#### **By Speed Post**

# No. J-11015/44/2012-IA.II (M) Government of India Ministry of Environment and Forests Impact Assessment Division

Paryavaran Bhavan, C.G.O. Complex, Lodi Road, New Delhi-110 003 Dated: 17<sup>th</sup> February, 2014

To,

### **M/s Benita Industries Limited,** B.S. Maktha, Somajiguda, Hyderabad-82

## Subject: Iron Ore & Laterite Mining of M/s Benita Industries, Village Chabali, Pendlimarri Mandal, Distt. Kadapa, A.P. (163.482ha). Expansion of iron ore production capacity from 50,000 TPA to 2,64,915 TPA & Laterite production capacity from 23,328 TPA to 1,94,580 TPA-Environmental Clearance regarding.

This has reference to your letter no. nil dated 23.01.2012 and subsequent letter dated 03.07.2012 on the subject mentioned above. The project was prescribed Terms of Reference (TORs) by the Ministry of Environment and Forests on 10.07.2012 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 31<sup>st</sup> October & 1<sup>st</sup> November, 2013 wherein the proposal was recommended for environmental clearance.

2. The proposal is for Open cast mining of Low grade Iron ore Mining (2,64,915 TPA) & Laterite ore mining (1,94,580 TPA) of M/s Benita Industries Ltd. at Village Chabali, Mandal Pendlimarri, District YSR Kadapa, Andhra Pradesh (163.482 ha). The Latitude and Longitude of the site is 14° 28' 32.5" N to 14° 29' 35.1" N and 78° 34' 57.7" E to 78° 36' 1.3" E. The mine lease area is 163.482 Ha, which is Govt. waste land. The Mining scheme is approved by IBM vide Letter No.659(511)/ LAT/IO/F.SHALE/ 2004/HYD dated 28.11.2011.

3. Project Proponent has proposed to carry out the mining of Iron Ore & Laterite by semi-mechanised method. The deposit is shallow bedded and soft in nature, the mineral excavation is proposed to be carried out with occasional mild blasting. As per proposals made in approved mining scheme, the mining activity will be carried out by semi-mechanised method with the help of jackhammer drilling & Blasting in Quartzite (O.B.) and using the excavator (without drilling and blasting) in shale and Ferruginous Shale with Iron Ore. Instated of pit-7, the pit-1, 2, 3, 4, 5 & 6 are being

developed towards NW direction in two or three benches of 3m to 7m height. Whereas the float ore (Iron Ore) is being excavated manually with the help of hand tools on SW and NW side of the area from the pit No.8 & 9 to an average thickness of 3m from the surface. No mine workings will be carried out within 7.5m from the lease boundary and 50m on either side of the public road. The anticipated life of mine is 3.6 years.

4. The water requirement is estimated as 35 KLD, which will be obtained from ground water/mine pit. It was reported by the PP, the waste consisting of quartize and shale will be generated as waste from semi mechanised mine and the soil and screen will be generated as waste from float ore mining. During the conceptual plan 9,97,654 m<sup>3</sup> of solid waste will be generated and 81,000 m<sup>3</sup> of OB will be generated. Mine working will not intersect the ground water table. It was reported by the PP that no Wild Life Sanctuary/Tiger Reserve/National Park/Schedule I species etc. are present within 10 km of the mine lease area.

5. Baseline studies were carried out during summer season i.e. March, April, May 2012. All the parameters for water and air quality were reported to be within permissible limits. The Public Hearing for the Project was conducted on 03.10.2012. The PH was chaired by Shri. P.H. Hema Sagar, District Revenue Officer and Addl. Dist. Magistrate, Kadapa, Andhra Pradesh. The issues raised during public hearing were also considered and discussed during the meeting, which inter-alia, included that priority to local people in employment, CSR activities and establishment of Beneficiation Plant. As per the villager's requirements, it was informed by the PP that they would consider of local employment; take up developmental activities in the village etc. The cost of the project is Rs. 2.5 Crores. Cost for Environmental protection and occupational health is Rs. 1.55 Crores. For CSR Rs. 25 Lakhs / annum will be allocated.

6. The mine had operated from 2004 to April, 2012. Hence it was a violation case. As per the circular dated 12.12.12, the prosecution report was filed in the Court of Additional Judicial Magistrate, Kadapa on 31.08.2013 vide Case No. C.C. No. is 449/2013 to take cognizance of offence by the said court under section 19 of Environment (Protection) Act, which has been committed by the offending project and the affidavit dated 03.07.2012 stating that such violations of Environment (protection) Act, 1986 will not be repeated in the future.

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 Benita Industries, for production capacity of 2,64,915 TPA (ROM) of iron & 1,94,580 TPA (ROM) of Laterite production in mine lease area of 163.482 ha located at Village Chabali, Pendlimarri Mandal, Distt. Kadapa, A.P. subject to implementation of the following conditions and environmental safeguards.

### A. Specific Conditions

- (i) Green barrier (five stratified rows) should be raised on the boundary of Mine Lease Area.
- (ii) 10-15% of plantation/green belt should be of endemic/endangered species.
- (iii) Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.
- (iv) The raw material shall be transported through road on dumpers/trucks covered with tarpaulin.
- (v) Effective safeguard measures shall be taken to ensure that the AAQ levels at various locations including crushing zone, are within permissible limit as prescribed by CPCB. The standards prescribed for stone crushers shall be followed.
- (vi) Traffic density on the route of mineral transportation shall be regularly monitored and report shall be submitted along with compliance report.
- (vii) 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.
- (viii) The project proponent shall set up at least one air quality monitoring station in the south west direction during monitoring of the AAQ.
- (ix) The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment and Forests and Central Ground Water Authority shall be obtained.
- (x) 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.
- (xi) 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.

- (xii) 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.
- (xiii) 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 yearpre-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.
  - (xiv) The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations.
- (xv) 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.
- (xvi) Regular monitoring of the flow rate of the springs and perennial nallahs shall be carried out and records maintained.
  - (xvii) Green barrier (five stratified rows) should be raised towards Betjhari Nalla and Jalpa River.
- (xviii) 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.
- (xix) 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.
- (xx) Plantation shall be raised in an area backfilled and dumps 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.

(xxi) 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. Drills shall either be operated with dust extractors or equipped with water injection system.

- (xxii) Regular monitoring of water quality, upstream and downstream of Baitarani River and other 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.
- (xxiii) Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the Jalpa Nalla, Betjhari Nalla, The Baitarani River and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. The drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and over burden dumps to prevent run off of water and flow of sediments directly into the river and other water bodies 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 shall be constructed at the corners of the garland drains and de-silted at regular intervals.
- (xxiv) Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with Regional Director, Central Ground Water Board.
- (xxv) 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 shall be covered with a tarpaulin and shall not be overloaded.

- (xxvi) Sewage treatment plant shall be installed for the colony. ETP shall also be provided for workshop and wastewater generated during mining operation.
- (xxvii) 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.
- (xxviii) 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.
- (xxix) 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.
- (xxx) 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 Pan 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.
- (xxxi) 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, 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., 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.
- (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 email) 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 <u>http://envfor.nic.in</u> 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) Director

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#### 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, 4<sup>th</sup> Floor E&F, Wings 17<sup>th</sup> 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, Chittor District, Government of Andhra Pradesh.
- xii. Guard File.

(Dr. V.P. Upadhyay) Director