

State Level Environment Impact Assessment Authority, Jharkhand.

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Ranchi, Date: 10.12.2018

To: **Shri Manash Biswas,**
General Manager (Mines),
Gua Ore Mines,
SAIL, Raw Material Division,
P.O. – Gua, Dist. – West Singhbhum,
Jharkhand – 833213.

Sub.: Environmental Clearance for the project “**Jhillingburu – II Iron & Manganese Ore Mining of Gua Ore Mines of M/s Steel Authority of India Ltd at Vill.- Gua, Noamundi, W. Singhbhum (30.430 Ha)**”.

Sir,

It is in reference to the project “Jhillingburu – II Iron & Manganese Ore Mining of Gua Ore Mines of M/s Steel Authority of India Ltd at Vill.- Gua, Noamundi, W. Singhbhum (30.430 Ha)” submitted by you for seeking prior Environmental Clearances (EC).

The proposal was appraised by State Level Expert Appraisal Committee (SEAC) and recommended for grant of Environmental Clearance in its meeting held on 08th & 09th October, 2018.

The proposal is for renewal of mine lease which fell due in May, 2010 for production of 20,820 TPA of manganese ore. The mine has been renewed accordance to MMDR Amendment order, 2015 under section 8A(8) and Ministry of Mines, Govt. of India OM 1/2/2015-M.VI. dated 06.02.2015 where Government undertaking company the Mining lease were renewed. It was stated that the mine was opened in 1961. But closed in 1971. Since, then the mine is closed. The mine was taken over by SAIL in 2006. Mine lease area is 30,430 ha, which is a forest land. It is a category ‘B’ project and has been considered in MoEF as SEIAA for Jharkhand is not in place. Mine working will be opencast involving drilling and blasting. Life of mine is 25 years. Water requirement is 47 kld, which will be obtained from karo river. Mine working will not intersect ground water table. As the project is located in west singhbhum, an identified severely polluted area, the comments of SPCB were also obtained and considered.

Jhillingburu –II mine lease forms part of Gua Ore Mine, which was the captive mine of the erstwhile Indian Iron and Steel Company Ltd. (IISCO). Since IISCO was takeover by SAIL, Gua Ore Mines is operated by the Raw Material Division of SAILL and supplies iron ore mainly to SAIL’s IISCO Steel Plant (ISP), Burnpur.

Gua mine is located in Noamundi Tehsil of west singhbhum district of Jharkhand, Jhillingburu-II mine lease is spread over 30.43 ha in Ghatkuri Reserve Forest (R.F) under Gua Range of Saranda Forest Division. The lease consists of three noncontiguous blocks. Block A (9.480), Block B (8.150 ha) and Block C (12.800 ha).

Gua ore mine commenced mining operation in 1921. The mine consists of 4 adjacent leases Durgaiburu (1443.756) & Topailore (14.16 ha) are iron ore mining lease. Jhillingburu-I (210.526 ha), Jhillingburu-II (30.43 ha) are iron & manganese leases In addition there is also a surface right area spread over 242.8 ha, where most of the infrastructure for the mines (township, railway siding) are located.

The proposed project envisages reopening the mine (closed since 1971-72) with a ore production of 20,820 t/yr of manganese ore. The mine will be a mechanized open cast mine. The proposal does not envisage any increase in lease area. The proponent has submitted copy of mining scheme approved by IBM on 04.09.15.

The entire Jhillingburu-II lease area falls under forest land. Stage-1 forestry clearance has been obtained for 30.430 ha on 29.01.2013 from MoEF vide letter No-5-JHC172/2010-BHU. The net present value (NPV) of forest amounting to Rs.2,69,27,268/- (Rupees two crores sixty-nine lakhs twenty-seven thousand two hundred and sixty eight only) has also been paid.

Green belt will be generated all along the periphery of lease boundary (safety zone) and afforestation will be made around sub grade ore dump. Water required for the proposed project for industrial as well as potable use will be drawn from Karo Rver flowing nearby.

The proposal was presented in SEAC on 31.05.18 & 01.06.18 in which further informations were sought as under -

- (i) The PP seeking EC for production of Manganese, whereas said Mining lease is for Iron Ore. Mining lease has been extended vide Mining Deptt. letter no. 518 / M dated 18.03.15 for Iron Ore lease only, not for Mn Ore.*
- (ii) Deptt. of Forest, Govt. of Jharkhand vide letter no.- 5055 dated 03.11.16 has sent the compliance report to C.F, GoI, Regional Office, Ranchi for Fe-Ore and not for Mn-Ore.*
- (iii) The SEAC seeks clarification from PP to clarify aforesaid anomaly.*
- (iv) PP should submit certificate from DFO, as to whether it would disturb movement of Elephant & other Wildlife or not, as it is near Elephant Corridor & in dense forest of Saranda.*

The documents related to the above mentioned discrepancies have been submitted and found to be satisfactory.

DFO, Saranda certify that Elephant corridor lies beyond 17-20 km.

SAIL obtained inclusion of Manganese ore in their mining lease of Jhillingburu-II of Gua ore mine vide letter no. 474 / M Ranchi dated 26.09.18 by Deptt. of Mines & Geology, Govt. of Jharkhand. The approval of scheme of mining along with progressive mine closure plan in respect of Jhillingburu –II Iron & Manganese mine over an area of 30.43 ha in the area by Regional Controller of Mines, Indian Bureau of Mines, Kolkata vide letter no.KOL/SB(W)/Fe/MP-426, dated 04.09.2015. However, committee feels a modified mine plan after the letter dated 26.09.2018 should be obtained from IBM.

State Level Environment Impact Assessment Authority (SEIAA), Jharkhand in its meeting held on 06th November, 2018 discussed the project proposal along with recommendations made by SEAC and decided to grant EC to the project.

Following the decision of SEIAA, as mentioned above, Environmental Clearance is hereby issued to the **“Jhillingburu – II Iron & Manganese Ore Mining of Gua Ore Mines of M/s Steel Authority**

of India Ltd at Vill.- Gua, Noamundi, W. Singhbhum (30.430 Ha)” alongwith the following conditions as recommended by SEAC.

I. Specific Conditions :

- i. This Environmental Clearance is valid subject to the following condition below –
That this project has-
 - a. Obtained all legal rights to operate at concerned place.
 - b. Complied with all existing concerned laws of the land and
 - c. Complied with the decisions of SEIAA on the issue of Environmental Clearance till date.

II. Statutory Compliance :

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- vii. A modified approved mine plan as per MCR, 2017 and mine closure plan as per MCDR, 2017 should be obtained by the proponent.

III. Air quality monitoring and preservation :

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. Monitor fugitive emissions in the plant premises.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)

- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent use leak proof trucks/dumpers carrying ore and other raw materials and cover them with tarpaulin.
- vii. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- viii. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation :

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. The project proponent shall provide the slime disposal facility with impervious lining and collection wells for seepage. The water collected from the slime pond shall be treated and recycled.
- v. Adhere to 'Zero Liquid Discharge'.
- vi. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- viii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- ix. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention:

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

V. Energy Conservation measures :

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- ii. Provide LED lights in their offices and residential areas.

VI. Waste management :

- i. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Trans boundary Movement) Rules, 2016.
- ii. Kitchen waste shall be composted or converted to biogas for further use.*(to be decided on case to case basis depending on type and size of plant)*

VII. Green Belt and EMP :

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

VIII. Public hearing and Human health issues :

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

IX. Corporate Environment Responsibility :


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

X. Miscellaneous :

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectorial parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities,

commencing the land development work and start of production operation by the project.

- i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
 - ii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act,
- xv. The Environmental Clearance accorded will be valid for the period of lease of the mine, till the PP does not increase production rate and alter lease area during the validity of Environmental Clearance.


Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand.
