

No.J-11015/1234/2007-IA.II (M)
Government of India
Ministry of Environment & Forests

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

Dated the 16th January, 2009

To

Shri Manohar Singh
S/o Shri Sajjan Singh,
R/o Plot No. 2, Mohanpura,
Jodhpur,
Rajasthan.

Subject: Expansion of Sand Stone(minor mineral) Mining Project (ML No. 2/07) of Shri Manohar Singh, located in Village Chokri, Tehsil Bhopalgarh, District Jodhpur, Rajasthan- environmental clearance regarding.

Sir,

This has reference to your letter No. 'NIL' dated 17.09.2008 and subsequent letters dated 10.10.2008, 21.10.2008 and 27.10.2008 on the subject mentioned above. The proposal is for renewal of mining lease and enhancement of production of sand stone (minor mineral) from 6,000 tonnes per annum (TPA) to 20,000 TPA. The total mine lease area of the project is 22.793ha, which is a waste land. No forestland is involved. Area proposed for mining is 8.5ha, an area of 0.5ha is kept for roads and 13.793ha is others (kept intact). There is no seasonal nallah in the lease hold area. The Jojari Nadi is flowing in the buffer zone of the mine at a distance of 3.25km from the mine lease boundary. No ecologically sensitive areas such as, national park/wildlife sanctuary/biosphere reserve/tiger reserve/ elephant reserve etc. are reported to be located in the core and buffer zone of the mine and that the area does not report to form corridor for Schedule-I fauna. In support of this, a letter from the ACF (Wildlife), Jodhpur has been provided, reporting that no National Park / Sanctuary/Biosphere Reserve and no Wildlife Corridor exist within 10 km of the mine lease. The mine working will be opencast by semi-mechanized method involving drilling and blasting. The targetted production capacity of the mine is 20,000TPA and the life of the mine is 28years. Approximately 67TPD of mineral will be transported through the road. The topography of the area is hilly at an elevation of 357m AMSL. The general ground level is 292m AMSL. The ultimate working depth of mine will be 291m AMSL (1m bgl). The ground water table in the core zone is reported to vary from 262m-252m AMSL (30-40 m bgl) during the pre-monsoon and the post-monsoon. The mine working will not intersect the groundwater table. The peak water requirement of the project is estimated as 4m³ per day, which will be obtained from the nearby villages and the drinking water requirement will be met from the public water supply. There is no population in the core zone, therefore, displacement of population and R&R is not involved. It is estimated that 75,000m³ of waste will be generated during the mine life, which will be

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taken by the villagers from the surrounding areas for their use and there be no external OB dump. Plantation will be raised in an area of 2.5ha at the end of the mine life and there will be no water body left during the post mining stage. The public hearing of the project was held on 30.08.2008 for enhancement of production of sand stone from 6,000TPA to 20,000TPA involving lease area of 22.793ha as per the EIA Notification, 2006. The Department of Mines and Geology, Government of Rajasthan, Jodhpur approved the eco-friendly mining and environment protection plan of the project for an area of 22.793ha. The Mining Engineer, Jodhpur, Government of Rajasthan vide their letter No. KHA.AA/JODH/CC-III/08/2912 dated 24.10.2008 stated that the proposed mine lease area does not fall in the Aravali Hills and is also not covered by the orders of the Hon'ble Supreme Court of India dated 08.04.2005. The capital cost of the project is Rs.5Lakhs and the capital cost for the environmental protection measures is proposed as Rs.2.75Lakhs. The annual recurring cost towards environmental protection measures is proposed as Rs.1.45Lakhs.

2. 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 Sand Stone(minor mineral) Mining Project (ML No. 2/07) of Shri Manohar Singh for an annual production capacity of 20,000tonnes of sandstone by opencast semi-mechanised method involving total mining lease area of 22.793ha, subject to implementation of the following conditions and environmental safeguards.

A. Specific conditions

- (i) The project proponent shall obtain Consent to Establish from the Rajasthan State Pollution Control Board and effectively implement all the conditions stipulated therein.
- (ii) The mining operations shall be restricted to the above ground water table and it should not intersect the groundwater table. In case of working below the ground water table, prior approval of the Ministry of Environment and Forests and the Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out.
- (iii) The project proponent shall ensure that no natural watercourse and/or water resources are obstructed due to any mining operations.
- (iv) The top soil, 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.
- (v) The over burden (OB) generated during the mining operation shall be temporarily stacked at the earmarked site. There shall be no external over burden dump. The excavated area shall be reclaimed by plantation. 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 Lucknow on six monthly basis.

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- (vi) Catch drains and siltation ponds of appropriate size shall be constructed around the working pit and the mineral dump to arrest flow of silt and sediment directly into the water bodies. 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 the monsoon and maintained properly.

Garland drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed around the mine pit to prevent run off of water and flow of sediments directly into the 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 should be constructed at the corners of the garland drains and desilted at regular intervals.

- (vii) Dimension of the retaining wall at the OB benches within the mine to check run-off and siltation should be based on the rainfall data.
- (viii) Plantation shall be raised in an area of 2.5ha including a 7.5m wide green belt in the safety zone around the mining lease, reclaimed area, roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 1000 plants per ha.
- (ix) 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 RSPM such as around crushing and screening plant, loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- (x) 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.
- (xi) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease. The monitoring should be carried out four times in a year - pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected shall be sent regularly to the Ministry of Environment and Forests and its Regional Office, Lucknow, 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.

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- (xii) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and ground water, if any) required for the project.
 - (xiii) Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground Water Board.
 - (xiv) 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 mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.
 - (xv) Controlled blasting shall 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) Mineral handling area shall be provided with the 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.
 - (xviii) Consent to operate shall be obtained from the Rajasthan State Pollution Control Board, prior to start of enhanced production from the mine.
 - (xix) Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and wastewater generated during the mining operation.
 - (xx) 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.
 - (xxi) 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.
 - (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 & Forests.
- (ii) No change in the calendar plan including excavation, quantum of mineral sandstone and waste should be made.

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- (iii) Conservation measures for protection of flora and fauna in the core & buffer zone should be drawn up in consultation with the local forest and wildlife department.
- (iv) Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM, SPM, 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.
- (v) Data on ambient air quality (RSPM, SPM, SO₂ & NO_x) should be regularly submitted to the Ministry of Environment and Forests including its Regional office located at Lucknow and the State Pollution Control Board / Central Pollution Control Board once in six months.
- (vi) 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.
- (vii) 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.
- (viii) 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.
- (ix) 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.
- (x) 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.
- (xi) 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 of Environment and Forests and its Regional Office located at Lucknow.
- (xii) The project authorities should inform to the Regional Office located at Lucknow regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (xiii) The Regional Office of this Ministry located at Lucknow 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.

- 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, Lucknow Central Pollution Control Board and State Pollution Control Board.
- (xv) A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.
- (xvi) 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.
- (xvii) 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 at Lucknow.
3. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
4. 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.
5. 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 thereunder and also any other orders passed by the Hon'ble Supreme Court of India/High Court of Rajasthan and any other Court of Law relating to the subject matter.
6. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.

Copy to:


(SATISH C. GARKOTI)
Additional Director (S)

- (i) The Secretary, Ministry of Mines, Government of India, Shastri Bhawan,
New Delhi.

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- (ii) The Department of Mines & Geology, Government of Rajasthan, Secretariat, Jaipur.
- (iii) The Secretary, Department of Environment, Government of Rajasthan, Secretariat, Jaipur.
- (iv) The Chief Conservator of Forests, Central Region, Ministry of Environment and Forests, B-1/72, Sector-A, Aliganj, Lucknow-226020.
- (v) The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-110032.
- (vi) The Member Secretary, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- (vii) The Chairman, Rajasthan State Pollution Control Board, 4, Institutional area, Jhalana, Doongri, Jaipur.
- (viii) The Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
- (ix) The District Collector, Jodhpur District, Rajasthan.
- (x) EI Division, Ministry of Environment and Forests, Paryavaran Bhavan, C. G. O. Complex, Lodi Road, New Delhi-110 003.
- (xi) Monitoring File.
- (xii) Guard File.
- (xiii) Record File.


(SATISH C. GARKOTI)
Additional Director (S)