## No. J-11015/ 33/2011-IA.II (M) Government of India Ministry of Environment & Forests

Paryavaran Bhavan, C.G.O. Complex, Lodi Road, New Delhi-110 003.

Dated the 13 May, 2013

To

M/s Shri Laxmi Chand Village- Chaikora and Kharaga Ka Nagala Tehsil- Rupbas, district- Bharatpur Rajasthan.

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Sub: Sand Stone and Khanda (Minor mineral) Mine (ML area-48.70 ha; ML No. 26/97) of M/s Sh. Laxmi Chand, Village Chaikora and Kharaga ka Nagala, Tehsil Rupbas, Distt. Bharatpur, Rajasthan – Environmental clearance regarding.

Sir,

This has reference to your letter No. Nil dated 22.5.2012 on the subject mentioned above.

2. The proposal is for renewal of mine lease for enhancement of production to 85,000 TPA (ROM) of Sand stone and Khanda (minor mineral). The mine lease area is 48.70 ha. The ML area is waste land. No forestland is involved. The coordinates of the Mine lease are - latitude- 26059'12" to 27°00′24" N; longitude- 77°36′00" to 77°37′35" E. The mine is reported to The proposed method of the mining will be be closed for the last 7 years. Haul road will be developed up to point of loading. manual open cast. Transportation of the mineral from pit - mouth to destination will be by trucks. No drilling and blasting is involved for mineral production. Life of the mine is 41 years. Water requirement is 15 kld, which will be obtained from nearby villages. An authentication by the Mining Engineer, Bharatpur, Department of Mines and Geology stating that the project does not falls in Aravalli has been submitted vide letter dated 14.06.2011. Back filling will start from 5th year. Total OB generation till the end of mine life will be 4,00,092 Tonnes. There will be one dump and no dump will be left at the conceptual stage. At the conceptual stage 19.10 ha will be converted to water body and reclaimed area will be 25.1613 ha. There is no National

Park, Wildlife Sanctuary, Wildlife Corridor, Tiger/ Elephant Reserve within 10Km radius from the mine site as per the Office of Divisional Forest Officer, Bharatpur vide letter dated 14.12.2011. River Gambhiri is at 1.5 km in NNE direction and seasonal river Kawar is at 4.00 Km in SSE direction. AAQ data presented is within prescribed limits. No objection certificate has been obtained from the Office of Gram Panchayat-Chaikora, Tehsil-Rupbas, District-Bharatpur ,Rajasthan . Public Hearing has been held on 20.3.2012. There is no legal issue against the project in the court of law. Budget allocation under CSR activities will be Rs. 1.00 lakh (Capital) and Rs. 0.35 lakh (Recurring). EMP cost will be Rs. 1.00 lakh (Capital) & Rs. 0.50 lakh (Recurring). Project cost will be Rs. 5.00 lakh.

- 3. The Terms of Reference (TOR) for the project were issued on 20.5.2011 for preparation of EIA and EMP. The Public hearing was held on 20.3.2012 at village Panchayat Head Office, Chaikora. The Eco-friendly mining plan has been approved by the Mining Engineer, DMG, Bharatpur vide letter no. 2514 dated 24.02.2011. Mine lease has been transferred in the name of Shri Laxmi Chand on 18.2.1998 by Mining Engineer, Bharatpur.
- 4. The proposal has been considered by the Expert Appraisal Committee for Mining based on the project documents and has recommended for the grant of environmental clearance for the said Sandstone and Khanda (Minor mineral) mining project. Accordingly, the Ministry of Environment and Forests hereby accords environmental clearance to the Sand Stone and Khanda (Minor mineral) Mine (ML area-48.70 ha; cap- 85,000 TPA-ROM: ML No. 26/97) of M/s Sh. Laxmi Chand, Village Chaikora and Kharaga ka Nagala, Tehsil Rupbas, Distt. Bharatpur, Rajasthan under the provisions of Environment Impact Assessment Notification, 2006 subject to strict compliance of the terms and conditions as follows:-

## A. Specific conditions:

- (i) The project proponent shall obtain Consent to Establish and Consent to Operate from the Rajasthan State Pollution Control Board and effectively implement all the conditions stipulated therein.
- (ii) The water supply to the affected population/users/ mining region shall be ensured.
- (iii) The mining operations shall be restricted above the groundwater table. Ground water table shall not be intersected at any point of time. In case of working below the ground water table, prior approval of the Ministry of Environment and Forests and the Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out.

- (iv) The project proponent shall ensure that no natural watercourse and/or water resources are obstructed due to any mining operations. Adequate measures shall be taken for protection of the 1<sup>st</sup> order and 2<sup>nd</sup> order streams, if any emanating/ passing through the mine lease during the course of mining operation.
- (v) The top soil 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.
- (vi) The over burden (OB) generated during the mining operation shall be temporarily stacked at earmarked dump site only for the purpose of backfilling. Backfilling shall commence from the end of 5th year onwards and at the conceptual stage there shall be no waste left out and any external over burden dumps. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests and its Regional Office, Lucknow on six monthly basis.
- (vii) The void left unfilled in an area of 19.10ha shall be converted into water body. The higher benches of excavated void/mining pit shall be terraced and plantation done to stabilize the slopes. The slope of higher benches shall be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out all along the excavated area.
- (viii) Garland drains, Catch drains, Check dams and siltation ponds of appropriate size shall be constructed around the mine working, soil and mineral dumps to prevent run off of water and flow of sediments. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted, particularly after the monsoon, and maintained properly.
- (ix) Dimension of the retaining wall at the toe of the OB benches within the mine to check run-off and siltation should be based on the rainfall data.
- (x) Plantation shall be raised in an area of 25.1613ha including 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 1000 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.
- (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  $PM_{10}$  such as loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.

- (xii) The project authority shall implement suitable conservation measures including suitable rain water harvesting measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.
- (xiii) Groundwater table shall be monitored regularly and it shall be ensured that there is no depletion of groundwater in the area. Necessary groundwater recharging structures shall be built.
- (xiv) 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 periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office, Lucknow, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.
- (xv) The mineral transportation to destination shall be by road. The vehicles carrying the mineral shall not be overloaded. The mineral transportation outside the mine lease shall be carried out through the tarpaulin covered trucks/closed trucks only and the vehicles carrying the mineral shall not be overloaded. There shall be no spillage of mineral enroute up to the delivery point.
- (xvi) Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral.
- (xvii) There shall be no blasting operations to excavate mineral in the mine.
- (xviii) Mineral handling area shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient

- dust control arrangements. These should be properly maintained and operated.
- (xix) ETP shall also be provided for the workshop and wastewater generated during the mining operation.
- (xx) Mineralogical composition of the dust to assess the silica content in the dust particle and particle size analysis shall be carried out periodically and records maintained. Personnel exposure monitoring for dust shall also be carried out for the workers.
- (xxi) Occupational Health Cell shall be created at the company under the charge of an officer of adequate seniority who is a qualified person in occupational health. Occupational health and safety measures for the workers including identification of work related health hazards, training on malaria eradication, HIV, and health effects on exposure to mineral dust etc. shall be carried out. The company shall engage a full time qualified doctor who is trained in occupational health. Periodic monitoring for exposure to respirable mineral dust on the workers shall be conducted and records maintained including health records of the workers. Awareness programme for workers on impact of mining on their health and precautionary measures like use of personal equipments etc. shall be carried out periodically. Review of impact of various health measures undertaken (at interval of five years of less) shall be conducted followed by follow up action wherever required.
- (xxii) The company shall stress upon the preventive aspects of occupational health. Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.
- (xxiii) 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.
- (xxiv) The critical parameters such as RSPM (Particulate matter with size less than 10micron i.e.,  $PM_{10}$ ) and  $NO_X$  in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically . Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended

Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry <a href="www.envfor.nic.in">www.envfor.nic.in</a> shall also be referred in this regard for its compliance.

(xxv) A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.

## B. General conditions:

- (i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.
- (ii) No change in the calendar plan including excavation, quantum of mineral Sandstone and Khanda and waste should be made.
- (iii) At least four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10micron i.e., PM<sub>10</sub>) and 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.
- (iv) Data on ambient air quality [(RSPM(Particulate matter with size less than 10micron i.e., PM<sub>10</sub>) and NO<sub>X</sub>] 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.
- (v) 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.
- (vi) 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.
- (vii) 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.
- (viii) 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. 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.
- (ix) 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.
- (x) 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.
- (xi) 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.
- (xii) 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.
- (xiii) The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, its Regional Office Lucknow, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Lucknow, the respective Zonal Officer of Central Pollution Control Board and the State Pollution Control Board.
- (xiv) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while

- processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
- (xv) The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector's office/ Tehsildar's Office for 30 days.
- The project authorities should advertise at least in two local (xvi) newspapers of the district or state in which project is located and widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forests at http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Lucknow.
- 5. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- 6. The Ministry may cancel the environmental clearance granted to this project under the provisions of EIA Notification, 2006, if, at any stage of the validity of this environmental clearance, it is found/ came to knowledge of this Ministry that the project proponent has deliberately concealed and/or submitted false or misleading information or inadequate data for obtaining the environmental clearance.
- 7. 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.
- 8. 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 Chhattisgarh and any other Court of Law relating to the subject matter.
- 9. 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.

## Copy to:

- (i) The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
- (ii) The Department of Mines & Geology, Government of Rajasthan, Secretariat, Jaipur.
- (iii) The Secretary, Department of Environment, Government of Rajasthan, Secretariat, Jaipur.
- (iv) The Chief Conservator of Forests, Central Region, Ministry of Environment and Forests, Kendriya Bhawan, 5<sup>th</sup> Floor, Sector "H", Aliganj, Lucknow-226020.
- (v) The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-1100032.
- (vi) The Member Secretary, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- (vii) The Chairman, Rajasthan State Pollution Control Board, 4, Institutional area, Jhalana, Doongri, Jaipur.
- (viii) The District Collector, Bharatpur District, Rajasthan.
  - (ix) EI Division, Ministry of Environment and Forests, Paryavaran Bhavan, C. G. O. Complex, Lodi Road, New Delhi-110 003.
  - (x) Monitoring File/Guard File/Record File.

(Dr. SAROJ) DIRECTOR