

BY SPEED POST

No. J-11015/379/2010-IA.II (M)
Government of India
Ministry of Environment, Forests & Climate Change
Impact Assessment Division

3rd Floor, Vayu Wing,
Indira Paryavaran Bhawan,
Jorbagh Road, Aliganj,
New Delhi-110 003

Dated: 17th November, 2014

To

M/s J. Lakshmana Rao,
Village: Bhamidika, Mandal: Nathavaram
District: Visakhapatnam-531087
Andhra Pradesh
Telephone No. 9347777774

Subject: Laterite Mining of M/s J. Lakshmana Rao, Village Bhamidika, Sarugudu Grampanchyat, Nathavaram Mandal, District Visakhapatnam, Andhra Pradesh (121ha) (1.0 MTPA of Laterite) - Environmental Clearance regarding.

Sir,

This has reference to your letter no. nil dated 16.11.2010 and subsequent letters dated 01.02.2011, 04.11.2013, 28.04.2014 and 27.06.2014 on the subject mentioned above. The project was prescribed Terms of Reference (TORs) by the Ministry of Environment and Forests on 28th April, 2011 for undertaking detailed EIA study for the purpose of obtaining environmental clearance. The proposal was considered in the Expert Appraisal Committee for Environmental Appraisal of Mining Projects held during April 29-30, 2014 and re-considered during July 8-9, 2014 wherein the proposal was recommended for environmental clearance.

2. The Proposal is for opencast Laterite Mining with proposed production of 1.0 MTPA (ROM) of Laterite by M/s J. Lakshmana Rao., located at village Bhamidika, tehsil Nathavaram, Visakhapatnam District, Andhra Pradesh. The Latitude and Longitude of the site are 82°20'05" to 82°20'49" E and 17°30'58" to 17°32'12" N. The mine lease area is 121.0 ha, which is an un-surveyed hill portion (Gap area Government land). The Mining lease is granted vide Letter No. 10474 / M.II (2) / 2010-2 dated 12-10-2010 by Govt. of A.P, Industries & Commerce (M-iii) Department. The mine plan has been approved by Directorate of Mines and Geology, Government of Andhra Pradesh, Hyderabad vide letter no 5042/M/2010 dated 13.12.2010. Life of the Mine is 14 years.

3. It is proposed to carry out the mining activity with the help of semi-mechanized method by using an excavator without drilling and blasting. Laterite is formed and exposed to surface on the top of the hill without any overburden. The excavated Laterite will be loaded directly into tippers of 10 tonnes capacity without any segregation or separation of mineral. This

mineral will be transported by tippers to the mineral stacked yard/railway loading point. From there the mineral will be supplied to the consuming industries through trucks of 20 to 30 tonnes capacity or through rail wagons. About 5% waste will be generated from the proposed mining. During this plan period about 1,32,943 m³ of waste will be generated from the mining activity.

4. The waste will be stacked by the side of the workings in non-mineralized zone over an extent of 160 x 20m (3,200 sq.m) and to a height of 3m. The dumps will be stabilized with retaining wall. The total water requirement is about 12 KLD for various activities such as dust suppression and domestic use including green belt. Water requirement will be met through tankers from nearby villages. Mining will not intersect the ground water. It was reported by the PP that the protected areas viz. Wild Life Sanctuary/Tiger Reserve/National Park/Schedule I species are not located within 10 km of the proposed mine lease area.

5. Baseline studies were carried out during pre monsoon season 2011 (March-May 2011) and also some studies during pre monsoon season 2012 (January-March 2012). All the parameters for water and air quality were within permissible limits. The Public Hearing for the project was conducted at Mandala Praja Parishath School at Erakannapalem Village, Nathavaram Mandal, on 17.11.2011. The public hearing was presided over by Shri Girija Shankar, Joint Collector and Additional District Magistrate. The issues raised during public hearing were also considered and discussed during the meeting, which inter-alia, included that mining activities should not result into any adverse affects on environment and that the natural resources should not be affected, air pollution control measures to be adopted, raising of plantations, sprinkling of water etc. Need to be ensured. As per the villager's requirements, it was informed by the PP that they would take care of local employment; health issues, providing education, and assistance in providing infrastructure facilities like road development, basic amenities etc. Necessary budget provision have been incorporated in the Project Plan.

6. The estimated cost of the project is Rs. 85 lakh. It was reported by the PP that there is no court case/litigation pending against the project.

7. 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 proposal of M/s J. Lakshmana Rao, for production capacity of 1.0 MTPA (ROM) of Laterite production in mine lease area of 121 ha located at Village Bhamidika, Sarugudu Grampanchyat, Nathavaram Mandal, District Visakhapatnam, Andhra Pradesh subject to implementation of the following conditions and environmental safeguards.

A. Specific Conditions

- (i) The Project Proponent should supply the Minerals only to those industries which are having valid Air and Water consents and EC (if applicable) and also compiling satisfactorily with the conditions stipulated by regulatory authorities.
- (ii) The Project Proponent shall obtain Consent to Establish and Consent to Operate from the State Pollution Control Board, Odisha and effectively implement all the conditions stipulated therein.
- (iii) Traffic density on the route of mineral transportation shall be regularly monitored and report shall be submitted along with compliance report.
- (iv) 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.
- (v) 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.
- (vi) 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.
- (vii) 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.
- (viii) 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 piezo meters 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.
- (ix) The project proponent shall regularly monitor the flow rate of the natural water streams flowing adjacent to the mine lease and maintain the records.
- (x) The reclaimed and rehabilitated area shall be afforested. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be

- submitted to the Ministry of Environment & Forests and its Regional Office located at Bangalore on six monthly basis.
- (xi) Dimension of the retaining wall at the toe of temporary over burden dumps and OB benches within the mine to check run-off and siltation shall be based on the rain fall data.
 - (xii) Plantation shall be raised in an area of 40 ha including a 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around the higher benches of excavated void to be converted in to water body, roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha.
 - (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 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.
 - (xiv) Process water discharge and/or any waste water shall be properly treated to meet the prescribed standards before reuse/discharge. The runoff from temporary OB dumps and other surface run off shall be analyzed for iron and in case its concentration is found higher than the permissible limit, the waste water should be treated before discharge/reuse.
 - (xv) 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.
 - (xvi) Regular monitoring of the flow rate of the springs and perennial nallahs shall be carried out and records maintained.
 - (xvii) Regular monitoring of water quality, upstream and downstream of natural 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.
 - (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) Sewage treatment plant shall be installed for the colony. ETP shall also be provided for workshop and wastewater generated during mining operation.
 - (xxi) 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.
- (xxii) 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.
- (xxiii) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna 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. All the safeguard measures brought out in the Wildlife Conservation Plan so prepared specific to the project site shall be effectively implemented. A copy of action plan shall be submitted to the Ministry of Environment and Forests and its Regional Office, Bangalore.
- (xxiv) 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.
- (xxv) 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 & Forests.
- (ii) No change in the calendar plan including excavation, quantum of mineral iron ore, beneficiation plant and waste should be made.
- (iii) The topsoil, 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. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time. The maximum height of the dumps shall not exceed 8m and width 20 m and overall slope of the dumps shall be maintained to 45°. The OB dumps should 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 dump. The entire excavated area shall be backfilled and afforested. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of

Environment & Forests and its Regional Office located at Bangalore on six monthly basis.

- (iv) 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., PM₁₀) and NO_x 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.
- (v) 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.
- (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 Bangalore 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 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, 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.

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 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 Andhra Pradesh 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.

(Dr. V.P. Upadhyay)
Scientist `F`

Copy to:

- i. The Secretary, Ministry of Mines, Government of India Shastri Bhawan, New Delhi.
- ii. Secretary, Department of Environment, Government of Andhra Pradesh, Hyderabad.
- iii. Secretary, Department of Forests, Government of Andhra Pradesh, Hyderabad.
- iv. Secretary, Department of Mines and Geology, Government of Andhra Pradesh, Hyderabad.
- v. Secretary, Department of Industries and Commerce (M-III), Govt of Andhra Pradesh, Hyderabad.
- vi. Chief Conservator of Forests, Regional Office (SZ), Kendriya Sadan, 4th Floor E&F, Wings 17th Main Road, 1 Block, Koramangala, Bangalore-560 034.
- vii. Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
- viii. Chairman, Andhra Pradesh State Pollution Control Board, Paryavaran Bhawan, A-3 Industrial Estate, Sanath Nagar, Hyderabad - 500 018
- ix. Member Secretary, Central Ground Water Authority, A2, W- 3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- x. Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur- 440 001.
- xi. District Collector, Visakhapatnam District, Government of Andhra Pradesh.
- xii. Guard File.

(Dr. V.P. Upadhyay)
Scientist `F`