## F. No. J-11015/36/2009-IA.II (M) Government of India Ministry of Environment, Forest & Climate Change Impact Assessment Division

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Dated: 13th March, 2015

To, M/s Dalmia Cement (Bharat) Limited, Hansalaya 11<sup>th</sup> & 12<sup>th</sup> Floor, 15 Barakhamba Road, New Delhi-110 001.

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Subject: Yadwad Limestone Mines of M/s Dalmia Cement (Bharat) Ltd., Village Yadwad and Kunnal, Distt. Belgaum Karnataka (1228.63 ha) (4.30 MTPA) – Environmental Clearance – Reg.

Sir,

This has reference to your letter No. nil dated 05.01.2009 and subsequent letters dated 15.05.2012, 15.01.2013, 14.05.2013, 19.12.2013 and 03.06.2014 on the subject mentioned above. The proposal was considered by the Expert Appraisal Committee in its Meeting held during 8-9th April, 2009 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. MoEF prescribed the TOR for the proposed project vide letter no. J-11015/36/2009-IA.II dated 30th April 2009. The same TOR was reiterated by MoEF with increased lease area (1228.63 ha) vide letter no F.No.J-11015/36/2009-IA.II(M) dated 13.07.2012 with validity till 12.07.2014. The proponent submitted the EIA/EMP and public hearing documents which was considered by Expert Appraisal Committee in its meeting held during February 24-25, 2014 and re-considered in the meetings held during May 28-30, 2014 wherein Committee recommended the proposal for grant of environmental clearance.

2. The proposed Project is located at Yadwad (Gokak) & Kunnal (Ramdurg) Village, Gokak & Ramdurg Tehsil, Belgaum District, Karnataka. The Mining lease area falls on Survey of India Toposheet No. 47P/4 bounded by the co-ordinates, Latitudes: N 16°09'58 - 16°13'21"; Longitudes: E 75°10'43" - 75°12'11". The proposed project is a captive mine for DCBL's Cement Plant being established near Yadwad Village, Gokak Taluk, Belgaum District, Karnataka. Area of the mining lease is 1228.63 Ha. The entire area is non-forestland. As per the revenue record, Patta lands: 1162.58 ha and Govt. land: 66.05 ha. The land use pattern of the core zone is Agricultural land 1158.89 ha, Roads: 3.69 ha and Water Body: 66.05 ha. The Mining plan is approved by IBM vide Letter MP/BLG/GOA - (KNT)/LST - 278 - SZ/1032 dated 12.07.2013 for 1223.78 ha.

- 3. The mine working will be carried out by conventional opencast fully mechanized mining method. The mining will involve drilling, blasting, loading and transportation of the excavated material. The height of the benches will be maintained at about 9.0 m. The diameter of drill hole will be approx 150 mm. Deep hole blasting will be carried out with slurry explosives/ANFO. Electric delay detonators with detonating fuse will be used. Non-electric initiation system (NoNel) of blasting with shock tube detonators in combination with noise trunk delays will also be used.
- 4. The total estimated mineable reserves are 69.14 million tonnes. Life of mine is approximately 19 years at the proposed rated production of about 4.3 MTPA. A total of 8.45 million m³ of reject including topsoil will be handled during the life of the mine. About 7.1 million m³ of rejects generated will be used for backfilling an area of 24 ha to an average height of 30 m.
- 5. The requirement of water in the mine will be approximately 500 m3/day. This requirement is proposed to be met from the resource of the integrated Cement Plant/water harvesting of mine pit after development. Mining is envisaged upto a depth of 39 m bgl (548 m RL) and will not intersect the ground water table as the general water table in the area is at a depth of about 120 m below ground level (bgl). Hydrogeology study has been carried out by M/s Hydro Geo Survey Consultant, Jodhpur.
- It was reported by the project proponent that there are no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors or Tiger/Elephant Reserves within 10 km of the mine lease and there are no Schedule - I species recorded in the study area. Baseline studies were carried out during post monsoon season (September-November) 2012. The Public Hearing for the project was conducted in survey no. 365 and 369 of mining area, 0.5 kilometer from Hosakote road, Yadwad village, Gokak Taluk, Belgaum District, Karnataka on 20.09.2013. The Public Hearing was conducted under the Chairmanship of Shri N. Jairam, Deputy Commissioner and District Magistrate, Belgaum District. The issues raised during public hearing were also considered and discussed during the meeting which inter included Cement Plant construction, land acquisition/compensation, employment and CSR activities. A budgetary provision of Rs. 275 lakhs has been made under CSR to meet the requirements raised during PH. The Capital cost of the proposed Project is Rs 72 Crores. An amount of Rs. 30 Lakhs is earmarked for implementation of the environmental management plan. Recurring Cost for Environment protection is estimated to be Rs 11.20 Lakhs per annum.
- 7. Pursuant to Karnataka Gazette Notification No DMG/AML/ADV/07-08 dated 18.01.2007 and 22.05.2007, application of DCBL is considered for grant of ML over 1228.63ha. Smt. Shobha Chikkud, applied over an area of 4.85 ha for limestone mineral covering the above notified area and a grant notification was issued. The Hon'ble High Court passed an order on 04.10.2009 directing DMG to execute the lease which was challenged by DCBL before Hon'ble High Court. The Hon'ble High Court, in its interim order, directed to maintain status-quo until final orders.
- 8. As per the DMG's letter no. DMG:MLS:384 AML 07: 11-12/13834 dated 24.02.2012, Mining Plan for 1228.63 ha mine was prepared and submitted to IBM on 24.05.2012 for approval. However, based on a subsequent communication

from DMG to IBM vide letter no DMG:MLS/Supt/2012-13 dated 27.05.2013, the Mining Plan is approved for the area 1223.78 ha excluding the area under litigation which is pending before Hon'ble High Court of Karnataka.

9. The Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the above mentioned Yadwad Limestone Mines of M/s Dalmia Cement (Bharat) Ltd., involving leases area of 1228.63 ha for production capacity of 4.30 MTPA (ROM) located at Village Yadwad and Kunnal, District Belgaum Karnataka under the provisions of the Environmental Impact Assessment Notification, 2006 and further amendments thereto subject to compliance of the terms and conditions mentioned below:

## A. SPECIFIC CONDITIONS:

(i) The EC valid only for 1223.78 ha of land out of 1228.63 ha, subject to final outcome in all the Writ Petitions in the Karnataka High Court.

(ii) The PP to provide unhindered access to the other lease holder(s) and

farmers to their land in the lease area.

(iii) The project proponent shall obtain Consent to Establish and Consent to Operate from the Karnataka State Pollution Control Board and effectively implement all the conditions stipulated therein.

(iv) The mining operations shall be restricted to above ground water table and it

should not intersect the groundwater table.

(v) To avoid adverse impact of mining operations on habitations/villages, the Project shall comply with conditions provided in OM no. Z-11013/57/2014-IA.II(M) dated 29.10.2014 on Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area.

(vi) The lose solids should be kept separately from flowing water and flow of effluents to nearby areas outside the leasehold shall be prevented. The paved drains along with arrangements for Over Burden Dumps and their drainage may be clearly depicted on a contoured map of the mining area.

(vii) The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations. Adequate measures shall be taken for conservation and protection of the 1<sup>st</sup> and 2<sup>nd</sup> order streams, emanating or passing through the mine lease during the course of mining operation.

(viii) 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.

(ix) Appropriate safeguard measures shall be taken to ensure stability and drainage of dump so that no solid waste/debris flows into the nallah.

(x) The over burden (OB) generated during the mining operation shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time and their phase-wise stabilization shall be carried out. Proper terracing of OB dump(s) shall be carried out. The over burden dump(s) shall 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 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, Forest and Climate Change and its Regional Office, Bangalore on six monthly basis.

(xi) Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, temporary OB and mineral dumps to arrest flow of silt and sediment directly into the adjoining River and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted particularly after the monsoon and maintained properly.

(xii) Dimension of the retaining wall at the toe of the OB dump(s) and the OB benches within the mine to check run-off and siltation should be based on the rain fall data.

(xiii) Plantation shall be raised in an specified area including a 7.5 m wide green belt in the safety zone around the mining lease, OB dump(s), along the roads, etc. by planting the native species in consultation with the local DFO/Agriculture Department. In addition, plantation shall also be raised in the backfilled and reclaimed area and around water body. The density of the trees should be around 1500 plants per ha.

(xiv) Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as around crushing and screening plant, 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.

(xv) Regular monitoring of water quality upstream and downstream of perennial nallahs falling in the impact zone shall be carried out and record of monitoring data should be maintained and submitted to Ministry of Environment, Forest and Climate Change, its Regional Office, Bangalore, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.

(xvi) Appropriate measures shall be taken for treatment of the upper catchment of the mine lease area.

(xvii) The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.

(xviii) 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 installing 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, Forest and Climate Change and its Regional Office Bangalore, 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.

- (xix) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water, required for the project.
- (xx) Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground Water Board.
- (xxi) Appropriate mitigative measures should be taken to prevent pollution of nearby River in consultation with the State Pollution Control Board.
- (xxii) 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. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.
- (xxiii) Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.
- (xxiv) Drills shall either be operated with dust extractors or equipped with water injection system.
- (xxv) Mineral handling area shall be provided with the 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.
- (xxvi) Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and wastewater generated during the mining operation.
- (xxvii) 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.
- (xxviii) Regular monitoring of free silica in the dust will be carried out and records maintained. It shall be ensured that the levels of silica do not exceed the prescribed limit. The workers will be provided with personal protective measures to guard against inhailing silica dust.
- (xxix) 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, creche

etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

- The project proponent should take all precautionary measures during mining operation for conservation and protection of endangered flora as well as endangered fauna in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. Copy of action plan may be submitted to the Ministry and its Regional Office at Bangalore within 3 months.
- The critical parameters such as RSPM (Particulate matter with size less than 10 micron i.e., PM<sub>10</sub>) and NOx in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006¬IA.II(M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change, which is available on the website of the Ministry www.envfor.nic.inshall also be referred in this regard for its compliance.
- (xxxii) A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment, Forest and Climate Change 5 years in advance of final mine closure for approval.
- (xxxiii) The project proponent shall undertake all the commitments made during the public hearing and effectively address the concerns raised by the locals in the public hearing as well as during consideration of the project, while implementing the project.

## 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 and Climate Change.
- (ii) No change in the calendar plan including excavation, quantum of mineral limestone and waste should be made.
- (iii) 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.,  $PM_{10}$ ) and NOx 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>) & NOx should be regularly submitted to the Ministry of Environment, Forest and Climate Change including its Regional office located at Bangalore 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 of Environment, Forest and Climate Change and its Regional Office located at Bangalore.
- (xi) The project authorities should inform the Regional Office located at Bangalore 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 Bangalore 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, Forest and Climate Change, its Regional Office Bangalore, the respective Zonal Office of Central Pollution Control Board 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, Forest and Climate Change, Bangalore, the respective Zonal Office 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.
- (xvi) The environmental statement for each financial year ending 31st March in Form-Vas 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 be put on the website of the company along with the status of compliance of Environmental Clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment, Forest and Climate Change, Bangalore by e-mail.
- (xvii) The project authorities should advertise at least in two local newspapers of the District or State widely circulated in which the project is located and one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded Environmental Clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment, Forest and Climate Change at http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bangalore.
- 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 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

thereunder and also any other orders passed by the Hon'ble Supreme Court of India/High Court of Karnataka 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.

(Dr. U. Sridharan) Scientist 'F'

## Copy to:

- (i) The Secretary, Ministry of Mines, Government of India Shastri Bhawan, New Delhi.
- (ii) The Secretary (Environment), Government of Karnataka, Multi Storeyed Building, Bangalore-560 001.
- (iii) The Secretary, Department of Forests, Government of Karnataka, Bangalore-560003
- (iv) The Secretary, Department of Mines and Geology, Government of Karnataka, Bangalore.
- (v) The Secretary, Department of Industries and Commerce (M-III), Govt Karnataka, Bangalore.
- (vi) The Chairman, Karnataka State Pollution Control Board, No. 25, 6th 9th Floor, Public Utility Building, M.G. Road, Bangalore 560 001.
- (vii) The Additional Principal Chief Conservator of Forests, Southern Regional Office, Ministry of Environment & Forests, Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Block, Koramangla, Bangalore-560 034,
- (viii) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
- (ix) The Member Secretary, Central Ground Water Authority, A2, W-3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- (x) The Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur- 440 001
- (xi) The District Collector, Belgaum District, Government of Karnataka.
- (xii) Guard File.
- (xiii) MoEF Website.

(Dr. U. Sridharan) Scientist 'F'

