

F. No. J-11015/384/2013-IA.II (M)  
**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
Impact Assessment Division  
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Indira Paryavaran Bhavan,  
Aliganj, Jor Bagh Road  
New Delhi-110 003

Dated: 11<sup>th</sup> February, 2016

To,

**M/s Rajputana Properties Pvt. Ltd.**

Hansalaya Building, 11<sup>th</sup> Floor,  
15 Barakhamba Road,  
New Delhi – 110 001

**Sub.: Limestone Mine with proposed production capacity of 5.4 million TPA (ROM) of Limestone by M/s Rajputana Properties Pvt. Ltd., located near village(s) Mangrol, Sathkhanda, Bhawaliya, Rampura, Bamaniya & Muruliya, Tehsil-Nimbahera, District Chittaurgarh, Rajasthan (MLA:701.268ha)-Environmental Clearance regarding.**

Sir,

This has reference to your application for the above mentioned proposal for Limestone Mine with proposed production capacity of 5.4 million TPA (ROM) of Limestone. The mine lease area is located at village(s) Mangrol, Sathkhanda, Bhawaliya, Rampura, Bamaniya & Muruliya, Tehsil-Nimbahera, Chittaurgarh, Rajasthan in the mine lease area of 701.268ha. The proposed captive mine is covered in the Survey of India Toposheet No. 45L/10 and lies between 24°41'09" N to 24°45'21.6" North latitude and between 74°38'12.6" E to 74°40'22.8" East Longitude.

2. The Ministry had prescribed TOR on 16.11.2010 which was extended on 22.03.2013. The Proponent after conducting Public Hearing on 31.10.2012 submitted the EIA/EMP report for seeking environmental clearance. The proposal was appraised before the Expert Appraisal Committee in its Meeting held during November 20-22, 2013 wherein the Committee deferred the proposal and sought the information/Clarification. Based on the information submitted by the Proponent vide letter dated 04.02.2015, the proposal was reconsidered in the EAC meeting held during April 29-30, 2015 wherein the Committee recommended the proposal of EC for Limestone Mining with production capacity of 5.4 Million TPA (ROM) in MLA of 701.268ha.

3. Total Mining Lease Area is of 701.268ha, out of which 569.213ha is Agricultural land, 68.315ha is Govt. waste land, 30.884ha is Charagah land and 32.856ha is Railway and other land. No forest land is involved. Mining Plan is approved by IBM vide letter no. 682(23)(808)/2012-M.C.C.M.(N.)-Udai, dated 27-28/05/2013. The life of mine is 11.3 years.

4. The mine working will be opencast fully mechanized mining method involving drilling, blasting, loading and transportation of the excavated material to the crusher. The diameter of drill hole will be of 150 mm. The depth of the holes will vary from 9.0 m to 10.0 m. Deep hole blasting will be carried out with slurry explosives/ ANFO. The height of the benches will be maintained at 9.0 m. Width of the bench will be 15 m. The slope of the individual benches will be maintained at around  $73^{\circ}$  to achieve ultimate pit slope of  $37.5^{\circ}$ . The water requirement for the proposed captive mine is estimated as  $100 \text{ m}^3/\text{day}$  which would be sourced from the ground water. An application has been submitted to CGWA and regional ground water department on 17.10.2012 for ground water permission. Project Proponent reported that 9.44 million tonnes of top soil and solid waste will be generated during the entire life of mine, out of which, 5.66 million tonnes will be generated during plan period. Totally an area of 99.66 Ha (includes 14.39 ha for topsoil dumps, Sub grade dump of 74.38 ha and 10.89 ha of waste dump) will be utilized for dumping which will be stabilized by afforestation. As reported by Project Proponent that as per mining plan approved by IBM, the mine working will not intersect ground water table, however a detailed hydrology study has been carried out.

5. It was reported by proponent that there is no Wild Life Sanctuary/Tiger Reserve/National Park within 10 km radius of the mining lease boundary. It was mentioned by Project Proponent that there are about 11 reserve forest parts in buffer zone but nearest RF is about 6.08 km from the project boundary. Three Schedule I species namely Indian Monitor, Sloth Bear and Common Leopard are reported. A Wild Life Conservation Plan for schedule-I species has been prepared & duly authenticated and approved by Deputy Conservator of Forest, Chittaurgarh, CCF (WL), Udaipur and Chief Wild Life Warden, Jaipur, Rajasthan vide letter Misc./CWLW/5555 dated 20.09.2013. Project Proponent informed that an amount of Rs. 160 Lakhs is proposed for implementation of Wild Life conservation and Eco-management plan.

6. The Baseline studies were carried out during April, May and June 2010 and one month of winter season i.e. December 2010. Ambient air quality was monitored at ten different locations. The Committee noted that the base line data were monitored before the issuance of TOR and wrong months have been taken for monitoring. The Committee was of the view that the Proponent need to collect baseline data for one complete season say winter season (December-February) and submit the Report. Further, Project Proponent has collected and submitted fresh baseline data of winter season (December 2013-February 2014). The predominant wind direction was observed from NNW. The calm conditions prevailed for 51.8% of the total time, Average wind speed was observed to be 0.7m/s. All the parameters were within the prescribed limits, except for  $\text{PM}_{10}$  which were reported to be on higher side. It was reported by Project Proponent that different Road Constructions activities such as widening of NH-79, construction of pakka road etc. were in progress in the study area during the study period, which may be the localized cause of high  $\text{PM}_{10}$ .

7. The Public Hearing for the project was conducted at Rajiv Gandhi Sewa Kendra, Mangrol Tehsil, Nimbahera, Chittaurgarh, Rajasthan on 31<sup>st</sup> October 2012. The Public Hearing was presided over by Sh. N. K. Kothari, Additional District Collector, Chittaurgarh. The representative from Rajasthan State Pollution Control Board was present. Main issues raised during public hearing were related to employment, environmental pollution, implementation of EMP of EIA/EMP,

transportation, infrastructure, water requirement and recharge, plantation, CSR activities etc. Project Proponent had submitted action plan with budgetary provisions on the issues raised during the Public hearing. An amount of Rs. 40.0 Crores has been earmarked for undertaking different socio-economic activities in the area in a span of 10 years. The activities were planned based on Need based, socio-economic Assessment and issues raised during Public Hearing.

8. The total capital cost of the integrated project is Rs. 2,143 Crores. The Proponent has earmarked Rs. 79 Crores towards Environmental Protection Measures and Rs. 6.25 Crores per annum towards recurring expenses. Proponent informed that Rs. 40 Crores have been earmarked towards CSR activities. It was reported by the PP that there is no court case/litigation pending against the project.

9. The Ministry of Environment, Forests & Climate Change 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 Rajputana Properties Pvt. Ltd., for Limestone Mine with proposed production capacity of 5.4 million TPA (ROM) of Limestone in the mine lease area of 701.268ha, located at Village(s) Mangrol, Sathkhanda, Bhawaliya, Rampura, Bamaniya & Muruliya, Tehsil-Nimbahera, Chittaurgarh, Rajasthan** subject to compliance of the followings terms and conditions and environmental safeguards mentioned below:-

**A. Specific conditions**

- (i) Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court of Rajasthan, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.
- (ii) Environmental clearance is subject to obtaining clearance, if any, under the Wildlife (Protection) Act, 1972 from the Competent Authority, as may be applicable to this project.
- (iii) No mining activities will be allowed in forest area, if any, for which the Forest Clearance is not available.
- (iv) The Project Proponent shall obtain Consent to Operate from the State Pollution Control Board, Rajasthan and effectively implement all the conditions stipulated therein.
- (v) Mining activity shall only be commenced after taking **necessary approval from the CGWA.**
- (vi) Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of

anti-snake venom including all other paramedical safeguards may be ensured before initiating the mining activities.

- (vii) Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The PP shall complete all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing.
- (viii) The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment, Forest and Climate Change and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out; The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry.
- (ix) The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly. Vehicles with PUC only will be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centres.
- (x) 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.
- (xi) Use of effective sprinkler system to suppress fugitive dust on haul roads and other transport roads shall be ensured.
- (xii) Washing of all transport vehicles should be done inside the mining lease.
- (xiii) Implementation of Environment Management Policy of the Company w.r.t. judicious use of Mineral resources for growth & development synchronizing mining & environment with prosperity.
- (xiv) Three Schedule I species namely Indian Monitor, Sloth Bear and Common Leopard are reported. A Wild Life Conservation Plan for schedule-I species has been prepared & duly authenticated and approved by Deputy Conservator of Forest, Chittaurgarh, CCF (WL), Udaipur and Chief Wild Life Warden, Jaipur, Rajasthan vide letter Misc./CWLW/5555 dated 20.09.2013. Project Proponent informed that an amount of Rs. 160 Lakhs is proposed for implementation of Wild Life conservation and Eco-management plan. The Project Proponent shall implement the Conservation Plan and also take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted in the study area.
- (xv) The illumination and sound at night at project site, disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. Project Proponent must ensure that the biological clock of

the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.

- (xvi) Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers.
- (xvii) Transportation of the minerals by road passing through the village shall not be allowed. A 'bypass' road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The Project Proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.
- (xviii) Likewise, Alteration or re-routing of foot paths, pagdandies, cart roads, and village infrastructure/public utilities or roads (for purposes of land acquisition for mining) shall be avoided to the extent possible and in case such acquisition is inevitable, alternative arrangements shall be made first and then only the area acquired. In these types of cases, Inspection Reports by site visit by experts may be insisted upon which should be done through reputed Institutes.
- (xix) CSR activities by Companies including the Mining Establishments has become mandatory up to 2% of their financial Turn-over, Socio Economic Development of the neighborhood Habitats could be planned and executed by the Project Proponent more systematically based on the 'Need based door to door survey' by established Social Institutes/Workers. The report shall be submitted to the Ministry of Environment & Forest and its Regional Office located at Lucknow on six monthly basis.
- (xx) 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.
- (xxi) A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment, Forest & Climate Change 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, Forest & Climate Change.
- (ii) No change in the calendar plan including excavation, quantum of mineral and waste should be made.

- (iii) 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.
- (iv) 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.
- (v) Monitoring of Ambient Air Quality to be carried out based on the 2009 Notification, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increased at places loading and unloading points & transfer point to reduce fugitive emissions.
- (vi) The upliftment of scheduled caste/scheduled tribe population, specific programmes have been taken in to consideration specially with respect to education, health care, livelihood generation, infrastructure development & promotion of sports & culture for SC/ST population and that these will be intensified in future.
- (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<sup>0</sup>. 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, Forest & Climate Change 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) 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.
- (xi) Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM<sub>10</sub> and PM<sub>2.5</sub> such as haul road, loading and unloading point and transfer points. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- (xii) Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintained. 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, Forest & Climate Change, its Regional Office, Lucknow, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.
- (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 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, Forest & Climate Change and its Regional Office, Lucknow, Central Ground Water Authority and Regional Director, Central Ground Water Board.
- (xiv) The critical parameters such as PM<sub>10</sub> (size less than 10 micro meter), PM<sub>2.5</sub> (size less than 2.5 micro meter), NO<sub>x</sub> 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, Forest & Climate Change, which is available on the website of the Ministry [www.envfor.nic.in](http://www.envfor.nic.in) shall also be referred in this regard for its compliance.
- (xv) Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> & NO<sub>x</sub> 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. Data on

ambient air quality should be regularly submitted to the Ministry including its Regional office located at Lucknow and the State Pollution Control Board / Central Pollution Control Board once in six months.

- (xvi) 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.
- (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 19<sup>th</sup> May, 1993 and 31<sup>st</sup> 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.
- (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, Forest & Climate Change, its Regional Office, Lucknow, Central Pollution Control Board and State Pollution Control Board.
- (xxvi) The project proponent shall submit six monthly report on the status of the implementation of the stipulated environmental safeguards to the Ministry of



Environment, Forest and Climate Change, its Regional Office, Lucknow, Central Pollution Control Board and State Pollution Control Board.

(xxvii) 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.

(xxviii) 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.

(xxix) 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, Forest & Climate Change 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 the 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.

 Yours faithfully,

**(Dr. U. Sridharan)**  
**Director (S)**

**Copy to:**

- 1). **The Secretary**, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi
- 2). **The Secretary**, Department of Mines & Geology, Government of Rajasthan, Secretariat, Jaipur
- 3). **The Secretary**, Department of Environment, Government of Rajasthan, Secretariat, Jaipur

- 4). **The Secretary**, Department of Forest, Government of Rajasthan, Secretariat, Jaipur
- 5). **The Controller General**, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001
- 6). **The Chief Wildlife Warden** of the State Govt. of Rajasthan, Jaipur
- 7). **The Additional Principal Chief Conservator of Forests**, Ministry of Environment, Forest & Climate Change, Regional Office (CZ), Kendriya Bhawan, 5<sup>th</sup> Floor, Sector "H", Aliganj, Lucknow-226020.
- 8). **The Chairman**, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- 9). **The Chairman**, Rajasthan State Pollution Control Board, 4, Institutional area, Jhalana, Doongri, Jaipur.
- 10). **The Member Secretary**, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 11). **The District Collector**, District- **Chittaurgarh**, Rajasthan.
- 12). **Guard File**
- 13). **MoEFCC website**



**(Dr. U. Sridharan)**  
**Director (S)**