No. J-11015/74/2014-IA.II (M) Government of India

Ministry of Environment, Forest and Climate Change

Impact Assessment Division

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

Dated: 11th June, 2015

Τo,

M/s MSK (JV)

S-571 Greater Kailash II New Delhi-110 048

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Sub.: Mining of Stone in the Mine of "Atela Kalan" with proposed production capacity of 6.0 million TPA of Stone (ROM) by M/s. MSK (JV), located at village – Atela kalan, Tehsil – Charkhi Dadri, District– Bhiwani, Haryana (54ha)-Environmental Clearance regarding.

Reference: Online Application IA/HR/MIN/22915/2014

Sir,

This has reference to your online application and subsequent letter dated 14.01.2015 for the above mentioned proposal for Mining of Stone (Minor Mineral) with proposed production capacity of 6.0 million TPA (ROM) of Stone. The mine is located at village – Atela kalan, Tehsil – Charkhi Dadri, District– Bhiwani, Haryana in MLA of 54ha. The Latitudes & Longitudes of the site are $28^{\circ}34'10.94''$ N to $28^{\circ}34'42.74''$ N and $76^{\circ}5'38.24''$ E to $76^{\circ}6'13.90''$ E respectively on Toposheet No. 53D/2, 53D/3.

- 2. The Ministry had prescribed TOR on 11.06.2014. The Proponent after conducting Public Hearing on 10.10.2014 submitted the EIA/EMP report online for seeking environmental clearance. The proposal was appraised before the Expert Appraisal Committee in its Meeting held during December 10-11, 2014 wherein the EAC sought information/clarification. Based on the information submitted by the Proponent, the proposal was reconsidered by the EAC in its meeting held during March 16-18, 2015 wherein the Committee recommended the Proposal for environmental clearance for Mining of Stone (Minor Mineral) with proposed production capacity of 6.0 million TPA (ROM) of Stone.
- 3. The total mining lease area is 54.0ha which is Government Land. Project Proponent reported that there is no forest land involved. LOI was issued by the Department of Mines & Geology, Haryana vide Memo No. DMG/HY/ML/Atela Kalan/2013/155 dated 03.01.2014, Chandigarh. Mining Plan & Progressive Mine Closure Plan has been approved by Department of Mines & Geology, State Govt. of Haryana vide letter No. DMG/HY/Atela Kalan/MP/4154, dated 15.09.2014. Project Proponent informed that the Department of Mines and Geology, Govt. of Haryana,

vide letter dated 13.01.2015 mentioned that there is no material change in both the plans except some of the minor changes.

- 4. Method of mining will be opencast mechanized for Mining of Stone (Minor Mineral) with production capacity of 6.0 million TPA (ROM) of Stone by digging, sorting and grading of minerals and transportation by trucks/dumpers. Bench height will be 9m. Each bench will advance one by one. The overall pit slope will be maintained at 50°. The mineral bearing rocks being hard and compact and blasting is proposed. Proponent reported that 27.56ha area will be converted into water reservoir, 18.91ha for Greenbelt development/Plantation; 0.18ha area for Infrastructure development, 2.08ha for road and 5.27ha area will the undisturbed area. The mineable reserves are 69.105 Million Tonnes and life of mine is 12 years. Total water requirement for the project is 40 KLD which will be sourced from Nearby Villages.
- The Latitudes & Longitudes of the site are 28°34′10.94″ N to 28°34′42.74″N and $76^{\circ}5'38.24''$ E to $76^{\circ}6'13.90''$ E respectively on Toposheet No. 53D/2, 53D/3. Project Proponent reported that there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves within 10 km radius of mine site. No Schedule - I species were reported within buffer zone. Proponent reported that mining lease does not fall in Aravalli Hill range and submitted a certificate from the Department of Mines & Geology, State Govt. of Haryana vide letter dated 20.08.2014. Proponent reported that total greenbelt & plantation will be carried out on 18.91 ha area till the end of the life of mine, out of which 3.4 ha will be unworked area & remaining 15.51 ha under plantation on benches. Green belt all along the mining lease boundary, quarry edge, roads, crushing plant, office, etc. The Species proposed for greenbelt development are Aam (Magnifera Indica), Jamun (Syzygium cumini), Arjun (Terminalia arjuna), Shahtoot (Morus Alba), Neem (Azadiracta indica), Pipal (Ficus religiosa), Ber (Ziziphus mauritiana), etc. Other Fruit bearing species, native species and plants useful for local etc. will also be planted.
- 6. The baseline data was generated for the period during Summer Season March to May, 2014 and one month additional monitoring in October, 2014. The Committee deliberated on the baseline data and found that the principle environment parameters are well within the permissible limits as prescribed by the CPCB. Project Proponent reported that Action Plan for ensuring good occupational environment for mine workers has been prepared based on Recommendations of Nationally reputed Institute and the same will be implemented during mining operation.
- 7. The Public Hearing was conducted on 10th October, 2014 at 11:00 am at Mine Site, Village– Atela Kalan, Tehsil –Charkhi Dadri, District: Bhiwani (Haryana). The Public Hearing was presided over by Shri D.K. Behera, Deputy Commissioner, Bhiwani. The representative of Haryana SPCB was also present. The issues raised during Public Hearing were discussed during the Meeting. Project Proponent reported that besides making provision for fluoride free drinking water, periodical medical test will be done and Rs. 1.0 Lakh as Capital cost & Rs. 25,000 per year as Recurring cost under Budget for prevention of fluorosis and awareness programs will be conducted in the nearby villages.

- 8. Total cost of the Project is Rs. 30 Crores. The Project Proponent has earmarked Rs. 75 Lakhs/- towards Environmental Protection Measures & Rs. 12.0 Lakhs/annum towards recurring expenses. Proponent informed that Rs. 25.00 Lakh/- has been earmarked towards CSR activities. Project Proponent reported that there is a Court case in the Hon'ble High Court Punjab & Haryana in the matter of CWP No. 27700 of 2013-Rajbir Singh v/s State and others. The petitioner had challenged the conditions of the auction notice and the rules relating to Payment of Rent and Compensation to the land owners. The Hon'ble High Court did not restrain the auction proceedings and held that the auctions may be held but it has also directed its orders dated 17.12.2013 that the same shall be subject to final outcome of above said CWP. Accordingly, the acceptance /Lol was issued to the outcome of said case. The said case is still pending before Hon'ble Punjab and Haryana High Court for adjudication.
- 9. The Ministry of Environment, Forest and 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 MSK (JV) for Mining of Stone (Minor Mineral) with proposed production capacity of 6.0 million TPA (ROM) of Stone in the mine lease area of 54ha, located at village—Atela kalan, Tehsil Charkhi Dadri, District—Bhiwani, Haryana 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 Haryana 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) The environmental clearance is valid for 12 years as the life of mine is 12 years.
- (iv) No mining activities will be allowed in forest area, if any, for which the Forest Clearance is not available.
- (v) The Project Proponent shall obtain Consent to Operate from the State Pollution Control Board, Haryana and effectively implement all the conditions stipulated therein.
- (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.

- (vii) An independent study be organized during peak activity, to understand how the actuals compare with the carrying capacities and further decisions taken to maintain sustainability of this essential stone extraction and supply activity. Project Proponent shall ensure that the road may not be damaged due to transportation of stone.
- (viii) 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 held on 10.10.2014.
- (ix) 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.
- (x) 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.
- (xi) 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.
- (xii) Use of effective sprinkler system to suppress fugitive dust on haul roads and other transport roads shall be ensured.
- (xiii) A comprehensive study for slope stabilization of mine benches and OB dumps shall be undertaken within one year. The Clearance is only for the Stone and not for any associated mineral.
- (xiv) Washing of all transport vehicles should be done inside the mining lease.
- (xv) Native plant species as suggested by villagers/specialist may be planted.
- (xvi) Implementation of Haryana Government Rehabilitation and Resettlement of Land Owners' Policy as per applicability in the area.
- (xvii) Implementation of Environment Management Policy of the Company w.r.t. judicious use of Mineral resources for growth & development synchronizing mining & environment with prosperity.
- (xviii) 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.

- (xix) 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.
- Where ever blasting is undertaken as part of mining activity, the Project (xx)Proponent shall carry out vibration studies well before approaching any such habitats or other buildings, to evaluate the zone of influence and impact of blasting on the neighbourhood. Within 500 meters of such sites vulnerable to blasting vibrations, avoidance of use of explosives and adoption of alternative means of mineral extraction, such as ripper/dozer combination/rock breakers/ surface miners etc. should be seriously considered and practiced wherever practicable. A provision for monitoring of each blast should be made so that the impact of blasting on nearby habitation and dwelling units could be ascertained. The covenant of lease deed under Rule 31 of MCR 1960 provides that no mining operations shall be carried out within 50 meters of public works such as public roads and buildings or inhabited sites except with the prior permission from the competent authority.
- (xxi) 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.
- (xxii) 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.
- (xxiii) 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.
- (xxiv) 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 Climate Change and its Regional Office located at Chandigarh on six monthly basis.
- (xxv) 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.
- (xxvi) 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 stone 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 Chandigarh 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_{10} 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 be maintained and submitted to the Ministry of Environment, Forest & Climate Change, its Regional Office, Chandigarh, 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, Chandigarh, Central Ground Water Authority and Regional Director, Central Ground Water Board.
- (xiv) 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.
- (xv) The critical parameters such as PM_{10} (size less than 10 micro meter), $PM_{2.5}$ (size less than 2.5 micro meter), 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, Forests & Climate Change, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.
- (xvi) Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for PM_{10} , $PM_{2.5}$, SO_2 & NO_x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board. Data on ambient air quality should be regularly submitted to the Ministry including its Regional office located at Chandigarh and the State Pollution Control Board / Central Pollution Control Board once in six months.
- (xvii) 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.
- (xviii) 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.
- (xix) 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.
- (xx) 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.
- (xxi) 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.

- (xxii) 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.
- (xxiii) 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 Chandigarh.
- (xxiv) The project authorities should inform to the Regional Office located at Chandigarh regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (xxv) The Regional Office of this Ministry located at Chandigarh 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.
- (xxvi) 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, Chandigarh, Central Pollution Control Board and State Pollution Control Board.
- (xxvii)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, Chandigarh, Central Pollution Control Board and State Pollution Control Board.
- (xxviii) 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.
- (xxix) 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.
- (xxx) 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 Chandigarh.
- 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 Haryana 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.

Ydurs 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 Environment, Government of Haryana, Chandigarh.
- 3). **The Secretary**, Department of Forests, Government of Haryana, Chandigarh.
- 4). **The Secretary**, Department of Mines and Geology, Government of Haryana, Chandigarh
- 5). **The Additional Principal Chief Conservator of Forests**, Region Office (Northern Region) Ministry of Environment and Forests, Bays No. 24-25, Dakshin Marg, Sector-31A Chandigarh-160030.
- 6). **The Chairman**, Haryana State Pollution Control Board, Plot No. C-11, Sector-6, Panchkula- 134109, Haryana
- 7). **The Chief Wildlife** of the State Govt., Haryana
- 8). **The Member Secretary**, Central Ground Water Authority, A2, W- 3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 9). **The District Collector**, **Bhiwani** District, State of Haryana.
- 10). Guard File.

11). MoEF &CC website.

(Dr. U. Sridharan)
Director (S)