#### BY SPEED POST

No. J-11015/ 104/2009-IA.II (M) Government of India

Ministry of Environment & Forests

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

Dated the 9<sup>th</sup> May, 2011

То

M/s Dalmia Cement (Bharat) Limited

Dalmiapuram - 621 651

Distt. Tiruchirapalli, Tamil Nadu

Subject: Expansion of Aminabad & Khairulabad Limestone Mines (ML area 95.345 ha, production capacity 0.30 MTPA to 1.10 MTPA) of M/s Dalmia Cement (Bharat) Limited at Villages Aminabad & Khairulabad, in Ariyalur Taluka & District in Tamil Nadu — Environmental clearance regarding.

Sir,

This has reference to your letter No. DP: Mines: A&K:01/10 dated 27.1.2010 on the subject mentioned above. Subsequent letter dt. 20.11.2010 and 20.1.2011 were also considered.

The proposal is for expansion of limestone mining for enhancement of 2. production capacity from 0.30 to 1.10 MTPA of M/s Dalmia Cement (Bharat) Ltd., at villages Aminabad & Khairulabad villages, in Ariyalur Taluk and Distt., in Tamil Nadu. Expansion will be carried out only vertically and no further horizontal excavation other area already excavated of 49.10 ha for the present production capacity of 0.3 MTPA will be involved. Earlier environmental clearance for 0.30 MTPA productions was accorded on 13.01.2006. The lease area is 95.345 ha, which is a Government waste land. The land use break-up at the end of mining will be as area for excavation 86.0 ha; area for roads 0.35 ha; area for green belt 5.48 ha; and 3.515 ha will be unutilised. The Coordinates of the mine lease area are Latitude- 110 07' 40" N to 110 08' 28" N; Longitude- 79° 07' 00" E to 79° 08' 21" E. Method of mining will be open cast Life of mine at proposed rate of production will be 14 years. Waste generation will be 1.08 Million tonnes in the form of ferrous limestone which will be backfilled. Present working depth is 17.3 m bgl and ultimate depth of mining will be at 53 m RL (27.8 m bgl). Ground water table varies from 45 m bgl to 35 m bgl ( pre-

DN BBH 14/6/11/16/6/11

monsoon to post monsoon). Mining will not intersect ground water table. Water requirement will be 15 KLD, which will be met from ground and mine pit water. Seasonal Kallar river flows adjacent to the lease in west and seasonal Marudaiyar river flows 6.5 km away in the South. HFL of Kallar river is 65.39 m and RLS of Kallar river near the ML area is 64.53m and 63.67m. The lowest RL of the mine lease area is 65.39m. There will be no discharge of waste water outside the mine lease area. There are no wildlife sanctuaries/National Parks/ Tiger Reserves and Heritage Sites etc within 10 Km of the lease. The nearest habitation is at a distance of 600 m in the Northern portion of the mine. Mineral transportation will be by road. There is no R&R issue involved. It was reported that there is no court case pending against the project. Public hearing was held on 15.10.2010. Cost of EMP will be Rs. 0.05 crores per annum. CSR budget will be Rs. 0.08 crores per annum besides Rs. 0.05 crores for Occupational Health and safety measures. Cost of the project will be Rs. 1.0 Crore.

- 3. The terms of reference for the project were issued on 25.5.2009 for preparation of EIA and EMP. The Public hearing was held on 15.10.2010 at Grievance Day Petition Hall of Taluk Office, Ariyalur, Ariyalur district by Tamil Nadu Pollution Control Board. The Mining scheme was approved by IBM on 18.3.2008. Mine lease renewal was done for the period up to 02.10.2020 vide letter dt. 16.10.2000 by the Govt. of Tamil Nadu.
- 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 new Limestone mining project. Accordingly, the Ministry of Environment and Forests hereby accords environmental clearance to the said project 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 Company shall undertake regular desiltation of Kallar river flowing adjacent to the lease in West during the dry period to prevent inundation of mine during rainy season.
- (ii) The project proponent shall obtain Consent to Establish and Consent to Operate from the Tamil Nadu State Pollution Control Board and effectively implement all the conditions stipulated therein.

- (iii) Measures for prevention and control of soil erosion and management of silt shall be undertaken. The de-silted material from the river should not be left near the river to avoid it from going back into the river and should be properly disposed of at appropriate site.
- (iv) The roads through which mineral transportation is undertaken outside the mine lease area should be maintained through the nodal agency in the State Government by making financial contribution for the same.
- (v) Trenches / garland drains shall be constructed at foot of dumps and coco filters installed at regular intervals to arrest silt from being carried to water bodies. Adequate number of Check Dams and Gully Plugs shall be constructed across seasonal/perennial nallahs (if any) flowing through the ML area and silts arrested. De- silting at regular intervals shall be carried out.
- (vi) The optimum charge for blasting shall be determined based on vibration study. 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.
- (vii) Drills shall either be operated with dust extractors or equipped with water injection system.
- (viii) 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.
- (ix) ETP shall also be provided for the workshop and wastewater generated during the mining operation.
- (x) Fugitive dust generation shall be controlled. Fugitive dust emission shall be regularly monitored at locations of nearest human habitation (including

schools and other public amenities located nearest to sources of dust generation as applicable) and records submitted to the Ministry.

- (xi) 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.
- (xii) Regular monitoring of ground water level and quality including Arsenic 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- premonsoon (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, 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.
- (xiii) 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.
- (xiv) Land-use pattern of the nearby villages shall be studied, including common property resources available for conversion into productive land. Action plan for abatement and compensation for damage to agricultural land / common property land (if any) in the nearby villages, due to mining activity shall be submitted to the Ministry within six months.
- (xv) Need based assessment for the nearby villages shall be conducted to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such

programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self employment and jobs.

- 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.
- (xvii) 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
- (xviii) Green belt shall be raised first in the northern portion of the mine where the nearest habitation is at a distance of 600m. The greenbelt plantation all around the mine lease should be completed within 5 years of grant of environmental clearance. Green belt development and selection of plant species shall be of native species. The density of the trees should be around 2000 plants per ha. Herbs and shrubs shall also form a part of afforestation programme besides tree plantation. Details of year wise afforestation programme including rehabilitation of mined out area shall be submitted to the Ministry within six months.

- (xix) 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 within the lease up to the stockyard. The mineral transportation within the mine lease shall be carried out through the covered trucks only and 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 only and the vehicles carrying the mineral shall not be overloaded. There shall be no spillage of mineral enroute up to the delivery point.
- 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.
- The critical parameters such as RSPM (Particulate matter with size less than 10micron i.e., PM<sub>10</sub>) and NO<sub>X</sub> 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="https://www.envfor.nic.in">www.envfor.nic.in</a> shall also be referred in this regard for its compliance.
- (xxii) 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.

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- (ii) No change in the calendar plan including excavation, quantum of mineral limestone 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.,  $PM_{10}$ ) and  $NO_X$  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.
- (iv) Data on ambient air quality [(RSPM(Particulate matter with size less than 10 micron i.e.,  $PM_{10}$ ) and  $NO_X$ ] should be regularly submitted to the Ministry 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 and its Regional Office located at Bangalore.

- (xi) The project authorities should inform to 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 and Forests, its Regional Office Bangalore, 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, Bangalore, 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.
- (xvi) 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 and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bangalore.

- 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. 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.
- 7. 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 Tamil Nadu and any other Court of Law relating to the subject matter.
- 8. The environmental statement for each financial year ending 31<sup>st</sup> 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 along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Office of the Ministry of Environment and Forests, Bangalore by e-mail.

#### Copy to:

- 1. Secretary, Ministry of Mines, Government of India Shastri Bhawan, New Delhi.
- 2. Secretary, Department of Environment, Government of Tamil Nadu, Chennai.
- Secretary, Department of Mines and Geology, Government of Tamil Nadu, Chennai.
- 4. Secretary, Department of Forests, Government of Tamilnadu, Chennai
- 5. The Secretary (Environment), Govt. of Tamil Nadu, Fort. St. George, Chennai-600009.
- 6. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- 7. The Chairman, Tamil Nadu Pollution Control Board, 76, Mount Road, Guindy, Chennai 600032.

- The Chief Conservator of Forests (Central), Regional Office (SZ), Kendriya Sadan, IV<sup>th</sup> Floor, E&F Wings, 7<sup>th</sup> Main Road, II<sup>nd</sup> Block, Koramangala, Bangalore-560034.
- 9. Member Secretary, Central Ground Water Authority, A 2, W3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 10. Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
- 11. District Collector, District Ariyalur, Tamil Nadu.
- 12. Monitoring File/Guard File/Record File.

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Distt. Tiruchirapalli, Tamil Nadu

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- The critical parameters such as RSPM (Particulate matter with size less than 10micron i.e., PM<sub>10</sub>) and NO<sub>X</sub> 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="https://www.envfor.nic.in">www.envfor.nic.in</a> shall also be referred in this regard for its compliance.
- (xxii) 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.

- (ii) No change in the calendar plan including excavation, quantum of mineral limestone 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.,  $PM_{10}$ ) and  $NO_X$  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.
- (iv) Data on ambient air quality [(RSPM(Particulate matter with size less than 10 micron i.e.,  $PM_{10}$ ) and  $NO_X$ ] should be regularly submitted to the Ministry 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 and its Regional Office located at Bangalore.

- (xi) The project authorities should inform to 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 and Forests, its Regional Office Bangalore, 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, Bangalore, 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.
- (xvi) 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 and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bangalore.

- 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. 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.
- 7. 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 Tamil Nadu and any other Court of Law relating to the subject matter.
- 8. The environmental statement for each financial year ending 31<sup>st</sup> 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 along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Office of the Ministry of Environment and Forests, Bangalore by e-mail.

#### Copy to:

- 1. Secretary, Ministry of Mines, Government of India Shastri Bhawan, New Delhi.
- 2. Secretary, Department of Environment, Government of Tamil Nadu, Chennai.
- Secretary, Department of Mines and Geology, Government of Tamil Nadu, Chennai.
- 4. Secretary, Department of Forests, Government of Tamilnadu, Chennai
- 5. The Secretary (Environment), Govt. of Tamil Nadu, Fort. St. George, Chennai-600009.
- 6. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- 7. The Chairman, Tamil Nadu Pollution Control Board, 76, Mount Road, Guindy, Chennai 600032.

- The Chief Conservator of Forests (Central), Regional Office (SZ), Kendriya Sadan, IV<sup>th</sup> Floor, E&F Wings, 7<sup>th</sup> Main Road, II<sup>nd</sup> Block, Koramangala, Bangalore-560034.
- 9. Member Secretary, Central Ground Water Authority, A 2, W3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 10. Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
- 11. District Collector, District Ariyalur, Tamil Nadu.
- 12. Monitoring File/Guard File/Record File.

No. J-11015/398/2005-IA-II(M)
Government of India
Ministry of Environment & Forests

Paryavaran Bhavan, CGO Complex, Lodhi Raod, New Delhi-110003.

Dated 13th January,2005

To,

Shri Y.P.Sharma,
Manager Business Development,
M/s. Dalmia Cement (Bharat) Ltd., Hansalaya (11<sup>th</sup> & 12<sup>th</sup> Floor)
15,Barakhamba Road, Post Box 364,
New Delhi-110001.

Subject:-Expansion of Aminabad and Khairulabad Limestone Mine(95.34.5ha.) of M/s. Dalmia Cement (Bharat) Ltd. (0.30 MTPA) located in Village(s) Aminabad and Khairulabad, Tehsil Ariyalur, District Perambalur, Tamil Nadu- environmental clearance- regarding.

Sir,

This has reference to your letter No.ND/SR/A&K/ dated 7.11.2005 alongwith your application and subsequent letter No.DP:DIM:MOEF:AK:01/2006dated 02.01.2006 on the subject mentioned above. The Ministry of Environment and Forests has examined the application. It has been noted the proposal is for renewal of lease of the existing Aminabad and Käirulabad Limestone Mine with a total lease area of 95.34.5 ha, consisting of wasteland (Government land and private land ). Of the total lease area, area to be excavated is 49.1 ha, 0.10 ha. is for infrastructure, 1.17 ha. is for roads, 4.48 ha. is for green belt and safety zone and 40.5 ha. is for area under mining activity(presently). No forestland is involved, No ecologically sensitive area falls within 10 Km. Radius of the mine site. The project does not involve displacement of people. The production capacity of the mine is 0.30 million tones per annum (MTPA) of limestone. Mineral transportation of 900 TPD is by road to the linked cement plant. Working is opencast by mechanized method involving drilling and blasting. Ultimate working depth is 63.5 m RL. Present working depth is 76 m RL. Mining will intersect water table. The area has been declared as semi-critical' by State Ground Water Department. Average water requirement of the mine is 160 m<sup>3</sup>/day, out of which 156 m<sup>3</sup>/day will be met from mine sump water and 4 m<sup>3</sup> /day from ground water. No solid waste generation is envisaged. Indian Bureau of Mines(IBM) has approved mining scheme on 31.12.2003. The Tamil Nadu Pollution Control Board has granted NOC on 2.11.2005.

Public hearing was held on 26.03.2004. Life of the mine at the rated capacity is about 9 years. Capital cost of the project is Rs. 90.00 lakhs.

2.0 The Ministry of Environment and forests hereby accords environmental clearance to the above mentioned Aminabad and Kairulabad Limestone Mine of M/s. Dalmia Cement (Bharat) Ltd. to production 0.30 MTPA of limestone involving lease area of 95.345 ha under the provisions of the Environment Impact Assessment Notification, 1994 and its subsequent amendments subject to terms and conditions mentioned below:

# A. Specific Conditions

- (i) Prior approval of the CGWA shall be taken for mining below water table.
- (ii) Top soil ,if any, should be stacked properly with proper slope at ear marked site(s) with adequate measures and should be used for greenbelt development.
- (iii) Check dams and siltation ponds of appropriate size should be constructed wherever required to arrest silt and sediment flows within the lease area. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted and maintained.

Garland drain (size, gradient & length) and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall 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 should be constructed at the corners of the garland drains.

- (iv) Drills should be wet operated or with dust extractors.
- (v) Controlled blasting should be practiced and only during daytime. The mitigative measures for control of ground vibrations to arrest the fly rocks and boulders should be implemented.
- (vi) Crusher should be operated with high efficiency bag filters, water sprinkling system should be provided to check fugitive emissions from crushing operations, haulage roads, transfer points, etc.
- (vii) Water sprinkling arrangements to control the fugitive dust generation from the haulage roads and to the crusher should be provided.
- (ix) Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral ore. The vehicles should be covered with tarpaulin and should not be overloaded.

- Progressive Mine Closure Plan shall be implemented. The higher benches of the excavated void/mine pit of an area of 89.595 ha. /converted into a water / reservoir, shall be terraced and plantation done to stabilize the slopes. Peripheral fencing shall be done along the excavated area.
- Plantation should be developed in an area of 4.48 ha. by planting the native species around the ML boundary, the roads, undisturbed area etc. in consultation with the local DFO/Agriculture Department. The density of trees should be around 2000 plants per hectare.
- (xii) A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years prior to closure of mine for approval of the Ministry.
- (xiii) Consent to operate should be obtained from State Pollution Control Board before expanding mining activities.
- B. General Conditions.
- (i) No change in 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 limestone, waster/OB dumps should be made.
- Ambient air quality monitoring stations should be established in the core zone as well as buffer zone for SPM, RPM. Location of the ambient air quality stations should be decided based on meteorological data, topographical features and environmentally and ecologically sensitive targets and the frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.
- (iv) Data on air quality should be regularly submitted to the Ministry including its Regional Office at Bangalore and the State Pollution control Board, Central Pollution Control Board once in six months.
- (v) Adequate measures for control of fugitive emissions should be undertaken such as water spraying arrangements on haul roads, loading and unloading points and transportation of minerals, etc. Fugitive dust emissions from all sources should be regularly monitored and data recorded properly.
- (vi) Adequate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and frilling operations, operations of HEMM, etc., should be provided with ear plugs/muffs.

- (vii) Industrial waste water (workshop and wastewater 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 as amended from time to time. Oil and grease trap should be installed before discharge of effluents from the Workshop.
- (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 programme of the workers should be undertaken periodically and corrective measures taken, if required.

- (ix) The funds carmarked for environmental protection measures should be kept in separate account and not diverted for any other purpose. Year-wise expenditure should be reported to the Ministry of Environment & Forests.
- (x) The project authorities should inform to 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.
- (xi) The Regional Office of this Ministry located at Bangalore shall monitor compliance of the stipulated environmental conditions. The project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.
- (xii) A copy of the clearance letter should be marked to concerned Panchayat/local NGO, if any, from whom any suggestion/represent ration has been received while processing the proposal.
- (xiii) The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the collector's/Tehsildar's Office for 30 days.
- (xiv) The project authorities should advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within 7 days of issuance 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 may also be seen at web site of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a>.
- C. All the conditions stipulated by Tamil Nadu Pollution Control Board vide their letter No. T6/TNPCB/F 5640B-Mine/RS/PMLR/2005 dated 2.11.2005 should be complied with.

- 3. The Ministry or any other competent authority may stipulate any further additional condition for environmental protection.
- 4. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance.
- 5. 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.

(S.K.Aggarwal)
Director

## Copy to:

- Secretary, Department of Environment & Forests, Government of Tamil Nadu, Fort St. George, Secretariat, Chennai-600009.
- Secretary(Industry), Industries Department, Government of Tamil Nadu, Fort St. George, Secretariat, Chennai-600009.
- 3. The Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office(SZ), E-3/240 Kendriya Sadan, 4th Floor, E&F Wings, 17th main Road, II Block, Koramangala, Bangalore-560034
- Chairmen, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi-110032.
- 5. Chairperson, Tamil Nadu Pollution Control Board,76 Mount Salai, Guindy, Chennai-600032.
- 6. Member Secretary, Central Ground Water Authority, A-3, W-3 Central Ground Water Authority, Curzon Road Barracks, K.G.Marg, New Delhi.
- 7. Controller General of Mines, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440001.
- 8. District Collector, Perambalur, Govt. of Tamil Nadu.
- 9. El Division, Ministry of Environment & Forests, New Delhi.
- 10.Guard File. 11. Monitoring File. 12. Record File.