

**By Speed Post**

**No. J-1 1015/134/2011-IA.II (M)**  
Government of India  
Ministry of Environment and Forests  
Impact Assessment Division

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

Dated the 10<sup>th</sup> May, 2013

To

**M/s NSL Mining Resources India Ltd.**

Flat No. 501, 5<sup>th</sup> Floor,  
Babu Khan, Millennium Centre,  
D-6-3-1099/1100, Raj Bhawan Road,  
Somajiguda, Hyderabad-500 082

Ph.: 91-404-2222013, Email: [debabrata.sanyal@nslconsolidated.com](mailto:debabrata.sanyal@nslconsolidated.com)

**Sub.: Iron Ore Beneficiation Plant with throughput of 0.75 MTPA to obtain 0.25 MTPA Beneficiated Ore of M/s NSL Mining Resources India Pvt. Ltd. at Village Muddavaram, Distt. Kurnool, Andhra Pradesh (4.92 ha) - Environmental Clearance regarding.**

This has reference to your letter no. nil dated 27<sup>th</sup> July 2012 on the subject mentioned above. The project was prescribed Terms of Reference (TORs) by the Ministry of Environment and Forests on 21.09.2011 for undertaking detailed EIA study for the purpose of obtaining environmental clearance.

2. The proposal is for setting up of iron ore beneficiation plant having a capacity of 0.75 million TPA throughput with an output of 0.25 million TPA. The filter press technology will be adopted. The total area for the project is 4.92 ha. No forestland is involved. The total water requirement of the project is estimated as 278.65 m<sup>3</sup>/day. The required water will be obtained from groundwater. The Project proponent has obtained Ground Water withdrawal permission for 288 m<sup>3</sup>/day vide letter no. 21-41-(181)/SR/CGWA/2011-3/11, dated 27.02.2012 from the Central Ground Water Authority. The main source of raw material is Mangal and Kuja Mines which have been acquired by the Project Proponent. The production capacities of these two mines are 5.0 LTPA and 3.28 LTPA respectively combining resource feed rate of 8.28 LTPA maximum capacity. Transportation of raw material will be through dumpers with maximum haul distance of 5 km and 0.5 km. The process flow has been designed assuming 130 tonnes per hour of ROM feed in to the crushing circuit. Assuming 30% Iron at 130 tonnes per hour, the yield will be 52 tonnes per hour, concentrate will be 57.1 % Fe, total water requirement will be 230.6

m<sup>3</sup>/hr, recycled water will be 214.2 m<sup>3</sup>/hr and make up water will be 16.4 m<sup>3</sup>/hr.

3. The proposed iron ore beneficiation plant is located in Village Muddavaram, District Kurnool, Andhra Pradesh. The total project area is 4.92 ha. The geographical co-ordinates of the plant sites are 15° 31' 46.98" N - 78° 05' 33.45" E, 15° 31' 46.67" N - 78° 05' 31.00" E, 15° 31' 43.98" N - 78° 05' 32.49" E and 15° 31' 43.02" N - 78° 05' 31.23" E. Area proposed for plant is 4.92 ha, an area of 1.6239 ha is kept for green belt, 1.2140 ha for plant and DG sets, 0.4046 ha for logistic area, 0.2023 ha for office area, 0.8093 ha for finished product storage and 0.6668 ha is for disposal of solid waste. No National Parks/Wild-Life Sanctuaries within 10 km radius of the project site is reported.

4. The public hearing of the project was held on 24.04.2012 for beneficiation plant with throughput capacity of 0.75 million TPA to obtain 0.25 million TPA of beneficiated Ore. The capital cost of the project is Rs. 11 Crores and a budget for environmental protection measures is Rs. 78.5 lakhs towards capital investment and Rs. 32.45 lakhs towards recurring expense/annum.

5. 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 Iron ore beneficiation plant with throughput capacity of 0.75 million TPA to obtain 0.25 million TPA of beneficiated Ore of M/s NSL Mining Resources India Pvt. Ltd. subject to implementation of the following conditions and environmental safeguards.

**A. Specific Conditions**

- i. Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.
- ii. The beneficiated ore shall be transported through road on trucks covered with tarpaulin.
- iii. Effective safeguard measures such as conditioning of ore with water, 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. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- iv. The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.

- v. 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 and Forests and its Regional Office Bangalore, 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.
- vi. The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any operations.
- vii. The decanted water from the beneficiation plant and slime/tailing pond shall be re-circulated within the mine and there shall be zero discharge from the mine.
- viii. Regular monitoring of water quality upstream and downstream of adjoining water bodies shall be carried out and record of monitoring data should be maintained and submitted to Ministry of Environment and Forests, its Regional Office, Bangalore, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.
- ix. About 0.50 MTPA tail cake is to be generated as solid waste. Out of which 30 % of solid waste from the tailings shall be used in the local brick manufacturing units and remaining 70% of tailing cake will be disposed on over burden waste in the mines for initial two years. After two years, this will be disposed in adjacent area which is under process of acquisition. Further, the dumps will be compacted with maximum dump height of 10 m. Waste dumps will be covered initially by geo textiles coir mats and grass seeds will be sown on mats. A retaining wall will be provided at the toe of the dump to arrest the surface runoff from the dumps. Trenches will be provided to collect runoff water from the dumps.
- x. In order to assess crop damage and potential compensation arising out of iron ore processing activities, a Committee shall be constituted comprising of MRO, DRO, EE, APPCB, AD, Mines Agriculture Officer and Police Department to look into the issue. The Committee will also coordinate the local development activities of M/s NSL Mining Resources India Pvt. Ltd.
- xi. The main source of raw material shall be from Mangal and Kuja Mines which have been acquired by the M/s NSL Mining Resources India Pvt. Ltd.

- xii. The project proponent shall obtain Consent to Operate from the State Pollution Control Board, Andhra Pradesh and effectively implement all the conditions stipulated therein.
- xiii. As part of ambient air quality monitoring during operational phase of the project, the air samples shall also be analysed for their mineralogical composition and records maintained.
- xiv. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office located at Bangalore on six monthly basis.
- xv. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RPM such as haul road, loading and unloading point and transfer points. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- xvi. Appropriate mitigative measures shall be taken to prevent pollution of River, if any, in consultation with the State Pollution Control Board.
- xvii. The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water for the project.
- xviii. Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with Regional Director, Central Ground Water Board.
- 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 from mine face to the beneficiation plant. The vehicles shall be covered with a tarpaulin and shall not be overloaded.
- xx. Mineral handling plant 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.
- xxi. Sewage treatment plant shall be installed for the colony. ETP shall also be provided for workshop and wastewater generated during mining operation.
- xxii. Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional Office, Bangalore.

- xxiii. Regular monitoring of ambient air quality including free silica shall be carried out and records maintained.
- 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.

**B. General Conditions**

- (i) No change in 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) At least 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 10 micron 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. The data so recorded should be regularly submitted to the Ministry including its Regional office located at Bangalore and the State Pollution Control Board / Central Pollution Control Board once in six months.
- (iv) 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.
- (v) There will be zero waste water discharge from the plant.
- (vi) 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.
- (vii) 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.
- (viii) 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.
- (ix) 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 Bangalore.

- (x) 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.
- (xi) The Regional Office of this Ministry located at Bangalore 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.
- (xii) 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 Bangalore, 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, Bangalore, the respective Zonal Officer of Central Pollution Control Board and the State Pollution Control Board.
- (xiii) 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.
- (xiv) 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.
- (xv) The environmental statement for each financial year ending 31<sup>st</sup> 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, Bangalore by e-mail.
- (xvi) 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 Bangalore.

6. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

7. 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.

8. 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 Andhra Pradesh and any other Court of Law relating to the subject matter.

9. 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:**

- 1). The Secretary, Ministry of Mines, Government of India Shastri Bhawan, New Delhi.
- 2). The Secretary, Department of Environment, Government of Andhra Pradesh, Hyderabad.
- 3). The Secretary, Department of Forests, Government of Andhra Pradesh, Hyderabad.
- 4). The Secretary, Department of Mines and Geology, Government of Andhra Pradesh, Hyderabad.
- 5). The Secretary, Department of Industries and Commerce (M-III), Govt of Andhra Pradesh, Hyderabad.
- 6). The Chief Conservator of Forests, Regional Office (SZ), Kendriya Sadan, 4th Floor E&F, Wings 17th Main Road, 1 Block, Koramangala, Bangalore-560 034.
- 7). The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
- 8). The Chairman, Andhra Pradesh State Pollution Control Board, Paryavaran Bhawan, A-3 Industrial Estate, Sanath Nagar, Hyderabad - 500 018
- 9). The Member Secretary, Central Ground Water Authority, A2, W- 3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.

- 10). The Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur- 440 001.
- 11). District Collector, District Kurnool, State of Andhra Pradesh.
- 12). EI Division, Ministry of Environment & Forests, Paryavaran Bhawan, New Delhi.
- 13). Guard File

**(Dr. Saroj)**  
**Director**