

BY SPEED POST

F.No. J-11015/383/2010-IA-II(M)
Government of India
Ministry of Environment and Forests

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi-110 003.
Dated: 17th June 2013

To

M/s Hindustan Copper Ltd.,
Malanjkhand Copper Project,
Qtr. No. D-8, P.O. Malanjkhand
District Baihar,
Madhya Pradesh -481116

**Subject: Malanjkhand Copper Ore Project of M/s Hindustan Copper Ltd.,
Village Malanjkhand, District Baihar, Madhya Pradesh -
environmental clearance - regarding.**

Sir,

This has reference to your letter No. HCL/MCP/ENV/MCP-EXP/53(10)/2010 dated 16.09.2010 and subsequent letter dated 29.08.2012 on the subject mentioned above. The proposal is for enhancement of production of copper ore from 3.0 million TPA to 5.0 million TPA with lease area of 479.9 ha along with change in technology from opencast to underground mining and expansion of beneficiation plant from an capacity of 3.0 million TPA to 5.0 million TPA.

2. The total project area is 2016.77 ha. The facility wise break-up of land is as - Mine I&II and existing beneficiation plant 479.9 ha; Mine-III 248.5 ha; tailing disposal facility 230.0 ha; housing complex, market, auditorium & club, oxidation ponds for sewage disposal and others-1057.6 ha. 728.8 ha of forest land is involved. The land use in the existing mine lease area is forest 113.74 ha, irrigated agriculture 84.46 ha, un-irrigated agriculture 143.49 ha, cultivable waste land 36.95 ha, uncultivable waste land 101.26 ha. The coordinates of the mine lease are 20°00' to 22°02'N and 80°42' to 80°03' E. Banjar river flows at 2.2 km NW of the ML area. The total water requirement is 52,577 m³/day out of this 21,260 m³/day will be recycled and net water requirement will be 31,317 m³/day which will be sourced from Banjar river. The Kanha National Park (core zone) is reported at a distance of 8.9 km from the project area and the buffer zone of the Kanha National Park is at a distance of 4.3 km from the project area.

3. Method of mining will be underground mechanized with mass blasting and filling. Average life of mine will be 22.5 years. The underground mine

will operate between 300mRL and -60mRL. The ultimate working depth of mine will be 170 m bgl. Mining Plan for 479.9 ha is approved vide letter No. 314(3)/ 2012-MCCM (CZ)/MP-04 dated 23.08.2012. The mineral beneficiation plant would consist of following sections crushing section, grinding section, floatation, thickening and filtration section, tailing disposal and water reclamation. The capacity of the proposed plant would be 16667 t/day. The maximum ore size of 1200 mm would be processed in plant. The estimated total volume of waste likely to be generated at the end of life of mine would be 1568.58 LM³. Total land area to be utilized for the purpose of disposal of tailings and waste rocks are about 230 and 236 ha respectively. About 153.89 ha area around the mining lease will be utilized for development of greenbelt.

4. Both the opencast mine and underground mining operation will intersect the ground water. Public Hearing was held on 06.01.2012. The total project cost is Rs 2112.8 crores. The EMP implementation cost for the proposed 5 year mining scheme period will be Rs 1859.18 lakhs.

5. 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 Copper Mining Project of M/s Hindustan Copper Ltd. for enhancement of production of copper ore from 3.0 million TPA to 5.0 million TPA for 366.16 ha (i.e. 479.90-113.74 ha of forest land for which FC is not available) of lease area along with change in technology from opencast to underground mining and beneficiation plant with a total capacity of 5.0 million TPA by adding another unit, subject to implementation of the following conditions and environmental safeguards.

A. Specific conditions

- (i) No mining activities will be allowed in forest area for which the Forest Clearance is not available.
- (ii) The project proponent will seek and obtain approval under the FC Act, 1980 for diversion of the entire forest land located within the mining lease within a period of two years from 01.02.2013 i.e. the date of issue of guidelines by FC vide there letter F. No. 11-362/ 2012-FC, failing which the mining lease area will be reduced to the non forest area plus the forest area for which the project proponent has been able to obtain the FC at the end of this time period. In the case of reduction in mine lease area, the project proponent will need to get a revised mining plan approved from the competent authority for reduced area and enter into a new mining lease as per reduced lease area. The EC will be construed to be

available for the mining lease area as per the revised mining lease deed.

- (iii) Environmental clearance is subject to obtaining clearance from the Standing Committee of National Board for Wildlife under the Wildlife (Protection) Act, 1972.
- (iv) All the conditions stipulated by the State Pollution Control Board in their NOC shall be effectively implemented.
- (v) The project proponent shall ensure that no natural watercourse shall be obstructed due to any mining operations.
- (vi) 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.
- (vii) The effluent from the ore beneficiation plant shall be treated to conform to the prescribed standards and the tailings slurry shall be transported through a closed pipeline to the tailing dam.
- (viii) The decanted water from the tailing dam shall be re-circulated and there should be zero discharge from the tailing dam. Acid mine water, if any, shall be neutralized and reused within the plant.
- (ix) 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.
- (x) 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 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.
- (xi) 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.

- (xii) 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.
- (xiii) Plantation shall be raised in an area of 153.89 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. The density of the trees should be around 2500 plants per ha.
- (xiv) 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.
- (xv) 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.
- (xvi) 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.
- (xvii) The project authorities should obtain prior approval of the competent authority for drawl of groundwater if any, required for the project.
- (xviii) 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.
- (xix) 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.
- (xx) Drills shall either be operated with dust extractors or equipped with water injection system.
- (xxi) Consent to operate should be obtained from SPCB before starting enhanced production from the mine.
- (xxii) 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 and waste should be made.
- (iii) 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.

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 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 Madhya 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 Bhavan, New Delhi.
2. The Secretary, Department of Mines & Geology, Government of Madhya Pradesh, Secretariat, Bhopal.
3. The Secretary, Department of Environment, Government of Madhya Pradesh, Secretariat, Bhopal.
4. The Secretary, Department of Forests, Government of Madhya Pradesh, Secretariat, Bhopal.
5. The Chief Wildlife Warden, Government of Madhya Pradesh, Van Bhavan, 1st Floor, Tulsi Nagar, Bhopal - 462 003.
6. The Chief Conservator of Forests, Regional Office (WZ), Regional Office (WZ), Kendriya Paryavaran Bhawan, Link Road No.3, Ravi Shankar Nagar, Bhopal -462 016.
7. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-1100032.
8. The Member Secretary, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
9. The Chairman, Madhya Pradesh State Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal - 462016.
10. The Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
11. The District Collector, Baihar District, Madhya Pradesh.
12. Guard File

(Dr. Saroj)
Director