



F.No. J-11015/60/2020-IA. II(M)

Government of India  
Ministry of Environment, Forest and Climate Change  
Impact Assessment Division

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11<sup>th</sup> June, 2021

To,

**M/s Rashtriya Ispat Nigam Limited**

Visakhapatnam Steel Plant,

Administrative Building,

Visakhapatnam 530031.

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**Subject: Proposal for Environmental Clearance (EC) under S.O. 1530 dated 06<sup>th</sup> April, 2018 for dump access in the 10 Ha with manganese production 50 TPD and to set-up screening plant with a handling capacity of 40 MT/hour powered by Diesel Generator from manual to screening Garbham Manganese Ore Mine of M/s Rashtriya Ispat Nigam Limited (264.540 Ha, 50 TPD/18000 TPA) at Village Garbham, Tehsil Merakamudldam in District Vizianagaram in Andhra Pradesh- Environmental Clearance (EC)**

Sir,

This has reference to online proposal no. IA/AP/MIN/180932/2020 of M/s Rashtriya Ispat Nigam Limited is for grant of Environmental Clearance (EC) under S.O. 1530 dated 06<sup>th</sup> April, 2018 for dump access in the 10 Ha with manganese production 50 TPD and to set-up screening plant with a handling capacity of 40 MT/hour powered by Diesel Generator from manual to screening for Garbham Manganese Ore Mine at Village Garbham, Tehsil Merakamudldam in District Vizianagaram in Andhra Pradesh (264.540 Ha. 50 TPD/ 18000 TPA). The mine lease area falls under the Survey of India Toposheet No 65 N/7 & 65 N/11 and bounded by latitude 18°22'15"N to 18°23'05"N and longitude 83°26'24"E to 83°28'03"E and falls in Seismic Zone-II.

EC-M/s Rashtriya Ispat Nigam Limited –Andhra Pradesh

Page 1 of 17

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category A or Activity 1(a) as the mining lease area is greater than 100 ha.

3. The Project Proponent submitted that the environmental clearance was granted by MoEF&CC vide letter no. J-11015/375/2005-IA.II (M) dated 04.10.2006 with a general condition no. B (i) *"No change in mining technology and scope of working shall be made without prior approval of Ministry of Environment & Forest."* PP vide its Proposal No. IA/AP/MIN/11447/2006 dated 11.11.2016 has applied for amendment in EC w.r.t. the above-mentioned general condition B (i) for change in technology. The PP has mentioned that the modernization through mechanized screening would bring down the demand supply gap. Hence it is proposed to set-up screening plant with a handling capacity of 40 MT/hour powered by Diesel Generator set. The proposal was earlier placed in the EAC meeting held during 23<sup>rd</sup>-25<sup>th</sup> November, 2016 wherein the Committee deferred the proposal for want of requisite information. The PP submitted the requisite information online on 30.07.2020 and the proposal was placed in EAC meeting held during 19-21 August, 2020 wherein Committee observed that the EC granted in this case was granted under EIA Notification 1994 and PP was required to apply as per provision of S.O. 1530(E) dated 06.04.2018. The Committee is of the view that if PP would have submitted the information on time the amendment in EC was granted under EIA 2006 and PP is not required to apply as per S.O. 1530(E). PP informed the Committee the delay in reply to the ADS is due to delay in preparation and approval of the modified mining plan & preparation of impact study for DG Set. The Committee is of the view that EC is no more valid the amendment in the same could not be granted at this stage, however as the proposal was already under consideration in the Ministry, before the issuance of S.O. 1530(E) dated 06.04.2018, the PP may be allowed for lateral entry, under S.O. 1530(E) dated 06.04.2018, to apply in Form-1 for grant of ToR. The Committee therefore returned the proposal in present form and asked the PP to apply afresh in Form-1 for obtaining EC as per provision of S.O. 1530 (E) dated 06.4.2018. PP applied online vide proposal no. IA/AP/MIN/180932/2020 Dated 13.11.2020 and the proposal was placed in the EAC meeting held on 09.12.2020 wherein the Committee recommended the proposal for grant of ToR to only dump access in the 10 Ha area with manganese production 50 TPD and to set-up screening plant with a handling capacity of 40 MT/hour powered by Diesel Generator set only change in will be from manual to screening at Garbham Manganese Ore Mine of M/s Rashtriya Ispat Nigam Limited at Village Garbham, Tehsil Merakamudldam in District Vizianagaram in Andhra Pradesh as per S.O. 1530(E) dated 06.04.2018 for undertaking detailed EIA/EMP study. The Ministry granted ToR vide letter No. J-11015/60/2020-IA.II (M) dated 31.12.2020 in the name of M/s Rashtriya Ispat Nigam

Limited. Then, PP applied for Environmental Clearance vide online proposal no. IA/AP/MIN/180932/2020 on 10.02.2021 and submitted the Form 2 and EIA report. The proposal was considered in 28<sup>th</sup> EAC meeting held during 24<sup>th</sup> -26<sup>th</sup> February, 2021.

4. The Project Proponent submitted that the Lessee i.e. M/s. Rashtriya Ispat Nigam Limited, Visakhapatnam Steel Plant has been granted mining lease for the Garbham Manganese Mine for a period of 20 years over an extent of 264.54 Ha (653.690 Acres) in Sy.No. 251,253,254,255 & 257(P), 87 to 107, 109 to 120 etc. of Garbham Village of Merakamudidam Mandal, Vizianagaram District vide G.O. Ms. No. 491 is related to Central Garbham and 625 is for East & West Garbham, together 264.54 Ha of Industries & Commerce Department, Govt. of A.P. dated 07.08.1982 for a period of 20 years. Later on, Central, East & West Garbham leases were amalgamated and first renewal of mining lease was granted vide G.O. Ms. No. 214 of Industries & Commerce department, Govt. of A.P. dated 08.08.2008 for a period of 20 years and the lease is valid up to 07.10.2022.

5. The Project Proponent submitted that the five-year period of scheme of mining was submitted and approved for the period 2013-14 to 2017-18 vide letter no AP/VZNR/MS/Mn-265-SZ/2049 dt: 05.12.2013 which was valid up to 31<sup>st</sup> March 2018. The present review of mining plan is submitted under rule no 17(2) MCR 2016 for the period of 2018-19 till the mining lease validity period i.e., 07.10.2022 and IBM Regional office at Hyderabad approved the review of mining plan vide letter No: AP/VZNR/MP/Mn-81/HYD, dated 21.02.2018.

6. The Project Proponent submitted that total reserves & resources is 12,49,987 T; Reserves in existing dump is 3,88,987 T (111) and annual production is proposed 18000 TPA. The mine will work in one shift i.e. general shift for 365 days in a year therefore the life of mine will be 21.61 years say 22 years. PP submitted that the mining will be carried out in the existing dump by open cast method by deploying shovel and dumper combination for excavation as per the production plan. Benches are proposed to develop at a height of 4 m and 12 m width. The total height of the dump is about 20 m. The no. of working benches will be 4 in the plan period. There is no drilling and blasting envisaged as the dump material is friable in nature and can be easily excavated with shovel. The benches are connected through ramps of 1:16 gradient for smooth haulage of dumpers and other HEMM. The lump and fines are segregated from the ROM by deploying manual screening and sizing for existing CFO capacity of 18000 TPA (50 TPD). To meet the additional lump requirement, it is proposed to introduce a mechanized screening facility of 40 TPH capacity. The mechanization of screening is proposed for

scientific mining, environmental protection and mineral conservation. A detailed study is conducted for suitable location of the screening & dust suppression facility at mine. To carry out the mining operations as per the production plan the HEMM and double deck screening system will be deployed. The ROM from the benches as per the production plan on daily basis will be excavated and transported to feed the screening plant for segregation of lump and fines. The oversize lump ore will be sized manually as per the requirement of RINL-VSP. PP informed that the Mineral Beneficiation plant is not proposed and hence, mineral beneficiation is not applicable in the instant proposal.

7. The Project Proponent submitted that nearest Village is Garbham village adjacent to the Central Garbham mine towards south.

8. The Project Proponent submitted that the no ground water intersection is envisaged and total water requirement for the proposed project will be 17.0 KLD out of which the water requirement of 1.0 KLD for domestic usage is met through existing bore well within the lease area. PP submitted that 6.0 KLD will be required for dust suppression and 10.0 KLD for which the water present in the existing old pits shall be utilized. PP submitted that NOC has been obtained from Tahsildar vide Rc No. 1/2021/JA dated 06.01.2021. PP also submitted that total waste water generation will be 0.6 KLD which will be treated through septic tank followed by soak pit.

9. The Project Proponent submitted that area covered by plantation is 6.33 hectares of the lease hold area. Hence, most of the vacant lands in the government area of the mining lease is afforested. In addition to the existing greenbelt, 2200 plants will be planted over an area of 2.0 ha within the lease area with preference to locally adapted species.

10. The Project Proponent submitted that there is no involvement of forest land in the project area. PP also submitted a letter issued from Office of the District Forest Officer, Vizianagaram stating that there is no National Park, Protected area or Wildlife Sanctuary situated within 10 KM of lease area and the nearest Wildlife sanctuary from mine is Kambalakonda Wild life sanctuary which is more than 50 kms. PP also submitted that proposal does not involve approval/clearance under the C.R.Z notification, 2011.

11. The Project Proponent submitted there is no schedule I species found in the study area.



12. The Project Proponent submitted that baseline study was carried out during October 2020 to December 2020 for micro-meteorological data, ambient air quality, water quality, noise level, geology, hydrology, biological environment, land environment soil quality, and socio – economic status surrounding the project site. The predominant wind direction is from East- West direction. The concentrations of PM<sub>10</sub> and PM<sub>2.5</sub> for all the 8 AAQM stations were found between 19.0 µg/m<sup>3</sup> to 70.2 µg/m<sup>3</sup> and 9.8 µg/m<sup>3</sup> to 34.2 µg/m<sup>3</sup> respectively. The concentrations of SO<sub>2</sub> and NO<sub>2</sub> were found to be in range of 4.1 µg/m<sup>3</sup> to 13.5 µg/m<sup>3</sup> and 6.2 µg/m<sup>3</sup> to 15.7 µg/m<sup>3</sup> respectively. PP also submitted that results indicate that the ambient air quality in the study area well within the prescribed limits of CPCB. Ambient noise levels were measured at 8 locations in and around the mine site and varied from 53.8 to 57.7 Leq dB(A) during day time and from 42.5 to 47.2 Leq dB(A) during night time. The water in the region (surface water) has been compared with respect to the Drinking water Quality Standards as IS: 10500 and IS: 2296. pH of the surface water collected was neutral with pH ranging from 7.1 -7.4, TDS was found to be 196mg/l to 229mg/l. The tolerance limit of 1,500 mg/l as per IS:2296, Total hardness was found to be 113mg/l to 134mg/l, Presence of Nitrate was recorded as 0.22mg/l to 0.36mg/l, DO was observed as 5.5mg/l to 6.3mg/l, Total coliforms in water was 660MPN/100ml to 710MPN/100ml. The likely source of bacteriological contamination was due to the proximity to residential area, all the heavy metals were found to be within below detectable limits. Results for pH, TDS, chloride, hardness, fluoride and heavy metals observed to be within the permissible limits of IS: 10500 Drinking Water Standards. The analysis results of soil shows that soils in the region are average fertile enough for cultivation of crops.

13. The Project Proponent submitted that since the proposal is reviewed under S.O 1530(E) dated 06.04.2018, repeated public hearing is not required as there is neither change in production nor any change in mining methodology as per Terms of Reference F. No: J-11015/60/2020-IA.II (M) dated 31.12.2020.

14. The Project Proponent submitted that out of total mine lease area 264.54 Ha; 143.33 Ha is Government wasteland and Pvt. & agriculture land is 121.21 Ha. PP submitted that only 46.22 Ha is the broken area, which consists of the existing old dumps and allied infrastructure, and remaining 218.32 Ha is of agriculture lands and greenbelt. The present and proposed workings are restricted to old dump spread over an area of 10.00 Ha of Govt. Waste Land. No mining is proposed from in-situ and an area of 11.84 Ha covered by 2 no of pits will remain same. PP has submitted that no human

settlements exist in the M.L. area and no humans have been displaced from the area so the project does not involve any rehabilitation and resettlement.

15. The Project Proponent submitted the Certified EC Compliance report issued by the Andhra Pradesh Pollution Control Board vide Lr.No.PCB/ROVZ/Tech/2021-76 dated 02.02.2021. PP also submitted the Consent to Operate issued by the Andhra Pradesh Pollution Control Board vide Consent order No. 9059-VZN/APPCB/ZOVSP/CFO/2016 dated 26.09.2016 and is valid up to 31.12.2021.

16. The Project Proponent submitted that there is no any Court Cases pending against the project.

17. The Project Proponent submitted that the total capital cost of the project is Rs. 150 Lakhs and capital cost of Environment Management Plan is Rs. 9.4 Lakh and recurring cost is Rs. 5.65 Lakh/Annum. PP reported that currently the mine is providing employment for a total of approximately 24 persons including skilled as well as semi-skilled staff directly and will contribute to indirect employment scope for 10 persons benefiting to local people.

18. The proposal for Environmental Clearance (EC) was considered before the Expert Appraisal Committee (Non Coal Mining) in its 28<sup>th</sup> EAC meeting held during 24<sup>th</sup> - 26<sup>th</sup> February, 2021. Based on the documents submitted and presentation made by the Project Proponent and the Consultant, the Committee **recommended** the proposal for grant of Environmental Clearance under Ministry's Notification S.O. 1530 dated 06<sup>th</sup> April, 2018 for dump access in the 10 Ha with manganese production 50 TPD and to set-up screening plant with a handling capacity of 40 MT/hour powered by Diesel Generator from manual to screening for Garbham Manganese Ore Mine of M/s Rashtriya Ispat Nigam Limited (264.540 Ha, 50 TPD/18000 TPA) at Village Garbham, Tehsil Merakamuddam, District Vizianagaram in Andhra Pradesh with the specific conditions in addition to the standard conditions applicable for non- coal mining projects.

19. The Ministry of Environment, Forest and Climate Change has examined the proposal in accordance with the Environmental Impact Assessment Notification, 2006 and further amendments thereto and hereby accords the above mentioned Environmental Clearance under Ministry's Notification S.O. 1530 dated 06<sup>th</sup> April, 2018 as recommended by EAC during its 28<sup>th</sup> EAC meeting held during 24<sup>th</sup> - 26<sup>th</sup> February, 2021 for dump access in the 10 Ha with manganese production 50 TPD and to set-up screening plant with a handling

capacity of 40 MT/hour powered by Diesel Generator from manual to screening for Garbham Manganese Ore Mine of M/s Rashtriya Ispat Nigam Limited (264.540 Ha, 50 TPD/18000 TPA) at Village Garbham, Tehsil Merakamuddam, District Vizianagaram in Andhra Pradesh subject to compliance of the terms & conditions and the environmental safeguards mentioned below:-

### **SPECIFIC CONDITIONS**

- 1) The Project Proponent shall undertake the adequate plantation in peripheral zone and three tier avenue plantation with at least 90% survival rate to control the dust at source.
- 2) The Project Proponent shall ensure that adequate safety measures adopted by the employees engaged in mining operations and every employee shall wear mask within the mine premises so as to avoid dust inhalation.
- 3) As the mine lease is valid up to 07.10.2022, Environmental Clearance (EC) shall be valid up to the lease period only.
- 4) The Project Proponent shall undertake quarterly health check up of the employees engaged in mining operations and shall conduct regular health camps for the public nearby.
- 5) The Project Proponent shall undertake the adequate control measures to control the noise level within the mining lease boundary.

### **STANDARD CONDITIONS**

#### **I. Statutory compliance**

- 1) This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
- 2) The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.

EC-M/s Rashtriya Ispat Nigam Limited –Andhra Pradesh



- 3) The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors.
- 4) The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- 5) A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
- 6) State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
- 7) The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change ([www.parivesh.nic.in](http://www.parivesh.nic.in)). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.
- 8) The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred, PP needs to apply for transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

## **II. Air quality monitoring and preservation**

- 9) The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120°



is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.

10) Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.

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

11) In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.

12) Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.



13) The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.

14) Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.

15) Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.

16) Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.

17) The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.

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

18) The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.

19) The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.

20) The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

#### **V. Mining plan**

21) The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.); mining technology; lease area; scope of working ( method of mining, overburden & dump management, O.B& dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure; land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.).

22) The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised



in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.

#### **VI. Land reclamation**

23) The Overburden (O.B.), waste and topsoil generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB / waste dumps / topsoil dump like height, width and angle of slope shall be governed as per the approved Mining Plan and the guidelines/circulars issued by D.G.M.S. The topsoil shall be used for land reclamation and plantation.

24) The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.

25) Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.

26) Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.

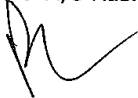
## **VII. Transportation**

27) No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers. [If applicable in case of road transport].

28) The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

## **VIII. Green Belt**

29) The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.



30) The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.

31) The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.

#### **IX. Public hearing and human health issues**

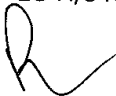
32) Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.

#### **X. Corporate Environment Responsibility (CER)**

33) The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.

## **XI. Miscellaneous**

- 34) The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
- 35) The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- 36) The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
- 37) A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEFCC.
- 38) The concerned Regional Office of the MoEFCC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEFCC officer(s) by furnishing the requisite data / information / monitoring reports.
- 39) In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause Vs Union of India, the mining lease holder shall after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
- 40) The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.



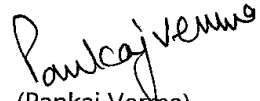
41) Concealing factual data failure to comply with any or submission of false/ fabricated data and of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

20. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.

21. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

22. This issues with the approval of Competent Authority.

Yours faithfully,



(Pankaj Verma)

Scientist 'E'

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Tel./Fax- 011-24695264

**Copy to:**

- i. **The Secretary**, Ministry of Mines, Government of India Shastri Bhawan, New Delhi.
- ii. **The Principal Secretary**, 4th Block, Ground Floor, Room No:187, Andhra Pradesh Secretariat Office, Velagapudi **Phone:** 0863-2444438 **Email:** [splcs\\_efst@ap.gov.in](mailto:splcs_efst@ap.gov.in)
- iii. **The Principal Secretary**, 4th Block, Ground Floor, Room No:187, Andhra Pradesh Secretariat Office, Velagapudi **Phone:** 0863-2444438 **Email:** [splcs\\_efst@ap.gov.in](mailto:splcs_efst@ap.gov.in).
- iv. **The DMG**, Department of Mines and Geology, Sri Anjaneya Towers, D.No. 7-104, B-Block, 5<sup>th</sup>& 6<sup>th</sup> floors, Ibrahimpatnam, Vijayawada, Government of Andhra Pradesh.
- v. **The Secretary**, 2nd Block, Ground Floor, Room No: 102, A.P Secretariat Office, Velagapudi **Phone:** 0863-2442113 **Email:** [prlsecy.industries@gmail.com](mailto:prlsecy.industries@gmail.com), [secy\\_inde@ap.gov.in](mailto:secy_inde@ap.gov.in).



- vi. **The Additional Principal Chief Conservator of Forests (C)**, Ministry of Environment, Forest and Climate Change, Regional Office (SEZ), I<sup>st</sup> and II<sup>nd</sup> Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai – 600034
- vii. **The Chairman**, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
- viii. **The Chairman**, Andhra Pradesh State Pollution Control Board, D.No. 33-26-14 D/2, Near Sunrise Hospital, Pushpa Hotel Centre, Chalamvari Street, Kasturibaipet, Vijayawada – 520 008
- ix. **The Member Secretary**, Central Ground Water Authority, 18/11, Jam Nagar House, Man Singh Road, New Delhi-110011.
- x. **The Chief Wildlife Warden**, Govt. of Andhra Pradesh, Aranya Bhawan , Saifabad, Hyderabad-500004
- xi. **The Controller General**, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur- 440 001.
- xii. **The District Collector**, Vizianagaram District, Government of Andhra Pradesh.
- xiii. **Guard File.**
- xiv. **PARIVESH PORTAL.**

  
(Pankaj Verma)  
Scientist 'E'