

BY SPEED POST

**No. J-11015/ 29/2010-IA.II (M)
Government of India
Ministry of Environment & Forests**

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

Dated the 2nd September, 2013

To

M/s Jindal Steel & Power Ltd (JSPL)
PO Box No. 16, Kharsia Road
Raigarh- 496 001, Chhattisgarh.
E-mail: raigarh@jspl.com

Subject: Godadih Mahal No. 2 Limestone Mine of M/s Jindal Steel and Power, located at Village Godadih, District Bilaspur, Chhattisgarh [ML area: 121.69 Ha; Cap: 1.54 MTPA(ROM)]- Environmental clearance regarding.

Sir,

This has reference to your letter No. JSPL/EMD/lime Stone mines/2011 dated 5th October, 2011 on the subject mentioned above. Subsequent information submitted vide letter no. JSPL/CG/LM/EC/INR dated 5th July, 2012 were also considered.

2. The proposal is for opening of a new mine for production of 1.54 million TPA (ROM) of limestone for use in their cement plant at a distance of about 135 km from the mine lease. The mine lease area is 121.69 ha, which include 89.166 ha of private agriculture land (single crop) and 24.414 ha of forestland. Out of total grazing land area of 22 ha in Godadih village, 6.59 ha is proposed under this mining project. To meet the feed requirement for livestock, additional grazing land outside ML area is being identified for proper fodder cultivation and irrigation support for high yield feed product. The Stage-I forest clearance for 24.414 ha of forest area has been granted vide letter dated 13.06.2013 no. 6-CHC062/2012-BHO/971. Coordinates of the mine lease are Latitude 21° 47' 26.2" N to 21° 48' 13.8" N and Longitude are 82° 18' 3.1" E to 82° 19' 21.2" E. No National Park / Sanctuary is reported within 10 km of the mine lease. A certificate and map authenticated by the PCCF (Wildlife) & Chief Wildlife warden, Chhattisgarh in this regard has been submitted vide letter No. 1860 dated 4.8.2011. The proponent have also prepared a Wildlife Conservation Plan and approved by PCCF & CWLW, Raipur. Mine working will be opencast mechanized using shovel dumper combination. Life of mine is 9 years. Ultimate depth of the mine will be 43 mbgl. Groundwater table is reported to vary between 5 - 12 mbgl. Mine working will intersect groundwater table. Water requirement will be 110 KLD and will be sourced from bore wells for which permission is obtained from CGWA on 9.4.2012. It was stated that the railway

siding is at a distance of 35 km from the mine. The mineral transportation up to railway siding will be by road and thereafter, it will be by rail. Soradih and Chelati villages are located close by. There are two ponds between the village and the mine lease, one near Soradih village which falls within ML area and this pond will be left undisturbed throughout mine life. The 2nd pond is outside the ML area. Local road passing through ML area at northern side will be diverted at 5th year of mining and the second road at southern side will not be diverted and power line will be diverted at 1st year of mining. Land losers and landless agricultural labours will be compensated as per Model R&R Policy of Chhattisgarh, 2007 and its amendments. The nearest hutment/habitation is at 45 m and farthest at 140m. There is no intent to draw water from GW5 as its water quality is bad. It is estimated that 3.63 M.cum of OB will be generated during the mine life. Backfilling will start from 2nd year onwards. The major part of the mined out area will be converted into water body. It was reported that there is no court case pending against the project. Public hearing has been held on 2.4.2011. Budget allocation under CSR activities will be Rs. 0. 2915 Crores (Capital) and Rs. 0.1675 crores (recurring). EMP cost will be Rs. 6.214 Crores (Capital) & Rs. 1.303 Crores (Recurring). Project cost will be Rs. 28.40 Crores.

3. The terms of reference (TOR) for the project were issued on 6.4.2010 for preparation of EIA and EMP. The Public hearing was held on 2.4.2011 at village Godadih, Distt Bilaspur, Chhattisgarh by the Chhattisgarh Environment Conservation Board. The Mining plan was approved by IBM on 19.5.2010. Letter of Intent for in-principle approval of mine lease was issued vide letter No. F-3-86/2007/12 dt. 4.10.2008 by the Govt. of Directorate of Mineral Resource Deptt, Govt of Chhattisgarh.

4. The proposal has been considered by the Expert Appraisal Committee for Mining based on the project documents and has recommended for the grant of environmental clearance for the said new Limestone mining project. Accordingly, the Ministry of Environment and Forests hereby accords environmental clearance to the Godadih Mahal no. 2 Limestone Mine of M/s Jindal Steel and Power, located at village Godadih, District Bilaspur, Chhattisgarh [ML area: 121.69 Ha; Cap: 1.54 MTPA(ROM)] under the provisions of Environment Impact Assessment Notification, 2006 subject to strict compliance of the terms and conditions as follows:-

A. Specific conditions:

- (i) The project proponent shall obtain Consent to Establish and Consent to Operate from the Chhattisgarh Environment Conservation Board and effectively implement all the conditions stipulated therein.
- (ii) Production from the mine shall not exceed 1.54 Million TPA (ROM) at any point of time.
- (iii) Land losers and landless agricultural labours shall be compensated as per Model R&R Policy of Chhattisgarh, 2007 and its amendments at the earliest.
- (iv) The water supply to the affected population/users shall be ensured.

- (v) Additional grazing land outside ML area shall be identified prior to start of mining activities for proper fodder cultivation and irrigation support for high yield feed product.
- (vi) The wildlife conservation plan for schedule -I animals should be in place for implementation before start of mining activity.
- (vii) The top soil 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.
- (viii) Garland drains, Catch drains, Check dams and siltation ponds of appropriate size shall be constructed around the mine working, soil and mineral dumps to prevent run off of water and flow of sediments. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted, particularly after the monsoon, and maintained properly.
- (ix) Dimension of the retaining wall at the toe of the OB benches within the mine to check run-off and siltation should be based on the rainfall data.
- (x) A 15 m wide greenbelt on Soradih village side including a 7.5m wide greenbelt all around the mining lease, reclaimed and rehabilitated areas, around water body, roads etc. by planting the native species in consultation with the local DFO/Agriculture Department shall be raised in a phased manner and shall be completed within first five years. The ultimate area to be planted /afforested shall not be less than 37.23 ha. The density of the trees should be around 2000 plants per ha.
- (xi) The project authority shall implement suitable conservation measures including suitable rain water harvesting measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.
- (xii) Groundwater table shall be monitored regularly and it shall be ensured that there is no depletion of groundwater in the area. Necessary groundwater recharging structures shall be built.
- (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 constructing 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, Bhopal, 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 mineral transportation up to railway siding shall be by road and thereafter, it will be by rail only.

- (xv) 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 within the lease up to the stockyard. The mineral transportation within the mine lease shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded. The mineral transportation outside the mine lease shall be carried out through the tarpaulin covered trucks/closed trucks only and the vehicles carrying the mineral shall not be overloaded. There shall be no spillage of mineral enroute up to the delivery point.
- (xvi) Soon after commencement of blasting operations in the mine, studies shall be undertaken to set out the pattern of Controlled blasting (Muffled blasting where needed), to be practiced when the mining operations approach sensitive areas like the village.
- (xvii) The optimum charge for blasting shall be determined based on vibration study. 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.
- (xviii) Drills shall either be operated with dust extractors or equipped with water injection system.
- (xix) Use of rock breaker from the nearby habitation up to 75 m inward to mining area complying with DGMS guidelines shall be done.
- (xx) Regular monitoring of vibration and its impact, if any, in the close by villages shall be carried out and if at any stage any damage is felt on the village buildings / structure, necessary corrective measures should be taken in this regard immediately.
- (xxi) 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.
- (xxii) ETP shall also be provided for the workshop and wastewater generated during the mining operation.
- (xxiii) Mineralogical composition of the dust to assess the silica content in the dust particle and particle size analysis shall be carried out periodically and records maintained. Personnel exposure monitoring for dust shall also be carried out for the workers.
- (xxiv) Occupational Health Cell shall be created at the company under the charge of an officer of adequate seniority who is a qualified person in occupational health. Occupational health and safety measures for the workers including identification of work related health hazards, training on malaria eradication, HIV, and health effects on exposure to mineral dust etc. shall be carried out. The company shall engage a full time qualified doctor who is trained in occupational health. Periodic monitoring for exposure to respirable mineral dust on the workers shall be conducted and records maintained including health

records of the workers. Awareness programme for workers on impact of mining on their health and precautionary measures like use of personal equipments etc. shall be carried out periodically. Review of impact of various health measures undertaken (at interval of five years or less) shall be conducted followed by follow up action wherever required.

- (xxv) The company shall stress upon the preventive aspects of occupational health. 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.
- (xxvi) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (xxvii) The critical parameters such as RSPM (Particulate matter with size less than 10micron i.e., PM₁₀) and NO_x in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS))]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.
- (xxviii) 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 limestone 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 10micron 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.

- (iv) Data on ambient air quality [(RSPM (Particulate matter with size less than 10micron i.e., PM₁₀) and NO_x] should be regularly submitted to the Ministry including its Regional office located at Bhopal and the State Pollution Control Board / Central Pollution Control Board once in six months.
- (v) 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.
- (vi) 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.
- (vii) Industrial waste water (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 workshop effluents.
- (viii) 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. 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.
- (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 purpose.
Year wise expenditure should be reported to the Ministry and its Regional Office located at Bhopal.
- (xi) 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.
- (xii) 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 the requisite data / information / monitoring reports.
- (xiii) 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 Bhopal, 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, Bhopal, the respective Zonal Officer of Central Pollution Control Board and the State Pollution Control Board.

- (xiv) 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.
- (xv) 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.
- (xvi) The project authorities should advertise at least in two local newspapers of the district or state in which 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 Bhopal.
- (xvii) 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, Bhopal by e-mail.

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. The Ministry may cancel the environmental clearance granted to this project under the provisions of EIA Notification, 2006, if, at any stage of the validity of this environmental clearance, it is found/ came to knowledge of this Ministry that the project proponent has deliberately concealed and/or submitted false or misleading information or inadequate data for obtaining the environmental clearance.

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 Chhattisgarh 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. Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment, Government of Chhattisgarh, Raipur.
3. Secretary, Department of Mines and Geology, Government of Chhattisgarh, Raipur
4. Secretary, Department of Forests, Government of Chhattisgarh, Raipur.
5. Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office, Kendriya Paryavaran Bhawan, E-5, Arera Colony, link Road-3, Ravishankar Nagar Bhopal- 462 016.
6. Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
7. Chairman, Chhattisgarh Environment Conservation Board, Nanak Niwas, Civil Lines, Raipur - 421 001, Chhattisgarh.
8. Member Secretary, Central Ground Water Authority, A2, W -3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
9. Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur- 440 001.
10. District Collector, Durg, Govt. Chhattisgarh.
12. Guard File.


(Dr. SAROJ)
DIRECTOR