F. No. J-11011/349/2009- IA II (I) Government of India Ministry of Environment and Forests (I.A. Division)

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Dated 16th September, 2009

To, M/s Trumboo Cement Industries Pvt. Ltd. Javidan Building, 156-C Near Post Office Raj bagh Srinagar- 190 008, Jammu & Kashmir

E-mail: jmenviron@hotmail.com; Fax No.: ??;

Subject: Modernization and expansion of Cement Plant (1,20,000 TPA to 1,80,000 TPA) alongwith Limestone Mine (44 ha, 1,80,000 TPA) at Khonmoh industrial area, Village Khunmoh, District Srinagar, Jammu & Kashmir by M/s Trumboo Cement Industries Pvt. Ltd. ? Environment clearance reg.

Ref. : Your letter no. TCI/LK/98 dated 15th May, 2009.

Sir,

This has reference to your letter no. nil dated 4th January, 2009 alongwith EIA/EMP report and other related projects documents and subsequent communication dated 16th July, 2009 on the above subject seeking environmental clearance under the Environmental Impact Assessment Notification, 1994.

- 2.0 The Ministry of Environment and Forests has examined your application. It is noted that the proposal is for the environmental clearance for the modernization and expansion of Cement Plant (1,20,000 TPA to 1,80,000 TPA) alongwith Limestone Mine (44 ha, 1,80,000 TPA) at Khonmoh industrial area Village Khunmoh, District Srinagar, Jammu & Kashmir by M/s Trumboo Cement Industries Pvt. Ltd. Total area required for cement plant is 10 ha. A colony will be constructed in 2 ha. area within the plant premises. General Manager, District Industries Centre, Srinagar has confirmed that the plant is located within the Khonmoh industrial area as notified by the State Govt. vide notification no. 56/2202-CE & 57/2002-CE dated 14th November, 2002. Mine is not located in the notified industrial area. Dachigham Wildlife sanctuary is at a distance of 6 km in N-direction of the proposed plant. ?No Objection Certificate? has been issued by Chief Conservator of Forests, Kashmir, Srinagar vide letter dated 30th November, 1993 indicating location of the project outside forest area in the project. Total cost of the proposed expansion is Rs. 27.00 Crores.
- 3.0 Proposed modernization will involve replacement of existing cement plant (400 TPD) based on VSK technology with a modern rotary kiln (600 TPD) system. Dry process technology will be used. Precalcination with rotary kiln and 5-stage cyclone pre-heater technology will be used for manufacturing cement. Limestone (600 TPD) from captive source, gypsum (30 TPD), iron ore (4 TPD), pet coke (90 TPD), coal (60 TPD), clay (220 TPD) and sand (25 TPD) will be used as raw materials in the process. Pet coke sourced from Reliance refinery at Jamnagar and coal from the collieries of West Bengal and Bihar will be used as fuel.
- 4.0 Open cast fully mechanized method of mining will be adopted using drilling and blasting. In limestone mine located at a distance of 1 km from the cement plant. Mining lease is granted by State

Government vide letter no. 42-MNG/93 (Lease) dated 29th October, 1998. Mining scheme was approved by IBM, Govt. of India vide letter no. 614(2)/MS-B/178/08-DDN dated 25th August, 2008. Total mineable reserves are 5.0 Million Ton. Life of the mine is 21 years.

- 5.0 Electrostatic precipitator (ESP), bag house, bag filters, cyclones, dust suppresson system, water sprinklers will be installed to control particulate matter. Dust emissions generated during drilling, handling and transportation of limestone will be controlled by water spraying. Drill machines with in-built bag filters will be used for drilling operations. Total ground water requirement will be 135 m³/day for the cement plant and mines. No liquid effluent will be discharged from cement plant and mine. All the solid waste collected by the dust collectors (bag house and cyclones) will be recycled in the process. Overburden generated from the mines will be used for backfilling and green belt development.
- Public hearing/consultation is exempted as per section 7(ii) of EIA Notification, 2006. **?Consent to Establish?** and **?Consent to Operate?** for the existing cement plant is obtained from Jammu & Kashmir Pollution Control Board vide order dated 10th April, 1999 and 30th June, 2006 respectively.
- 7.0. The Ministry of Environment and Forests hereby accords environmental clearance to the above project under EIA Notification, 2006 subject to strict compliance of the following conditions:

A SPECIFIC CONDITIONS:

- i) Necessary statutory clearances from concerned Departments including ?No Objection Certificate? from the Jammu & Kashmir Pollution Control Board (J & K PCB) shall be obtained prior to commencement of construction and/or operation.
- ii) Permission from the Chief Wildlife Warden and clearance from the National Board of Wildlife regarding the impact of the proposed plant on the Dachigham Wildlife sanctuary located at a distance of 6 km shall be obtained prior to the start of construction activities at the site. Further, Conservation Plan for the conservation of wild fauna in consultation with the State Forest Department shall be prepared and implemented.
- iii) No construction work at the proposed project site shall be started without obtaining prior clearances / approvals for the linked mining component from the Indian Bureau of Mines (IBM) and State Govt. of Jammu & Kashmir. A copy of the mining lease approval from the Indian Bureau of Mines (IBM) and State Govt. of Jammu & Kashmir shall be submitted to the Ministry and its Regional Office at Chandigarh before initiating any construction work at site related to mining.
- iv) Continuous monitoring system to monitor gaseous emissions shall be provided and limit of SPM shall be controlled within 50 mg/Nm³ by installing adequate air pollution control system and data submitted to the Ministry?s Regional Office at Chandigarh half yearly, CPCB and J & K PCB quarterly.
- v) Electrostatic precipitators (ESP) to clinker cooler and high efficiency bag filters shall be provided to cement plant to control air pollution and gaseous emissions within 50 mg/Nm³. Bag filters shall also be installed at all transfer points and major stacks. Dust extraction system with bag filters shall be provided to all the conveying systems, unloading and storage systems. At no time, particulate emissions from the cement plant shall exceed 50 mg/Nm³. All the pollution control equipments shall be interlocked so that in the event of the pollution control equipment not working, the respective unit (s) is shut down automatically.
- vi) Ambient air quality monitoring stations shall be set up in the down wind direction as well as where maximum ground level concentration of SPM, SO₂ and NO_X are anticipated as per statutory requirement in consultation with the Jammu & Kashmir Pollution Control Board (J & K PCB). Ambient air emissions shall not exceed the standards stipulated under EPA or by the State authorities. Monitoring of ambient air quality shall be carried out regularly in consultation with CECB and data submitted to the Ministry?s Regional Office at Chandigarh half-yearly, CPCB and J & K PCB quarterly.

vii) The fugitive emissions during loading and unloading shall be suitably controlled by installing adequate dust collection and extraction system and at all the transfer points. Fugitive emissions shall also be controlled by providing silos and closed roof sheds for raw materials and product. Water sprinkling arrangement shall be made in the raw material stock yard and cement bag loading areas to prevent fugitive emissions. Bag filters shall be provided to coal and limestone handling system. Dust suppression system and water spraying shall be provided in the mine area to control fugitive emissions due to drilling and handling and transportation of raw material (limestone). Dust suppression system shall also be provided at coal handling, fly ash handling and in mine.

- viii) Possibilities shall be explored for the proper and full utilization of gases generated from the kiln in waste heat recovery boiler (WHRB) and a feasibility report shall be prepared and submitted to the Ministry and its Regional Office at Chandigarh within 3 months from the date of issue of the letter.
- ix) Secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.
- x) Asphalting/concreting of roads and water spray all around the critical areas prone to air pollution and having high levels of SPM and RPM shall be ensured.
- xi) Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials including fly ash shall be transported in the closed containers only and shall not be overloaded. Vehicular emissions shall be regularly monitored and records maintained.
- Mine shall not exceed 120 m³/day and 15 m³/day respectively. The water stored in the artificial reservoir made in the mine pit shall be used maximum to reduce ground water consumption. The cooling water shall be recycled back in the process after treatment and used for cooling and dust suppression. No effluent shall be discharged from the cement plant and limestone mine and ?zero? discharge shall be strictly followed. Domestic wastewater from the colony shall be treated in septic tank followed by soak pit and used for green belt development.
- xiii) ?Permission? for the drawl of 135 m³/day ground water from bore wells shall be obtained from the Central Ground Water Authority and State Ground Water Board (CGWA/SGWB). The water stored in the artificial reservoir made in the mine pit shall be used maximum to reduce ground water consumption. No effluent shall be discharged from the mine to any water body or nearby river.
- xiv) Detailed hydrological study shall be carried out and implementation of recommendations of the detailed hydrological study shall be ensured.
- xv) The project proponent shall ensure that no natural water course shall be obstructed due to any mining operations.
- xvi) Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, inter burden and mineral dumps to arrest flow of silt and sediment. 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 monsoon, and maintained properly.
- xvii) Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and inter burden dumps and sump capacity shall 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 shall 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.

xviii) Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers at suitable locations by the project proponent in and around project area in consultation with Regional Director, Central Ground Water Board. The frequency of monitoring shall be four times a year- pre-monsoon (April / May), monsoon (August), post-monsoon (November), and winter (January). Data thus collected shall be sent at regular intervals to Ministry of Environment and Forests and its Regional Office at Chandigarh, Central Ground Water Authority and State Ground Water Board.

- xix) Dimension of the retaining wall at the toe of inter burden dumps and inter burden benches within the mine to check run-off and siltation shall be based on the rain fall data.
- xx) Suitable conservation measures to augment ground water resources in the area shall be planned and implemented in consultation with Regional Director, Central Ground Water Board.
- All the bag filter dust, raw meal dust, coal dust, clinker dust and cement dust from pollution control devices shall be recycled and reused in the process and used for cement manufacturing. Domestic waste generated from the colony shall be shall be disposed to the local municipality after segregating the waste into biodegradable and non-biodegradable. Sewage shall be used as organic manure for green belt development. Waste/used oil shall be used as alternative fuel in kiln or sold to authorized recyclers/reprocessors only.
- **XXII)** An effort shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly.
- **XXIII)** Efforts shall be made to use low grade lime, more fly ash and solid waste in the cement manufacturing.
- **xxiv)** Action plan for the mining, management of over burden (removal, storage, disposal etc.), reclamation of the mined out area and mine closure shall be submitted to the Ministry and its Regional Office at Chandigarh.
- **XXV)** All the fly ash shall be utilized as per Fly Ash Notification, 1999 subsequently amended in 2003. Efforts shall be made to use fly ash generated from the captive power plant maximum in manufacturing Pozollona Portland Cement (PPC).
- **xxvi)** Wet drilling blasting method and provision for the control air emissions during blasting using dust collectors etc. shall be used, or otherwise, drill machines with in-built bag filters shall be used for drilling operations.
- **xxvii)** 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 shall be implemented.
- **XXVIII)** Bench height, width and slope for individual bench shall be properly assessed and implemented. Adequate measures shall be adopted to stabilize the slope before abandonment. The fencing around the reservoir shall be provided to prevent accidents.
- xxix) Action plan for the mining, management of over burden (removal, storage, disposal etc.), reclamation of the mined out area and mine closure shall be submitted to the Ministry and its Regional Office at Chandigarh. Overburden generated from the mines shall be used for backfilling and green belt development.
- xxx) The inter burden and other waste generated shall be stacked at earmarked dump site(s) only and shall not be kept active for long period. The total height of the dumps shall not exceed 30 m in three terraces of 10 m each and the over all slope of the dump shall be maintained to 28⁰. The inter burden dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-

sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office, Chandigarh on six monthly bases.

- **XXXI)** The project proponent shall modify the mine plan of the project at the time of seeking approval for the next mining scheme from the Indian Bureau of Mines so as to reduce the area for external over burden dump by suitably increasing the height of the dumps with proper terracing. It shall be ensured that the overall slope of the dump does not exceed 28⁰.
- xxxii) The void left unfilled in the mining area 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 along the excavated area.
- **xxxiii)** Top soil, if any, shall be stacked with proper slope at earmarked site(s) only with adequate measures and shall be used for reclamation and rehabilitation of mined out areas.
- As proposed, green belt shall be developed in at least 3.4 ha (33 %) out of total 10 ha. in cement plant and all the mined out area except used for reservoir to reduce impact of fugitive emissions as per Central Pollution Control Board (CPCB) guidelines in consultation with DFO.
- All the safety norms stipulated by the Director General, Mine & Safety (DGMS) shall be implemented.
- xxxvi) Rehabilitation and Resettlement Plan for the project affected population including tibals as per the policy of the State Govt. in consultation with the State Govt. of Jammu & Kashmir shall be implemented. Compensation paid in any case shall not be less than the norms prescribed under the National Resettlement and Rehabilitation Policy, 2007.
- xxxvii) ?Permission? and ?Recommendations? of the State Forest Department regarding impact of cement plant and mining activities on the surrounding reserve forests shall be obtained and implemented. Further, Conservation Plan for the conservation of wild fauna in consultation with the State Forest Department shall be prepared and implemented.
- XXXVIII) All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement Plants shall be implemented.
- xxxix) The company shall provide housing for 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.

B. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the Jammu & Kashmir State Pollution Control Board (J & K PCB) and the State Government.
- ii. No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.
- iii. The company shall provide adequate dust collection and extraction system to control fugitive dust emissions at various transfer points, raw mill handling (unloading, conveying, transporting, stacking), vehicular movement, bagging and packing areas etc. Asphalting/concreting of roads and water spray all around the coal stockpiles shall be carried out to control fugitive emissions.
- iv. Industrial wastewater shall 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 form time to

time. The treated wastewater shall be utilized for plantation purpose.

- v. The project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October 1994 and January 2000 and Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the J & KSPCB must be obtained for collection/ treatment/storage/disposal of hazardous wastes.
- vi. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
- vii. The company shall harvest the rainwater from the roof tops and storm water drains to recharge the ground water. The company must also collect rain water in the mined out pits and use the same water for the various activities of the project to conserve fresh water.
- viii. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP report.
- ix. The company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.
- x. As proposed, Rs. 1.50 Crores and Rs. 12.50 Lakhs earmarked towards total capital cost and recurring cost/annum for environmental pollution control measures shall be used to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government and an implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of this Ministry at Chandigarh. The funds so provided shall not be diverted for any other purpose.
- xi. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the J & K PCB and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Chandigarh.
- xii. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / 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 web site of the company by the proponent.
- xiii. The project proponent shall upload the status of compliance of the stipulated environment 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 MOEF at Chandigarh, the respective Zonal Office of CPCB and the J & K PCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- xiv. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by email) to the respective Regional Office of MOEF at Chandigarh, the respective Zonal Office of CPCB and the J & K PCB. The Regional Office of this Ministry at Chandigarh / CPCB / J & K SPCB shall monitor the stipulated conditions.

- xv. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the Project Proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF at Chandigarh by e-mail.
- xvi. Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.
- 8.0. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 9.0. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- 10.0. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.
- 11.0. 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, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules

(Dr. P.B. Rastogi)
Director

Copy to:

- 1. Secretary, Department of Environment, Govt. of Jammu & Kashmir, Jammu.
- 2. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi ? 110032.
- 3. The Chairman, J & K State Pollution Control Board, Jammu.
- 4. The Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office (Northern Zone), Bays No. 24-25, Sector 31-A, Dakshin Marg, Chandigarh 160 047.
- 5. Joint Secretary (CCI-I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi 110003.
- 6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
- 7. Guard file.
- 8. Monitoring file.
- 9. Record file.

(Dr. P.B. Rastogi)

Director