F. No. J-11015/296/2011-IA.II (M) Government of India

Ministry of Environment, Forest and Climate Change

Impact Assessment Division

CEME

Indira Paryavaran Bhavan, Aliganj, Jor Bagh Road New Delhi-110 003

Dated: 3rd July, 2015

To,

M/s J.K. White Cements Works

P.O. Gotan, District-Nagaur Rajasthan, Pin- 342 902

Ph.: 01591-230201-03

Email: factory@jk-white.com

Sub.: Enhancement in production capacity of China Clay Mine from 15,000 TPA to 1,50,000 TPA (ROM) and installation of crusher of 65 TPH by M/s J.K. White Cements Works, located at village-Kantharia, Tehsil & District Chittorgarh, Rajasthan (53.8424ha)-Environmental Clearance regarding.

Sir,

This has reference to your application for the above mentioned proposal for Enhancement in production capacity of China Clay Mine from 15,000 TPA to 1,50,000 TPA (ROM) and installation of crusher of 65 TPH. The mine lease area is located at village-Kantharia, Tehsil & District Chittorgarh, Rajasthan in the mine lease area of 53.8424ha. The mine lease area lies between Latitudes & Longitudes 24° 47′ 24″ to 24° 47′ 57″ N and 74° 34′ 48″ to 74° 35′ 29″ E respectively.

- 2. The Ministry had prescribed TOR on 30.04.2012. The Proponent after conducting Public Hearing on 26.09.2013 submitted the EIA/EMP report for seeking environmental clearance. The proposal was appraised before the Expert Appraisal Committee in its Meeting held during September 25-26, 2014 wherein the Committee deferred the proposal and sought the information/Clarification. Based on the information submitted by the Project Proponent, the proposal was reconsidered in the EAC meeting held during May 27-29, 2015 wherein the Committee recommended the proposal for environmental clearance for Enhancement in production capacity of China Clay Mine from 15,000 TPA to 1,50,000 TPA (ROM) and installation of crusher of 65 TPH.
- 3. The original LoI of lease granted was for 63.2ha. The final lease has been granted for an area of 53.8424 ha (Govt. waste land-32.4920ha & Private land-21.3504 ha) by the State Government of Rajasthan, vide Order no. DMG/Chitto/CC-3/P-1/1/27/92/904, dated 04.03.2005. The Lease period is valid up to 06.04.2025. Method of mining will be opencast semi-mechanized with no drilling and blasting. The mined out ROM will be dispatched by trucks to the proposed 65 TPH Crushing plant. All the crushed material will then be transported to Project Proponent's Cement plant located in Gotan for manufacturing of Cement. The Mining Scheme with Progressive Mine Closure Plan for production capacity of 1,50,000

TPA is approved by IBM, vide Letter no. 682(23)MS-578/10, Udaipur, dated 03.02.2011. Total water requirement of 9.0 KLD which will be sourced from wells of nearby villages and will be brought through water tankers. The waste generated during the life of the mine is 0.57 million m³. Backfilling has been proposed once the mineral is mined out from the pit. Initially, the waste will be stacked at the dump site of 1.2419ha area of two dumps to be located near pits which will then be re-handled for backfilling in the mined out pits after achieving ultimate pit limits. Backfilling portion of pit & pit periphery (7.5m around) will be planted with local species of plants for improving plantation at site. Excavated area of the pit will be 19.1142ha. Out of this, 15.5074ha will be used as water reservoir. Waste dump area at the end of life of mine will be only 1.2419ha. The plantation will be carried out in an area of 6.5168ha. Besides this 1.2419 ha area of dump will be reclaimed and stabilized with plantation of suitable species.

- The earlier EC was accorded by MoEFCC vide letter no. J-11015/24/2001-IA 4. II (M), dated 07.04.2003 was perused for appraising the compliance status of the earlier EC. The Compliance Report by MoEFCC Regional Office Lucknow was also discussed by the EAC. The Committee deliberated the compliance report of earlier EC in its meeting held during September 25-26, 2014. Further, the Committee discussed the issues in the EAC meeting held during May 27-29, 2015 wherein the Project Proponent inter-alia reported that (i) They have constructed one water harvesting & recharge pit at site; (ii) Piezometer has been installed to monitor the ground water at site; (iii) PP is constructing new toilet block at site and committed to better facility; (iv) Proponent has submitted the revised dispersion modelling. The AERMOD results shows the concentration of PM₁₀ will be 9.95 mg/m³ by using control measures and submitted water quality result and AAQ monitoring report as per Notification of 2009; and (v) With regards to surrendering non-mineralized area, Proponent has informed that this area will be used in overburden dumps and plantation etc.
- 5. Project Proponent reported that there is no National Park, Wild Life Sanctuary, Habitat for Migratory Birds, Tiger Reserve, Elephant Reserve, Biosphere Reserve located within 10 km radius of the mine lease. The project is located in seismic zone-II. Further, Proponent also reported that there is no Schedule-I species found in the study area. Project does not fall in Aravali Hill as per Government of Rajasthan (Mines and Geology Department) vide letter dated 18.10.2013.
- 6. The Baseline data was generated for the period during summer season i.e. March–May 2012. All the parameters for water and Air quality were within the permissible limits. Public Hearing was held on 26.09.2013 which was presided over by Shri Jagbir Singh, ADC Chittorgarh. The Regional Officer, Rajasthan State Pollution Control Board, Chittorgarh was also present during the Public Hearing. The Committee discussed the issues raised during Public Hearing.
- 7. The total cost of the project is Rs. 1.2 Crores. The Project Proponent has earmarked Rs 3.40 lakhs per annum as recurring cost towards Environmental protection measures. Project Proponent informed that Rs. 3.5 lakhs have been earmarked towards Socio-economic Welfare measures for the nearby village other than R&R Plan. Proponent reported that there is no court case /litigation pending against the project.

8. 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 J.K. White Cements Works for Enhancement in production capacity of China Clay from 15,000 TPA to 1,50,000 TPA (ROM) and installation of crusher of 65 TPH in the mine lease area of 91.786ha, located at village-Kantharia, Tehsil & District Chittorgarh, 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 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) The local species may be recommended to 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.
- (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 PUCC 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; Washing of all transport vehicle should be done inside the mining lease.
- (xii) Implementation of Environment Management Policy of the Company w.r.t. judicious use of Mineral resources for growth & development synchronizing mining & environment with prosperity.
- (xiii) The Project Proponent shall also take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted in the study area.
- (xiv) 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.
- (xv) 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.
- (xvi) 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.
- (xvii) 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.

- (xviii) 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.
- (xix) 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.
- (xx) 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°. 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.
- Catch drains and siltation ponds of appropriate size shall be constructed (viii) 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 PM₁₀ and PM_{2.5} 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

- (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.

- 9. The Ministry or any other Competent Authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- 10. 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.
- 11. 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.
- 12. 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 Secretary**, Irrigation Department of Government of Rajasthan, Secretariat, Jaipur
- 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, 5th Floor, Sector "H", Aliganj, Lucknow-226020.

- 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 District Collector, District- Chittorgarh, Rajasthan.
- 11). Guard File
- 12). MoEFCC website

(Dr. U. Sridharan) Director (S)