plan shall also be covered measures of mines in cluster (within 500m) of the said mine.
39. 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.
40. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
41. 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.
42. 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.

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43. 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.

44. 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.

45. 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.

46. 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.

47. 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.

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

49. 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.

50. 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.

51. 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.

52. 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.

53. 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.

54. 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.

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

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

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

58. 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.

59. 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.

    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.

60. **This Terms of References (TORs) is valid for a period of four years from the date of issue of TORs for submission of the EIA/EMP report after conducting public hearing.**

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