

No. J-11015/72/2007-IA.II (M) pt.
Government of India
Ministry of Environment & Forests

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

Dated the 11th April, 2013

To,

M/s Prachi Mines,
11/12, Parshva Krupa,
Bhabola-Chulna Road,
Stella, Vasai (W),
District Thane-401 202
Maharashtra

Subject: Bauxite mining project of M/s Prachi Mines located at village Adi M Khadi, Karivane and Dhariwali, taluka Mahasala and Sriwardhan, District Raigad, Maharashtra - environmental clearance regarding.

Sir,

This has reference to your No. 'Nil' dated 09.08.2012 and subsequent letter dated 07.09.2012 on the subject mentioned above. The proposal is for proposed production of bauxite 0.20 million tonnes per annum (MTPA) ROM. The total mine lease area of the project is 73.2176 ha, which is private land. Area proposed for mining is 54.2076 ha.

2. The mine lease area is 73.2176 ha, which is non-forest land. The co-ordinates of the lease area are 17°59'41.72"N to 18°01'13.48"N and 73°06'3.32"E to 73°06'50.68"E. The Savitri River is flowing at a distance of 1.0 km in SE direction from the mine lease. In addition, Bharja River and Arabian Sea are falling in the buffer zone of the mine at a distance of 6.3 km SSW and 9.4 km W respectively from the mine lease boundary. No national park/wildlife sanctuary/biosphere reserve/ Elephant reserve etc. is reported to be located in the core and buffer zone of the mine.

3. The mine working will be opencast by mechanized method involving drilling and blasting. The targeted production capacity of the mine is 0.20 million TPA and the life of mine is 20 years. Mineral will be transported through road. The topography of the area is plateau at an elevation above mean sea level ranging from 176 m to 179 m. The mine working will not intersect ground water table. The peak water requirement of the project is estimated as 7.5 m³per day. During 4, five yearly period total waste generation will be 11,61,260 T during the entire life of the mine which will be used for backfilling in 29.0312 ha excavated area at the end of the life of mine plantation will be raised in on the same. The public hearing of the project was held on 06.01.2010. The Indian Bureau of Mines had approved mining plan along with progressive mine closure plan of the project vide no. RGH/BX/MPNL-

1032/NGP dated 24.04.2009 for lease area of 73.2176 ha. The capital cost of the project is Rs. 1.0 crore and the capital cost for environmental protection measures is proposed as Rs. 37.0 Lakhs.

4. The Ministry of Environment and Forests has examined the application in accordance with Section 12 of EIA Notification 2006 and hereby accords environmental clearance under the provisions thereof to the above mentioned Bauxite Mining Project of M/s Prachi Mines for an annual production capacity of 0.20 million tonnes of bauxite by opencast mechanised method involving total lease area of 73.2176 ha, subject to implementation of the following conditions and environmental safeguards.

A. Specific conditions

- (i) All the conditions stipulated by the State Pollution Control Board in their NOC shall be effectively implemented.
- (ii) Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.
- (iii) The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. Prior approval of the Ministry of Environment & Forests and Central Ground Water Authority shall be obtained for mining below water table.
- (iv) The project proponent shall ensure that no natural watercourse shall be obstructed due to any mining operations.
- (v) Top soil should be stacked with proper slope at earmarked site(s) only with adequate measures and should be used for reclamation and rehabilitation of mined out areas.
- (vi) The entire waste generated shall be backfilled and there shall be no external over burden dump left at the end of the mine life. The entire backfilled area of 29.0312 ha shall be reclaimed by plantation. The back filling should be carried out in such a manner that it is restored to the normal ground level. 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, Bhopal on six monthly basis.
- (vii) Catch drains and siltation ponds of appropriate size should be constructed for the working pit, temporary OB dumps, if any and mineral dumps to arrest flow of silt and sediment. 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.

Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and temporary dumps 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.

- (viii) Dimension of the retaining wall at the toe of temporary dumps and OB benches within the mine to check run-off and siltation should be based on the rain fall data.
- (ix) Plantation shall be raised in an area of 72.2076 ha including a 7.5m wide green belt in the safety zone around the mining lease by planting the native species around ML area, backfilled and reclaimed area, around water body, roads etc. in consultation with the local DFO/Agriculture Department at the end of life of mine. The density of the trees should be around 2500 plants per ha.
- (x) Regular water sprinkling should be carried out in critical areas prone to air pollution and having high levels of SPM and RSPM such as haul road, 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.
- (xi) 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.
- (xii) Regular monitoring of ground water level and quality should be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring should be carried out four times in a year i.e. January, April-May, August, November and the data thus collected may be sent regularly to Ministry of Environment and Forests, its Regional Office, Bhopal; Central Ground Water Authority and Central Ground Water Board.
- (xiii) The project authorities should obtain prior approval of the competent authority for drawal of groundwater if any, required for the project.
- (xiv) Vehicular emissions should 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.

- (xv) Blasting operation should be carried out only during the daytime. Controlled blasting should be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.
- (xvi) Drills shall either be operated with dust extractors or equipped with water injection system.
- (xvii) Consent to operate should be obtained from SPCB before starting enhanced production from the mine.
- (xviii) A Final Mine Closure Plan along with details of Corpus Fund should 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 and Forests.
- (ii) No change in the calendar plan including excavation, quantum of mineral bauxite 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 PM₁₀, SO₂ & 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.
- (iv) 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.
- (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) Industrial wastewater (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 effluents from workshop.

- (vii) 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.
- (viii) Occupational health surveillance programme 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 purposes. Year-wise expenditure should be reported to the Ministry and its Regional Office located at Bhopal.
- (xi) The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The Project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing requisite data/information/monitoring reports.
- (xii) The project proponent shall submit six monthly report on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Bhopal, Central Pollution Control Board and State Pollution Control Board.
- (xiii) A copy of the clearance letter will be marked to the concerned Panchayat /local NGO, if any, from whom suggestions/representation has been received while processing the proposal.
- (xiv) The project authorities should inform to the Regional Office located at Bhopal regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (xv) State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industry Centre and Collector's/Tehsildar's Office for 30 days.
- (xvi) The project authorities should advertise at least in two local newspapers 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 Bhopal.

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

6. 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.

7. 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 Maharashtra and any other Court of Law relating to the subject matter.

8. 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-110 001.
- (ii) The Secretary, Department of Mines & Geology, Govt. of Maharashtra, Mantralaya, Mumbai.
- (iii) The Secretary, Department of Environment, Govt. of Maharashtra, Mantralaya, Mumbai.
- (iv) The Secretary, Department of Forests, Govt. of Maharashtra, Mantralaya, Mumbai
- (v) The Chief Conservator of Forests, Regional Office (WZ), E-3/240, Arera Colony, Bhopal-462 016.
- (vi) The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-1100032.

- (vii) The Member Secretary, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- (viii) The Chairman, Maharashtra Pollution Control Board, Kalpatru Point, Sion Circle, Sion (East), Mumbai-400 022, Maharashtra.
- (ix) The Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
- (x) The District Collector, Raigad District, Government of Maharashtra.
- (xi) Guard File.

(Dr. Saroj)
Director