

No. J-11015/294/2015-IA.II (M)
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division

Indira Paryavaran Bhavan,
Aliganj, Jor Bagh Road
New Delhi-110 003

Dated: 17th May, 2017

To,

M/s Monnet Ispat & Energy Ltd.,
Monnet Marg, Mandir Hasaud,
Raipur-492101(Chhattisgarh).

Sub.: Hahaladdi Iron Ore Mine of M/s Monnet Ispat & Energy Ltd. With capacity of 1,50,000 TPA of Iron ore (ROM) in 78.90 Ha M.L. area located at Village –Hahalladi Tehsil Bhanupratappur, District Kanker, State-Chhattisgarh -Environmental Clearance.

Reference: Online Application IA/CG/MIN/30056/2015.

Sir,

This has reference to your online application for the above mentioned proposal of **Iron ore** Mining with proposed production capacity of **1,50,000 TPA (ROM)**. The mine lease area is located in Village – Hahalladi Tehsil Bhanupratappur, District Kanker, State-Chhattisgarh in MLA 78.90 ha. The Area falls in survey of India Toposheet No. 64D/16 and is bounded between latitudes 20°13'40"N -20°14'45"N and longitudes 81°53'15"E -81°54'00"E. The Project is located in Seismic zone-II.

2. The proposal of TOR was considered by the EAC in its meeting held during September 22nd-24th, 2015, wherein the Committee noted that the proposal has already been considered and recommended by EAC in November, 2010 and is pending for Stage-I forest clearance. The Committee, therefore, suggested the PP to apply for consideration after obtaining Stage-I forest clearance. In this context, the PP vide letter dated 02.11.2016, has submitted the Stage –I Forest approval for diversion of 79.56 Ha of Forest land for Iron Ore mining under Section 2 of the Forest (Conservation) Act, 1980. The MoEFCC, vide letter no.8-81/2010-FC dated 28.10.2016, has accorded Stage –I Forest approval for diversion of 79.56ha of Forest land for iron Ore mining. In its meeting dated December15-16, 2016, also the Committee noted that the proposal of EC was earlier recommended by EAC in its meeting held during November, 24-26, 2010. Further, the Stage –I FC has been granted on 28.10.2016 by the Ministry i.e. after about six years of the recommendations of EAC. Accordingly, the Committee suggested that the PP needs to collect one full season baseline data comprising of three months (w.r.t. Air Quality, Ground Water Quality, Surface Water Quality, Soil, Noise, Flora/Fauna etc.) and compare the old baseline data and accordingly to submit the report for further consideration of the proposal.

3. Project Proponent submitted report on one full season baseline data comprising of three months (w.r.t. Air Quality, Ground Water Quality, Surface Water

Quality, Soil, Noise, Flora/Fauna etc.) on 02 February, 2017. It was explained before the Committee that in anticipation of the requirement of generating baseline data afresh, they had commenced air quality monitoring at and around proposed mine after the end of monsoon i.e. from 1st October 2016 which was brought to the notice of EAC during presentation on 16th December, 2016. The PP has obtained Stage-2/ Final approval for diversion of forest land vide MoEFCC letter no. 8-81/2010-FC dated 04.01.2017. Based on the information submitted by Project Proponent, the proposal was again appraised by the EAC in its meeting held during **March 21-22, 2017** wherein the Committee **recommended** the Proposal for Environmental Clearance subject to providing proof of submission of wildlife conservation plan and water drawl permission from concerned CGWA/ State Government for **Iron Ore Mine** with proposed production **capacity of 1,50,000 TPA (ROM)**. Accordingly Project Proponent vide letter dated **18.04.2017** had submitted the information as sought by EAC in its meeting held during **March 21-22, 2017** viz:- (i) Wildlife conservation plan approved by PCCF, wildlife, Chhattisgarh vide letter no.B.Pra./Prabandh-391/1040 dated 21.02.2017. and (ii) Proof of application submitted with Central Ground Water Authority for grant of permission for withdrawal of ground water.

4. The Mining Plan has been approved by the Regional Controller of Mines (M.R), IBM, Nagpur vide letter no. KNK/FE/MPLN-952/NGP dated 17.01.2008. Project Proponent has reported that anticipated life of mine is 21 years. The Mine mining is opencast semi-mechanized nature. The drilling shall be carried out wet by compressed air operated jack hammer. The operations shall involve medium scale blasting operations also. The total water required for the project is 60 KLD covering Industrial sprinkling (20 KLD), plantation (20 KLD), and vehicle washing in workshop (2 KLD), potable water for manpower at site (8 KLD) and other uses (10 KLD) .The PP proposes to use groundwater through bore-well. The Committee advised the PP to seek necessary permission of CGWA/ concerned State Government Authority, if required.

5. Project Proponent reported that there is no National Park, Sanctuary, Biosphere Reserve, Wildlife Corridor, Tiger Reserves, Critically Polluted Area or CRZ Area within study area (10 km of the mine lease) are located within the 10 km study area of the mine lease. There is one major Reserved Forest, named Michgaon Lohattarr RF and patches of Protected Forests present in study area. The nearest sanctuary Sitanadi Sanctuary and National Park is Tadoba National Park about 117 km east and 140 km west respectively from core zone. The PP has obtained the authenticated list of flora and fauna from the State Forest Department. The PP has provided the copy of Wildlife Conservation Plan. However, the proof of its submission to the concerned State Government Authority is not submitted. The Committee asked the PP to submit the proof of submission of wildlife conservation plan.

6. The Public hearing for the project was conducted on 29.04.2010 under the chairmanship of Collector, Kanker, District-North Bastar, Chattisgarh wherein Regional Officers of Chattisgarh Environment Conservation Board. As per the report of ADM and representatives of JSPCB, main issues raised by the public were employment, opening of good schools, construction of roads, technical training to villagers, health facilities, safety of villagers and special attention towards the development of entire area. The CSR activities identified by the PP include employment generation options for the poor people such as financial aid and managerial assistance for self help groups/ cooperatives, vocational training centre for eligible girls and boys, calling of expert from outside for improving skills and marketing. The Committee noted that the proposal covering Public hearing and CSR related issues have already been appraised

7. Project Proponent has earmarked **Rs. 54.88 Lakhs towards EMP cost** covering Pollution Control (Rs. 19.70 Lakh per annum), Pollution Monitoring 2.38 Lakh per annum, Reclamation 2.05 Lakh per annum Occupational Health (Rs. 0.70 Lakh per annum) and Green Belt/Plantation (Rs. 0.60 Lakh per annum) Project Proponent reported that there is **no court case/ litigation pending against the project.**

8. The Ministry of Environment, Forest and Climate Change has examined the proposal in accordance with the Environmental Impact Assessment Notification (EIA), 2006 and further amendments thereto and hereby accords the Environmental Clearance under the provisions thereof to the above mentioned proposal of **M/s Monnet Ispat & Energy Ltd for Iron ore** Mining with proposed production capacity of **1,50,000 TPA (ROM)**. The mine lease area is located in Village – Hahalladi Tehsil Bhanupratappur, District Kanker, State-Chhattisgarh in MLA 78.90 ha subject to compliance of the followings terms and conditions and environmental safeguards mentioned below:-

A. Specific conditions

- (i) Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court of Chhattisgarh and any other Court of Law, if any, as may be applicable to this project.
- (ii) Environmental clearance is subject to obtaining clearance, if any, under the Wildlife (Protection) Act, 1972 from the Competent Authority, as may be applicable to this project.
- (iii) No mining activities will be allowed in forest area, if any, for which the Forest Clearance is not available.
- (iv) The project proponent shall obtain Consent to Establish and Consent to Operate from the State Pollution Control Board and effectively implement all the conditions stipulated therein.
- (v) The mining operations shall be restricted to above ground water table and it should not intersect the groundwater table.
- (vi) The loose solids should be kept separately from flowing water and flow of effluents to nearby areas outside the leasehold shall be prevented. These paved drains along with arrangements for Over Burden Dumps and their drainage may be clearly depicted on a contoured map of the mining area.
- (vii) The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations. Adequate measures shall be taken for conservation and protection of the 1st and 2nd order streams, emanating or passing through the mine lease during the course of mining operation.
- (viii) The top soil, if any shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation.
- (ix) Appropriate safeguard measures shall be taken to ensure stability and drainage of dump so that no solid waste/debris flows into the nallah.
- (x) The over burden (OB) generated during the mining operation shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time and their phase-wise stabilization shall be carried out. Proper terracing of OB dump(s) shall be carried out so that the overall slope shall not exceed 28°. The over burden dump(s) shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dumps. Monitoring and management of rehabilitated areas should continue until the

vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office, Nagpur on six monthly basis.

- (xi) Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, temporary OB and mineral dumps to arrest flow of silt and sediment directly into the adjoining River and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted particularly after the monsoon and maintained properly.
- (xii) Dimension of the retaining wall at the toe of the OB dump(s) and the OB benches within the mine to check run-off and siltation should be based on the rain fall data.
- (xiii) Plantation shall be raised in an specified area including a 7.5 m wide green belt in the safety zone around the mining lease, OB dump(s), along the roads, etc. by planting the native species in consultation with the local DFO/Agriculture Department. In addition, plantation shall also be raised in the backfilled and reclaimed area and around water body. The density of the trees should be around 2500 plants per ha.
- (xiv) Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as around crushing and screening plant, loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- (xv) Regular monitoring of water quality upstream and downstream of perennial nallahs falling in the impact zone shall be carried out and record of monitoring data should be maintained and submitted to Ministry of Environment, Forest and Climate Change, its Regional Office, Nagpur, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.
- (xvi) Appropriate measures shall be taken for treatment of the upper catchment of the mine lease area.
- (xvii) The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.
- (xviii) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and installing new piezometers during the mining operation. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment, Forest and Climate Change and its Regional Office Nagpur, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.
- (xix) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water, required for the project.
- (xx) Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground Water Board.

- (xxi) Appropriate mitigative measures should be taken to prevent pollution of nearby River in consultation with the State Pollution Control Board.
- (xxii) Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.
- (xxiii) Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.
- (xxiv) Drills shall either be operated with dust extractors or equipped with water injection system.
- (xxv) Mineral handling area shall be provided with the adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- (xxvi) Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and wastewater generated during the mining operation.
- (xxvii) Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.
- (xxviii) Regular monitoring of free silica in the dust will be carried out and records maintained. It shall be ensured that the levels of silica do not exceed the prescribed limit. The workers will be provided with personal protective measures to guard against inhaling silica dust.
- (xxix) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (xxx) The project proponent should take all precautionary measures during mining operation for conservation and protection of endangered flora as well as endangered fauna namely black buck, python, peacock etc. spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. Copy of action plan may be submitted to the Ministry and its Regional Office at Nagpur within 3 months.
- (xxxii) The critical parameters such as RSPM (Particulate matter with size less than 10 micron i.e., PM₁₀) and NO_x in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006.IA.II(M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.
- (xxxiii) A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment, Forest and Climate Change 5 years in advance of final mine closure for approval.

- (xxxiii) The project proponent shall undertake all the commitments made during the public hearing and effectively address the concerns raised by the locals in the public hearing as well as during consideration of the project, while implementing the project.

B. General conditions

- (i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment, Forest and Climate Change.
- (ii) No change in the calendar plan including excavation, quantum of mineral and waste should be made.
- (iii) Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10micron i.e., PM₁₀) and NOx monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.
- (iv) Data on ambient air quality RSPM (Particulate matter with size less than 10micron i.e., PM₁₀) & NOx should be regularly submitted to the Ministry of Environment, Forest and Climate Change including its Regional office located at Nagpur and the State Pollution Control Board / Central Pollution Control Board once in six months.
- (v) Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
- (vi) Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.
- (vii) Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.
- (viii) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
- (ix) A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- (x) The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry of Environment, Forest and Climate Change and its Regional Office located at Nagpur.
- (xi) The project authorities should inform to the Regional Office located at Nagpur regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (xii) The Regional Office of this Ministry located at Nagpur 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 project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the

Ministry of Environment, Forest and Climate Change, its Regional Office Nagpur, the respective Zonal Office of Central Pollution Control Board the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment, Forest and Climate Change, Nagpur, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board.

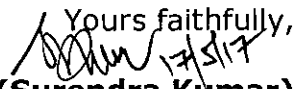
- (xiv) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
- (xv) The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector's office/ Tehsildar's Office for 30 days.
- (xvi) The environmental statement for each financial year ending 31st March in Form-Vas is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment, Forest and Climate Change, Nagpur by e-mail.
- (xvii) The project authorities should advertise at least in two local newspapers of the District or State in which the project is located and widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment, Forest and Climate Change at <http://envfor.nic.in> and a copy of the same should be forwarded to the Regional Office of this Ministry located at Nagpur.

10. The Ministry or any other Competent Authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

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

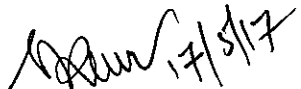
12. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments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

13. 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.

Yours faithfully,

(Surendra Kumar)
Director (S)

Copy to:

- i. **The Secretary**, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi-110 001.
- ii. **The Secretary**, Department of Environment, Government of Chhattisgarh,
- iii. **The Secretary**, Department of Mines and Geology, Government of Chhattisgarh, Chhattisgarh.
- iv. **The Chairman**, Central Pollution Control Board, Parivesh Bhawan, CBD-cumoffice complex, East Arjun Nagar, Delhi-110032
- v. **The Chairman**, Chhattisgarh Environment Conservation Board, Nanak Niwas, Civil Lines, Raipur, Chhattisgarh
- vi. **The Additional Principal Chief Conservator of Forests(C)**, Ministry of Environment, Forest and Climate Change, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur - 440001.
- vii. **The Controller General**, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
- viii. **The Member Secretary**, Chhattisgarh State Pollution Control Board, Commercial Complex, Chhattisgarh Housing Board Colony, Kabir Nagar, Raipur, Chhattisgarh.
- ix. **The Member Secretary**, Central Ground Water Authority, A2, W3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- x. **The Chief Wildlife Warden**, Govt. of Chattisgarh, Aranya Bhavan, Jail Road, Fafadih Chowk, Raipur - 492001.
- xi. **The District Collector**, Kankar District, Chhattisgarh.
- xii. **Guard File**
- xiii. **MoEF&CC website.**


(Surendra Kumar)
Director (S)