

Speed Post

No. J-11015/25/2011-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: 23rd January, 2014

To,

M/s J.K. Cement Works
P.O. Kailash Nagar, Tehsil-Nimbahera
District- Chittorgarh,
Rajasthan, Pin-312 617

Subject: Mangrol Tilakhera Limestone Mine for enhancement of production capacity from 0.6 million TPA to 1.6 million TPA (ROM) of limestone by M/s J.K. Cement Works, located near village(s)- Mangrol & Tilakhera, Tehsil-Nimbahera, District-Chittorgarh, Rajasthan(299.20ha) -Environmental Clearance regarding.

This has reference to your letter no. nil, dated 27.02.2013 and subsequent letter no. MGR-PC-10(A)/666 dated 12.06.2013 on the proposal of enhancement of production capacity from 0.6 million TPA to 1.6 million TPA (ROM) of limestone. The mine lease area is located near village(s)- Mangrol & Tilakhera, Tehsil-Nimbahera, District-Chittorgarh, Rajasthan.

2. The Ministry had prescribed TORs on 28th December, 2011. The Proponent after conducting public hearing on 20.12.2012 submitted EIA/EMP report for seeking environmental clearance. The proposal for environmental clearance was appraised in the 6th meeting of the Reconstituted EAC held during 16th-18th April, 2013 wherein the Committee sought the additional information. Further, the proposal was reconsidered in 11th Meeting of the Reconstituted Expert Appraisal Committee held during 25th-27th September 2013 wherein the Committee recommended the proposal for environmental clearance.

3. The mine lease area is 299.20 ha, out of which 120.50 ha is Govt. waste land, 34.00 ha grazing land and 144.70 ha Agriculture land. No forestland is involved. The Mining Plan was approved by Controller of Mines, Indian Bureau of Mines vide letter no. 682 (23) (500)/ 94-MCCM-(N) UDP dated 31.07.1995. Scheme of Mining was approved vide letter no. 682 (23) MS-531/ 99 MCCM (N) Udaipur dt. 04.08.2010. Modified Scheme of Mining with PMCP has been approved vide letter no. 682 (23) MS-589/ 2010 dated 25.07.2011. Proponent reported that 44.17ha area will be used for excavation, 7.55ha for overburden/dumps, 0.87ha

for infrastructure, 59.34ha for built up area of cement plant, 19.20ha for Green belt development, 3.94ha for township area and 164.13ha area will be the undisturbed area. Life of mine is 15 years.

4. The mine working will be carried out using mechanized opencast mining method involving deep-hole drilling and blasting. Hydraulic drills will be used in combination with the diesel operated compressor. The diameter of drill hole will be of 101/118 mm and the depth will vary from 7.0m to 7.5m. Deep hole blasting will be carried out with slurry explosives/ANFO. NoNEL blasting will be used for minimizing ground vibrations. The blasted limestone will be excavated with the 2.1m³ hydraulic excavators. The ultimate working depth is 395 AMSL. Water table will not be intersected as the ultimate pit limit (395 MSL) is almost 36m below the general ground level (431 MSL), while the water level is 60m below the general ground level. Water requirement for the project is 50 KLD (47 KLD surface water; 3 KLD Ground Water). CGWA has given permission for drawl of only 2300m³/day ground water. Proponent informed that this is captive mining for the linked cement plant and captive power plant adjacent to the mine. The proponent stated that separate environmental clearance is being obtained for different industrial activities.

5. The Latitudes and Longitudes of mine lease area are 24°41'33.0"N to 24°42'44.4"N and 74°40'59.5"E to 74°41'48.3" E respectively on toposheet no. 45 L/9, 45 L/10 and 45 L/14. Proponent reported that there is no National Parks, Wildlife Sanctuaries, Biosphere Reserves and Tiger/Elephant Reserves within 10 km radius of the mining lease boundary. One Schedule I species namely *Pavo cristatus* was reported. Accordingly, a Conservation plan for schedule-I species has been prepared. The Committee discussed the conservation plan. The Mines and Geology Department, State Govt. of Rajasthan, vide letter dated 30.03.2012, has clarified that the mine lease area does not fall in the Aravali region. The baseline data was generated for the period during December 2011 to February 2012. All the parameters for water and air quality were observed to be within permissible limits.

6. It is noted that the mine has been earlier granted Environmental Clearance vide letter no. J-11015/82/2004-IA. II dated 30th May 2005 for expansion of the capacity from 0.36 million TPA to 0.6 million TPA of limestone. The Compliance Report of earlier EC condition has been submitted by the Regional Office of MoEF vide dated 26.02.2013 and dated 07.06.2013.

7. The Public hearing was held on 20.12.2012 under the chairmanship of Shri Jagvir Singh, Chief Executive Officer. The representative of Regional Office from the Rajasthan State Pollution Control Board was present. The proponent has informed that the Chairman of the public hearing is of level of ADM as per EIA Notification, 2006. The issues raised during public hearing were also considered and discussed during the meeting, which inter-alia, included the problems related to blasting, efforts done by the company on grazing land, flora and fauna,

employment to local persons etc. These have been incorporated in the project plan with budgetary provisions and time bound action plan.

8. The total cost of the project is Rs. 2.5 Crores. The Proponent has earmarked Rs. 6.97 Lakhs towards Environmental Protection Measures and Rs. 16.3 Lakhs per annum towards recurring expenses. Proponent reported that there is no court case/litigation pending against the project.

9. The Ministry of Environment and Forests has examined the proposal in accordance with the Environmental Impact Assessment Notification, 2006 and further amendments thereto and hereby accords the environmental clearance under the provisions thereof to the above mentioned proposal of **M/s J.K. Cement Works for enhancement of production capacity from 0.6 million TPA to 1.6 million TPA (ROM) of limestone in Mangrol Tilakhera mine lease area of 299.20ha**, located near village(s)- Mangrol & Tilakhera, Tehsil- Nimbahera, District-Chittorgarh, Rajasthan subject to compliance of the followings terms and conditions and environmental safeguards mentioned below:

A. Specific conditions

- (i) The mining activity will not commence unless the NOC from the Gram Panchayat for grazing land has been obtained.
- (ii) The lands which are not owned by Proponent, mining will be carried out only after obtaining the consents from all the concerned land owners as per the provisions of the Mineral Concession Rules, 1960 and MMDR Act, 1957.
- (iii) Implementation of the Conservation Plan for Schedule I species reported in the Study area namely *Pavo cristatus* (Indian peafowl).
- (iv) The proponent shall ensure implementation of Action Plan on the issues raised during the Public Hearing held on 20.12.2012. The proponent shall complete all the tasks as per the action plan submitted with the budgetary provisions during the public hearing.
- (v) The proponent shall ensure implementation of commitment made for Socio economic welfare measures and report shall be submitted to the Ministry of Environment & Forests and its Regional Office located at Lucknow on six monthly basis.
- (vi) Sufficient number of Gullies should be provided for better management of water. Regular Monitoring of pH shall be included in the monitoring plan and report shall be submitted to the Ministry of Environment & Forests and its Regional Office located at Lucknow on six monthly basis.
- (vii) Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.

- (viii) No mining activities will be allowed in forest area, if applicable, for which the Forest Clearance is not available.
- (ix) The project proponent shall obtain Consent to Operate from the State Pollution Control Board, Rajasthan and effectively implement all the conditions stipulated therein.
- (x) The mining operations shall be restricted to above ground water table and it shall not be intersect groundwater table. For working below ground water table, prior approval of the Ministry of Environment and Forests and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out.
- (xi) Dimension of the retaining wall at the toe of over burden dumps and OB benches within the mine to check run-off and siltation shall be based on the rain fall data.
- (xii) 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. Advanced technologies for environmental protection to be used for controlled blasting.
- (xiii) Water sprinkling should be increased at places loading and unloading points & transfer point to reduce fugitive emissions.
- (xiv) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and ground water for the project.
- (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. The mineral transportation shall be carried out through covered dumpers and further leading to the plant through covered conveyor belt. The vehicles carrying the mineral shall not be overloaded.
- (xvi) Fugitive dust emissions from all the sources shall be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
- (xvii) 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. Occupational health and safety measures for workers who are having some ailments like BP, diabetes, or are habitual smokers, should have health checkup once in six months.

- (xviii) Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court of Rajasthan and any other Court of Law, as may be applicable to this project.

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 limestone mineral and waste should be made.
- (iii) 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.
- (iv) There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis in consultation with Regional Director, Central Groundwater Board and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.
- (v) Regular monitoring of ground water table to be carried out at the upstream and depth of water available in the dug well is to be measured. Monitoring to be done by establishing a network of existing wells and constructing new piezometers.
- (vi) The project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations.
- (vii) 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. 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 Lucknow on six monthly basis.
- (viii) 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 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 desilted at regular intervals.

- (ix) Plantation shall be raised in a 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the 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. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed, within first five years.
- (x) Regular monitoring of the flow rate of the springs and perennial nullahs flowing in and around the mine lease shall be carried out and records maintain.
- (xi) Regular monitoring of water quality upstream and downstream of water bodies shall be carried out and record of monitoring data should be maintained and submitted to the Ministry of Environment and Forests, its Regional Office, Lucknow, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.
- (xii) 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 monitoring shall 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 may be sent regularly to Ministry of Environment and Forests and its Regional Office, Lucknow, Central Ground Water Authority and Regional Director, Central Ground Water Board.
- (xiii) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely leopard, elephant etc. 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 Plan 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, Lucknow.
- (xiv) 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.

- (xv) Monitoring of Ambient Air Quality shall be carried out based on the Notification, as amended from time to time by the Central Pollution Control Board.
- (xvi) The critical parameters such as SPM, RSPM (Particulate matter with size less than 10 micron i.e., PM_{10}), 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.
- (xvii) 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.
- (xviii) 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.
- (xix) 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.
- (xx) 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. 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) 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.
- (xxii) 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 Lucknow.

(xxiii) 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.

(xxiv) 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.

(xxv) The project proponent shall submit six monthly reports 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.

(xxvi) 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.

(xxvii) State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/ Tehsildar's Office for 30 days.

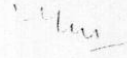
(xxviii) The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and 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 Lucknow.

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 Rajasthan 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

Copy to:

- 1). The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi
- 2). The Department of Mines & Geology, Government of Rajasthan, Secretariat, Jaipur
- 3). The Secretary, Department of Environment, Government of Rajasthan, Secretariat, Jaipur
- 4). The Chief Conservator of Forests, Central Region, Ministry of Environment and Forests, B-1/72, Sector-A, Aliganj, Lucknow-226020.
- 5). The Member Secretary, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 6). The Chairman, Rajasthan State Pollution Control Board, 4, Institutional area, Jhalana, Doongri, Jaipur.
- 7). The Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur - 440 001
- 8). The District Collector, District -Chittorgarh, Rajasthan.
- 9). Guard File.
- 10). MoEF website.

(Dr. V.P. Upadhyay)
Director