

No. J-11015/388/2014-IA.II (M)
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division

Indira Paryavaran Bhavan,
Vayu Wing, 3rd Floor,
Aliganj, Jorbagh Road,
New Delhi-110 003

Dated: 01st August, 2017

To,

M/s Mangalam Cement Ltd,
Aditya Nagar Morak - Village
Tehsil-Ramganj Mandi, District- Kota,
Rajasthan-326520
Tel. no. 07459-232156,
Email: mines@mangalamcement.com

Sub.: Enhancement of production capacity of Morak Limestone mine from 4.5 to 8.0 Million TPA (ROM) by M/s Mangalam Cement Ltd. (MCL), located at Village-Morak, Tehsil - Ramganj Mandi, District-Kota, Rajasthan (MLA 895.42 ha) – Environmental Clearance regarding.

Ref.: Online Proposal no. IA/ RJ/MIN/11546/2006.

Sir,

This has reference to your online application for the above mentioned EC proposal for enhancement of production from 4.5 to 8.0 Million Tonnes per Annum (ROM) from Morak Limestone Mine having mining lease area of 895.42 ha. The ML area is located at Morak Village, Ramganj Mandi Tehsil, Kota District, Rajasthan. The latitudes and longitudes of the mine site falls between 24°41'44.68"N to 24°45'12.23"N and 75°53'22.27"E to 75°57'41.70"E respectively. Study area falls within the survey of India toposheet no. 45/P/13 & 14. The project is located in Seismic Zone- II.

2. The proposal of terms of reference (TOR) was considered by the Expert Appraisal Committee in its meeting held during 22-23 December, 2014 to determine Terms of Reference (TOR) for undertaking detailed EIA study. The TOR was issued by MoEF&CC, vide Letter No. J-11015/388/2014-IA.II(M), dated 17th June, 2015. Project Proponent submitted the EIA/EMP report online to the Ministry for seeking environmental clearance after conducting public hearing. The Consultant has presented the details of mine site using KML/SHP files on DSS. The proposal of EC was earlier considered by the Expert Appraisal

Committee in its meeting held during October 24-25, 2016 and February 20-21, 2017 wherein the Committee deferred the Proposal sought the information/clarification. Based on the information submitted by Project Proponent, the proposal of EC was again appraised before the EAC meeting held during June 28, 2017 wherein the Committee recommended the proposal for environmental clearance for Enhancement of production capacity of Morak Limestone mine from 4.5 to 8.0 Million TPA (ROM).

3. Total mine lease area is 895.42 Ha, out of which 139 Ha is Forest land and 756.42 Ha is non-Forest Land (Private Non irrigated Land: 473.22 ha + Govt. Land: 283.2 ha). Project Proponent reported that the forest diversion permission for 139 Ha was issued by the Ministry vide letter F.No.8-20/2004-FC Dt. 09.08.2007. The lease was issued in the name of M/s Mangalam Cement Limited on 18.11.1976 with subsequent renewals; it was further extended by State Govt. up to 31.03.2030 as per Section 8A of the MMDR Amendment Act, 2015 and a letter is issued by the Mining Engineer on dated 23.02.2015 for the same. The Modified Mining Plan & Progressive Mine Closure Plan for the Morak limestone mine was approved by IBM vide letter no. 584(4)(3)(1631)/2015 RCM-AJM dated 14th June, 2016.

4. Mine working will be mechanized opencast method involving drilling, blasting, loading, by excavators and dumpers. At the conceptual stage, out of the total mining lease area (i.e. 895.42 ha), total mined-out area will be 600 ha out of which backfilled area would be 457.28ha (Afforestation-163.76 ha) and 142.72 would be converted into Water reservoir (without benches: 65.11 ha +water reservoir with benches: 77.61 ha). Green belt will be developed on 54.79 ha. The lime stone produced from the mine will be transported to the crusher located near the plant through closed conveyor. Water requirement for the project will increase from 210 to 500 KLD. Project Proponent reported that the mining will intersect ground water table and Project Proponent obtained permission for intersection of water table by mining activity from Central Ground Water Authority vide letter dated 17.05.2016 which is valid for three years i.e. 16.05.2019.

5. The baseline data was collected for the Summer Season in the year 2015 i.e. from March - May 2015. The analytical results of samples collected for all parameters were found within permissible limits. Project Proponent reported that Darrah Wildlife Sanctuary (also known as Game Sanctuary) is at 8.7km – NE from the mine lease area boundary. Peacock, Schedule I species was found in the study area and Conservation plan is prepared and submitted to the DFO, Kota, the Budget of Wildlife Conservation Plan was revised from ₹2 lakh to ₹20 lakh for 5 years and submitted to Dy. Conservator of Forest, Mukundara National Park, Kota (Rajasthan). The Committee further observed that the proposal was earlier not having NBWL clearance since 2009, however, it has applied for the same in July, 2015 in compliance to the ToR issued to it in 17.06.15. As per the minutes of the 41st meeting of the Standing Committee of National Board for Wildlife (NBWL), the proposal of Morak limestone mines of M/s Mangalam Cement has been recommended for grant of clearance under Wildlife Protection Act, 1972 along with certain conditions.

6. The Public Hearing was conducted on 06th April, 2016 at office premises of SDM, Ramganjmandi, Kota District, Rajasthan State. The Public Hearing was presided over by Ms. Kalpana Agrawal, Addl. District Collector. The issues raised during Public Hearing were also considered and discussed during the meeting, which inter alia, included Employment, Health, Education, Water supply, Green Belt development & development of village. The Committee noted the Action Plan prepared by PP along with the budget provisions to address the issues raised in public hearing. Project Proponent reported that there is no court case/ litigation pending against the project. The total project cost is estimated to be ₹66.46 Crores. The budget for environmental management plan is ₹2.5 crores and anticipated budget for meeting recurring costs is ₹266 Lakhs per annum. Project Proponent has earmarked Rs. 34.41 Crores towards the Enterprise Social Commitment for the period 2015-31.

7. The Ministry of Environment, Forest and Climate Change has examined the instant proposal of M/s Mangalam Cement Ltd. 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 Mangalam Cement Ltd. for Enhancement of production capacity of Morak Limestone mine from 4.5 to 8.0 Million TPA (ROM), located at Village-Morak, Tehsil - Ramganj Mandi, District-Kota, Rajasthan in 895.42 Ha M.L. area subject to compliance of the followings terms and conditions and environmental safeguards mentioned below:

A. Specific conditions

- 1) 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, if any, as may be applicable to this project.
- 2) **This Environmental Clearance is subject to obtaining requisite NBWL Clearance from the Standing Committee of National Board for Wild Life. Accordingly, the EC for instant expansion proposal shall become operational only after obtaining necessary NBWL clearance letter under Wildlife Protection Act, 1972.**
- 3) **Project Proponent shall ensure the implementation of Wild Life Conservation Plan in respect of Schedule-1 species with a budget ₹20 Lakhs in consultation with State Forest Department.**
- 4) This Environmental clearance is granted subject to necessary permissions for land use to be obtained from the State Govt. of Rajasthan before commencing the activities.
- 5) The Proponent shall ensure that the canals should not be diverted. The 50m buffer zone on either side of stream/canal in lease area and adjoining to the mine lease area shall be maintained.
- 6) The Proponent shall install online Ambient Air Quality Monitoring System and there should be system for display of digital AAQ data within 03 months at least at three locations as per wind direction. Online provisions of pH and turbidity meters at

discharge points of STP and ETP and also at water storage ponds in the mining area may be made. Project Proponent should display the result digitally in front of the main Gate of the mine site.

- 7) The project proponent shall carry out scientific investigation in respect of "Blast induced ground vibration, fly rock & air blast". Based on this study, Project Proponent should design an effective blast design to curb blast induced menace & public annoyance.
- 8) No mining activities will be allowed in forest area, if any, for which the Forest Clearance is not available.
- 9) The project proponent shall obtain Consent to Operate from the State Pollution Control Board, Rajasthan and effectively implement all the conditions stipulated therein.
- 10) Surface and ground water in and around mine lease area may be monitored quarterly and Report submitted to the Regional Office of Ministry.
- 11) Regular subsidence study will be carried out by any Institution of repute under existing Rules and Reports submitted to the RO of the Ministry.
- 12) Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical checkup and once in six months and necessary medical care/preventive measures under taken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers would also be adopted.
- 13) Transport of minerals shall be done either by dedicated road or it should be ensured that the trucks/dumpers carrying the mineral should not be allowed to pass through the villages. The Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral; and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density.
- 14) 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 centre.
- 15) Implementation of Action Plan on the issues raised during the Public Hearing. The Proponent shall complete all the tasks as per the Action Plan submitted with the budgetary provisions during the Public Hearing.
- 16) Project Proponent shall ensure the safeguard and wellbeing of villagers and school, regular health monitoring of all residents in the area and the compliance Report shall be submitted to the Regional office of the Ministry.

B. Standard conditions

- 1). No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment, Forest and Climate Change.

- 2). A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment, Forest and Climate Change 5 years in advance of final mine closure for approval.
- 3). No change in the calendar plan including excavation, quantum of mineral and waste should be made.
- 4). The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and ground water) for the project.
- 5). Mining shall be carried out as per the provisions outlined in mining plan approved by Indian Bureau of Mines (IBM) as well as by abiding to the guidelines of Directorate General Mines Safety (DGMS).
- 6). 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.
- 7). Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment, Forest and Climate Change its Regional Office.
- 8). The critical parameters as per the Notification 2009 such as PM₁₀, PM_{2.5}, NO_x, and SO_x etc. 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 and Climate Change shall also be referred in this regard for its compliance.
- 9). Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM₁₀ and PM_{2.5} such as haul road, loading and unloading point and transfer points. Fugitive dust emissions from all the sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board.
- 10). 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 project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. 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 and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board.

- 11). 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 maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table.
- 12). 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 and Climate Change and its Regional Office, Central Ground Water Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.
- 13). 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.
- 14). The illumination and sound at night at project sites 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. PPs 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.
- 15). 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. The material transfer points should invariably be provided with Bag filters and or dry fogging system. In case of Belt-conveyors facilities the system should be fully covered to avoid air borne dust; Use of effective sprinkler system to suppress fugitive dust on haul roads and other transport roads shall be ensured.
- 16). Sufficient number of Gullies to 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, Forest and Climate Change and its Regional Office on six monthly basis.
- 17). There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis and implementation of conservation

measures to augment ground water resources in the area in consultation with Central Ground Water Board.

- 18). The Project Proponent has to take care of gullies formed on slopes. Dump mass should be consolidated with proper filling/leveling with the help of dozer/compactors.
- 19). The reclamation at waste dump sites shall be ecologically sustainable. Scientific reclamation shall be followed. The local species may be encouraged and species are so chosen that the slope, bottom of the dumps and top of the dumps are able to sustain these species. The aspect of the dump is also a factor which regulates some climatic parameters and allows only species adapted to that micro climate.
- 20). 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, Forest and Climate Change and its Regional Office on six monthly basis.
- 21). 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.
- 22). 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 DFO/Agriculture Department and as per CPCB Guidelines. 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.

- 23). Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area", if any, applicable to the project.
- 24). The Project Proponent shall make necessary alternative arrangements, where required, in consultation with the State Government to provide alternate areas for livestock grazing, if any. In this context, Project Proponent should implement the directions of the Hon'ble Supreme Court with regard to acquiring grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded against felling and plantation of such trees should be promoted.
- 25). The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, 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. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.
- 26). At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office located at Ranchi. Implementation of such program shall be ensured accordingly in a time bound manner. The report shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.
- 27). 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.
- 28). 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.
- 29). 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.
- 30). 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.
- 31). 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.


- 32). 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.
- 33). The project authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- 34). 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 and Climate Change, its Regional Office, Central Pollution Control Board and State Pollution Control Board.
- 35). The Regional Office of this Ministry 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.
- 36). 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.
- 37). 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.
- 38). 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 and Climate Change at www.environmentclearance.nic.in and a copy of the same should be forwarded to the Regional Office.

8. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

9. 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.

10. 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.

11. 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.

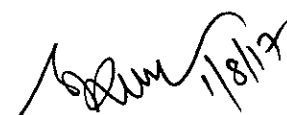


(Surendra Kumar)

Scientist-G

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 Chief Wildlife Warden, State Govt. of Rajasthan, Jaipur.
- 6). The Additional Principal Chief Conservator of Forests, Central Region, Ministry of Environment, Forest and Climate Change, B-1/72, Sector-A, Aliganj, Lucknow-226020.
- 7). The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- 8). The Chairman, Rajasthan State Pollution Control Board, 4, Institutional area, Jhalana, Doongri, Jaipur.
- 9). The Member Secretary, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 10). The Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
- 11). The District Collector, District- Kota, Rajasthan.
- 12). Guard File / MoEF&CC website.



(Surendra Kumar)

Scientist-G