

BY SPEED POST

No. J-11015/375/2008-IA.II(M)  
 Government of India  
 Ministry of Environment & Forests

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Paryavaran Bhavan,  
 C.G.O. Complex, Lodi Road,  
 New Delhi-110 003.

Dated: 28<sup>th</sup> June, 2013

To

M/s National Enterprises,  
 P.O. Box No. 44  
 At P.O. Barbil- 758035 Keonjhar  
 Odisha

**Subject: Sanindpur Iron and Manganese Ore Mines Project of M/s National Enterprise at Village Sanindpur, Tehsil Bonai, District Sundergarh, State Orissa - environmental clearance regarding.**

Sir,

This has reference to your letter No. NE/BBL/MoEF/10-11/015 dated 27.12.2010 and subsequent letters dated 05.07.2011, 23.08.2011, 22.09.2011, 18.11.2011 and 20.12.2011 on the subject mentioned above. The project was earlier prescribed Terms of Reference (TORs) by the Ministry of Environment and Forests on 05.02.2009 for undertaking detailed EIA study for the purpose of obtaining environmental clearance. The Expert Appraisal Committee recommended the proposal for Environmental Clearance in its meeting held during 22-23 December 2011. The proposal is for enhancement of production from 23,625 TPA to 0.41 million tonnes of iron ore per annum. Screening and crushing (60,000 TPA capacity) is also proposed as part of the project.

2. The total mine lease area of the project is 70.917 ha, out of which 50.537 ha is forest land, 14.431 ha is agricultural, 3.448 ha is grazingland, 2.234 ha is others (non forest) and 0.267 is water bodies. It was stated that 50.537 ha of DLC broken up forestland is prior to 12.12.1996 and the Hon'ble High Court of Orissa has allowed the lessee to continue its mining operations in broken up area subject to conditions, till the renewal of mine lease due in September 2020. The proponent have submitted proposal for forest diversion.

3. No National park / wildlife sanctuary / biosphere reserve / tiger reserve / elephant reserve etc. are reported to be located in the core and buffer zone of the mine. The Mendhamaruni R.F. (approx. 2.9 km on NW),

Karo R.F (approx. 8-4 km on NW), Sidhamath R.F. (approx 5.2km on NE), Baitarani R.F. (4.7 km on NE), Khajurdihi R.F. (5.4 km on S) and Kathamala R.F. is at 7.0 km on W.

4. The mine working will be opencast by semi-mechanized method involving drilling and blasting. Life of mine is 42 years. Approval of mining scheme alongwith PMCP is obtained vide no. MSM/OTFM/16-ORI/BHU/2011-12 dated 08.07.2011. The mine lease area is hilly and undulating. The Longitude is 21°54'00" to 21°55'00" N and Latitude is 85°15'00" to 85°20'00" E. Ultimate working depth will be 59 m bgl (575 m AMSL). The groundwater table is reported to vary between 573.3 m AMSL - 571.75 m AMSL. Mine working will not intersect groundwater table. Water requirement for the project is estimated as 75 kld, which will be obtained from Sun a nallah and bore well.

5. It is estimated that 1.775 million m<sup>3</sup> of waste will be generated during the conceptual period, which will be partly backfilled (74%). At the conceptual stage an area of 33.487 ha will be covered under plantation and 17.557 ha will be covered under water body. Height and width of the bench in overburden / waste is 6.0 m X 20 m and proposed inclination / slope of the sides is 28°.

6. The public hearing of the project was held on 26.05.2010. Total cost of the project is Rs. 6.5 crores. EMP implementation cost for proposed 5 year mining scheme is Rs. 1,59,77,550/-.

7. It is a violation case as the mine has been operating after it fell due for renewal in 2000 without requisite prior environment clearance and also had increased production. The prosecution report has been filed in the Court of Sub-Divisional Judicial Magistrate, Bonai, District Sundergarh on 18.02.2013 vide Case No. 2(C)C 24/2013 to take cognizance of offence by the said court under section 15 of Environment (Protection) Act, which has been committed by the offending project and the affidavit stating that such violations of Environment (protection) Act, 1986 will not be repeated in the future has been submitted by proprietor the same have been taken on record.

8. The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and hereby accords environmental clearance under the provisions thereof to the above mentioned Sanindpur Iron and Manganese Ore Mines Project of M/s National Enterprise at Village Sanindpur, Tehsil Bonai, District Sundergarh, State Orissa, for the enhancement of production from 23,625 TPA to 0.41

million tonnes of iron ore per annum and Screening and crushing plant of 60,000 TPA capacity in mine lease area of 70.917 ha subject to implementation of the following conditions and environmental safeguards.

#### **A. Specific Conditions**

- (i) Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004, as may be applicable to this project.
- (ii) Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972, if required from the competent authority.
- (iii) The project proponent shall obtain Consent to Establish and Consent to Operate from the State Pollution Control Board, Orissa and effectively implement all the conditions stipulated therein.
- (iv) The Company shall submit within 3 months their policy towards Corporate Environment Responsibility which should inter-alia provide for (i) Standard operating process / process to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions, (ii) Hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions and (iii) System of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders.
- (v) The mining operations shall be restricted to above ground water table and it should not intersect the groundwater table. In case of working below the ground water table, prior approval of the Ministry of Environment and Forests and the Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out.
- (vi) The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations.
- (vii) 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.
- (viii) The over burden (OB) generated during the mining operation shall be stacked at earmarked dump site(s) only and should not be kept active for long period. 1.775 million m<sup>3</sup> of waste will be generated during the conceptual period, which will be partly backfilled (74%). At the conceptual stage an area of 33.487 ha will be covered under plantation and 17.557 ha will be covered under water body. Height

- and width of the bench in overburden / waste is 6.0 m X 20 m and proposed inclination / slope of the sides is 28°. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests and its Regional Office located at Bhubaneswar on six monthly basis.
- (ix) Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from mine working, soil, OB and mineral dumps. 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 monsoon and maintained properly.
  - (x) Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and OB dump and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and desilted at regular intervals.
  - (xi) Dimension of the retaining wall at the toe of dumps and OB benches within the mine to check run-off and siltation should be based on the rainfall data.
  - (xii) Plantation shall be raised in an area of 33-487 ha including a 7.5m wide green belt in the safety zone around the mining lease by planting the native species around OB dump, reclaimed area, mine benches, along the roads etc. in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per hectare. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.
  - (xiii) 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 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.
  - (xiv) 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.

- (xv) 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 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 and Forests and its Regional Office Bhubaneswar, 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.
- (xvi) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water, if any, required for the project.
- (xvii) The safeguard measures as suggested by the Central Groundwater Board vide letter NO.21-4(231)/CGWA/SER/2010-1010 dated 11.06.2010 shall be effectively implemented.
- (xviii) The project proponent shall practice suitable rainwater harvesting measures on long term basis and work out a detailed scheme for rainwater harvesting in consultation with the Central Groundwater Authority and submit a copy of the same to the Ministry of Environment and Forests and its Regional Office, Bhubaneswar.
- (xix) 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 vehicles should be covered with a tarpaulin and shall not be overloaded.
- (xx) No blasting shall be carried out after the sunset. Blasting operation shall be carried out only during the daytime. Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.
- (xxi) Drills shall either be operated with the dust extractors or equipped with water injection system.
- (xxii) Mineral handling area shall be provided with 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.
- (xxiii) Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and wastewater generated during the mining operation.
- (xxiv) 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.

- (xxv) 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.
- (xxvi) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely elephant, sloth bear etc. spotted in the study area. All the safeguard measures brought out in the Wildlife Conservation Plan so prepared specific to this project site and approved by the Chief Conservator of Forests (Wildlife) shall be effectively implemented. A copy of Wildlife Conservation Plan shall be submitted to the Ministry of Environment and Forests and its Regional Office, Bhubaneswar.
- (xxvii) The critical parameters such as RSPM (Particulate matter with size less than 10micron i.e., PM<sub>10</sub>) and NO<sub>x</sub> 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 and Forests, which is available on the website of the Ministry [www.envfor.nic.in](http://www.envfor.nic.in) shall also be referred in this regard for its compliance.
- (xxviii) A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.

#### **B. General conditions**

- (i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.
- (ii) No change in the calendar plan including excavation, quantum of mineral iron ore and waste should be made.
- (iii) Atleast 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., PM<sub>10</sub>) and NO<sub>x</sub> 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., PM<sub>10</sub>) and NO<sub>x</sub>] should be regularly submitted to the Ministry including its Regional office located at Bhubaneswar 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.
- (ix) 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.
- (x) 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.
- (xi) 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 and its Regional Office located at Bhubaneswar.
- (xii) The project authorities should inform to the Regional Office located at Bhubaneswar regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (xiii) The Regional Office of this Ministry located at Bhubaneswar 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.

- (xiv) 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 and Forests, its Regional Office Bhubaneswar, the respective Zonal Office of Central Pollution Control Board and 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 and Forests, Bhubaneswar, the respective Zonal Officer of Central Pollution Control Board and the State Pollution Control Board.
- (xv) 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.
- (xvi) 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.
- (xvii) The environmental statement for each financial year ending 31st March in Form-V as 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 respective Regional Office of the Ministry of Environment and Forests, Bhubaneswar by e-mail.
- (xviii) 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 and Forests at



<http://envfor.nic.in> and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bhubaneswar.

9. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
10. 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.
11. 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 thereunder and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of Orissa and any other Court of Law relating to the subject matter.
12. 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.

  
(Dr. Saroj)  
Director

Copy to:

- (i) The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
- (ii) The Secretary, Department of Environment, Government of Orissa, Secretariat, Bhubaneswar.
- (iii) The Secretary, Department of Mines and Geology, Government of Orissa, Secretariat, Bhubaneswar.
- (iv) The Secretary, Department of Forests, Government of Orissa, Secretariat, Bhubaneswar.
- (v) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.

- (vi) The Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment and Forests, A-3 Chandrashekharpur, Bhubaneswar-751023.
- (vii) The Chairman, Orissa State Pollution Control Board, Parivesh Bhawan, A/118 Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012.
- (viii) The Member Secretary, Central Ground Water Authority, A2, W3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- (ix) The District Collector, District Sundergarh, Government of Orissa.
- (x) Guard File.

  
(Dr. Saroj)  
Director