## F. No. J-11015/60/2011-IA.II (M) Government of India

## Ministry of Environment, Forests & Climate Change

Impact Assessment Division

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

Dated: 22<sup>nd</sup> September, 2014

To,

M/s Orient Cement

7-1-33/3, First Floor Leela Nagar, K.K Zone, Ameerpet Hyderabad, Andhra Pradesh Pin-500 016

Tel:040-40326666, Fax: 040-42002142; Email-bpandey@orientcement.com

Subject: Captive Lime stone Mine of M/s Orient Cement with limestone production of 3.0 million tonnes per annum (ROM) located at Itgi & Mogla Villages, Chittapur Taluk, Gulbarga district, Karnataka-Environmental Clearance Regarding.

Sir,

This has reference to your letter no. ORCEM:PROJ:0267, dated 14.08.2012 and subsequent letters dated 31.01.2013 & 19.08.2014 on the subject mentioned above. The mine is located at Itgi & Mogla Villages, Chittapur Taluk, Gulbarga district, Karnataka in the mine lease area of 602.054 ha.

- 2. The proposal is for opening of a new mine for production of 3.0 million TPA of limestone (ROM) to meet the requirement of the integrated Cement Plant of M/s Orient Cement which will be located adjacent to the mine lease. The Terms of Reference (TORs) were prescribed by the Ministry of Environment and Forests on 27.06.2011 for undertaking detailed EIA study for the purpose of obtaining environmental clearance. The project proponent has submitted EIA/EMP Report after conducting Public Hearing. The proposal for environmental clearance was appraised in the 2<sup>nd</sup> Meeting of the Reconstituted Expert Appraisal Committee held during December 19th-21st, 2012 wherein the Committee sought information/clarification. The proposal was reconsidered in the 6<sup>th</sup> Meeting of the Reconstituted Expert Appraisal Committee held during April 16<sup>th</sup>-18<sup>th</sup>, 2013 wherein the Committee recommended the proposal for environmental clearance. Further, the proposal was appraised by the EAC, w.r.t. safety of village surrounded by the mine lease area, in its meeting held during August, 26-27, 2014 wherein the committee recommended for environmental clearance for Pit 1 and Pit 2 of the mine lease area.
- 3. The mine lease area is 602.054ha, out of which 572.554ha is agricultural land, 25ha is rocky/stony waste land and 4.5ha is seasonal nala. No forestland is involved. Life of mine is 92 years. It is reported by the Proponent that 370.60ha area is for

excavation which consist of three pits viz. Pit 1 having 238.80ha MLA, Pit 2 having 42.10ha and Pit 3 having 89.70ha. It is observed that Itgi village is totally surrounded by the mining lease except a narrow road leading from village towards west which again gets narrower due to proposed construction of the Cement Plant. The areas towards North West of the Itgi village i.e. proposed Pit 3 of the mining lease need to be carved out for giving access to villagers of both Itgi and Mogla villages. Therefore, the Committee was of the view that Pit 3 may not be included in granting EC as Project Proponent has no plan to carry out any mining activity in Pit 3 in coming 15 years. As far as mining activities in Pit 3 is concerned, the Committee was of the view that the same may be considered for granting EC after rehabilitation/ access concerns of Itgi village and safety concerns of Mogla village are suitably addressed by the Project Proponent. The options before the Project Proponent for seeking Environment Clearance for this mining activity could be after successfully rehabilitating Itgi village and clearly defining safety zone of 500m for Mogla village in Mining Plan.

- 4. The Mine plan including progressive mine closure plan was approved by the Indian Bureau of Mine vide letter no KNT/GLB/MP/Lst-260-SZ/1081 dated 04.12.2012. It is reported that mineable reserve of limestone is 294.30 million tonnes. The mode of transportation is by road involving 200 dumpers per day. The total water requirement will be 500 m³/day which is sourced from the Kagna River. The Water Resource Department of Govt. of Karnataka has approved the supply of 5.56 MLD water from the Kagna River for integrated plant vide order no. JASAME06KBN2011 Bangalore, dated 19.03.2013. The solid waste will be in the form of black cotton soil and lateritic soil. The top soil of 5.05 million m³ will be generated out of which 5.01 million m³ will be backfilled in 18.40 ha of mined out area and 0.04 million m³ will be disposed in 9.35 ha by bund formation along SW of pit in the safety zone of village to a height of 10 m. Further, 16.2 million m³ of waste (subgrade limestone) will be generated and backfilled in 64.44 ha of mined out area. Ground water level is 80 m below the general ground water level (340m msl). It is reported that mining activities will not reach the Ground Water Table.
- 5. The Project Site is located between latitude and longitude of the Mine Lease area are 17° 6′ 34.87″- 17° 8′ 13.86″ N and 77° 7′ 35.65″ 77° 9′ 35.41″ E respectively on the toposheet no. 56 G/4. The Project Proponent reported that there is no National Parks/ Sanctuaries/Tiger Reserve/Elephant Reserve/Habitat for migratory birds/Corridor for animals of Schedule I Species as per the Wildlife (Protection) Act, 1972 within 10 km radius of the project site. The Kagna River is 5.4 km and Benithora river is 7.9 km from the mine site.
- 6. The Public Hearing was held under the Chairmanship of Dr. Vishal R., Deputy Commissioner, Gulbarga District on 18<sup>th</sup> July, 2012. The Representative from the Karnataka Pollution Control Board were also present. The issues raised by public were addressed by the Project Proponent with commitment for implementation of development activities.
- 7. The capital cost of the integrated project (Cement Plant, Captive Power Plant & Captive Limestone Mine) is Rs. 1500 Crores and a budget for environmental protection measures is Rs. 135.30 Crores towards capital investment and Rs. 8.0 Crores towards recurring expense/annum. As reported by the Proponent Rs 10.04 Crores is earmarked for socio-economic welfare measures for the nearby villagers other than R&R plans which were further increased to 74 Crores for first 10 years.

8. The Ministry of Environment and Forests has examined the application in accordance with the Environmental Impact Assessment Notification, 2006 and further amendments thereto and hereby accords the environmental clearance under the provisions thereof to the above mentioned proposal of M/s Orient Cement for limestone production of 3.0 million tonnes per annum (ROM) for proposed mine lease area excluding Pit-3, i.e. 512.354ha (602.54ha – 89.70ha), located at Village(s) Itgi & Mogla, Taluk-Chittapur, District-Gulbarga, Karnataka with the condition that mining operations may be restricted to mining in Pit-1 (238.80ha) and Pit-2 (42.10ha) as per approved mine plan, subject to compliance of the followings terms and conditions and environmental safeguards mentioned below:

## A. Specific Conditions

- (i) Environmental Clearance for mining shall be for Pit-1 (238.80ha) and Pit-2 (42.10ha). Mining lease may be executed for the area for which EC is accorded. The EC would be subject to Project Proponent fulfilling the requirement under the provisions of MMDR Act, 1957 and MCR 1960 with regard to the reduced mine lease area.
- (ii) Project Proponent shall carry out only the plantation in the safety area of 500 meters, after spreading top soil.
- (iii) A safety zone of 500m from any dwelling or habitation will be left out as no mining area and no blasting will be conducted in this zone.
- (iv) A bund of about 5m height is to be made along the mining lease boundary on the village side with good width of green belt between village and mining area.
- (v) Mining will not be done in all sides of the Itgi village at one time and will be done in a sequential manner as per Mining Plan approved by IBM. During these operations all along the safety zone, measures will be taken to prevent air and noise pollution.
- (vi) The natural streams (nalas) passing through the mining lease area shall not be disturbed. Further, these streams shall be protected by creation of bunds on both sides, if required. The rain water collected in the mining pit shall be pumped out to the water storage in plant area for use and shall not be discharged into any natural stream or nala.
- (vii) A long term study with at least one year field data on runoff, rain fall, vegetation disturbance and water flow and drainage in all streams of the catchment will be carried out by reputed Institution and recommendations will be implemented within one year of commencement of mining.
- (viii) Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, if any, as may be applicable to this project.
- (ix) 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.

- (x) During mining, pollution mitigation measures will be taken up to ensure that the impact on the village and the surrounding area will not occur. Small blasts will be conducted to reduce ground vibrations and noise. Blasted material heaps will be thoroughly wetted before loading to avoid fugitive dust during loading.
- 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<sub>10</sub> and PM<sub>2.5</sub> such as haul road, loading and unloading point and transfer points. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard. Main haulage road in the mine will be provided with permanent water sprinklers and other roads will be wetted with water tanker fitted with sprinklers. Crusher and material transfer points will be provided with Bag filters and conveyor will be fully covered to avoid air borne dust.
- (xii) Effective safeguard measures such as conditioning of material with water, 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 transfer points. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- (xiii) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and 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 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.
- (xiv) The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.
- (xv) The raw material shall be transported through road on 200 dumpers/trucks covered with tarpaulin.
- (xvi) Appropriate mitigative measures shall be taken to prevent pollution of the Benithora and Kagna River in consultation with the State Pollution Control Board.

- (xvii) Setting up of hospital with satisfactory health care facilities for local residents as per the followings: (i) 9/10 bedded Hospital is with necessary equipment & medicines for providing health care facilities to local residents; (ii) Three doctors (out of which at least one will be a lady doctor) and necessary paramedical staff will be appointed; (iii) Medical and Health & Hygiene education camps will be organized for nearby villagers periodically; (iv) Rs 110 Lakhs will be spent for launching ICUs on wheels service with ultra-modern facilities like ECG, EEG, respirator, Bio-metric monitors etc. Recurring cost of Rs 86.0 lakhs will be spent during the 10 years period; (v) Ambulances/ Vehicles will be provided, whenever necessary to take the patients to the following nearby hospitals having better medical facilities. Orient Cement is committed to contribute Rs. 57.60 lakhs in the next 10 years for strengthening of this health center. Orient Cement is also committed to contribute Rs 57.20 lakhs in the next 10 years for strengthening of the District Hospital & Rs 54.10 lakhs to Red Cross society at Gulbarga.
- With regard to the R&R Plan (i) there shall be (no Habitation or dwellings within the mine lease area; (ii) Land sellers are paid as per compensation package fixed/ decided by the tripartite committee comprising of project proponent, land sellers & District authorities in the presence of local legislator and other leaders, and agreed upon by all; (iii) Gainful employment to the land sellers directly or through its agencies, within the needs of the company; (iv) Preference to local people for the various jobs as per qualifications and suitability; (v) Initiated necessary training activity by identifying 40 local people and sending them for training in various trades at L&T Training Centre and will be absorbed in various jobs in the project; (vi) As part of CSR activities, Rs 74 crores will be spent in the first ten years of the project; (vii) Welfare measures in the fields of Education, Health, Hygiene & Sanitation, Community mobilization, Livelihood Promotion & capability building etc. of the local population.
- (xix) Regular monitoring of water quality upstream and downstream of adjoining water bodies shall be carried out and record of monitoring data should be maintained and submitted to Ministry of Environment and Forests, its Regional Office, Bangalore, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.
- There shall be scientific method for the soild waste management which will be in the form of black cotton soil and lateritic soil. The top soil of 5.05 million m³ will be generated out of which 5.01 million m³ will be backfilled in 18.40 ha of mined out area and 0.04 million m³ will be disposed in 9.35 ha by bund formation along SW of pit in the safety zone of village to a height of 10 m. Further, 16.2 million m³ of waste (subgrade limestone) will be generated and backfilled in 64.44 ha of mined out area. Ground water level is 80 m below the general ground water level (340m msl).
- (xxi) Compliance status shall be submitted to the Ministry of Environment, Forests and Climate Change and its Regional Office located at Bangalore on six monthly basis.

- (xxii) ETP shall also be provided for workshop and wastewater generated during the mining operation.
- (xxiii) Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional Office, Bangalore.
- (xxiv) Regular monitoring of ambient air quality shall be carried out and records maintained.
- (xxv) 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.
- (xxvi) Implementation of Action plan on issues raised during Public Hearing.

# B. General conditions

- (i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment and Forests.
- (ii) No change in the calendar plan including excavation, quantum of limestone mineral and waste should be made.
- (iii) A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment, Forests and Climate Change 5 years in advance of final mine closure for approval.
- (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, 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.
- (vi) The over burden (OB) generated during the mining operation shall be temporarily stacked at earmarked dump site(s) only for the purpose of backfilling. 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 Climate Change and its Regional Office, Bangalore on six monthly basis.
- (vii) 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 Kagna River and Benithora 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.

- (viii) Garland drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and temporary over burden dumps to prevent run off of water and flow of sediments directly into the Benithora and Kagna River and other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and desilted at regular intervals.
- (ix) Dimension of the retaining wall at the toe of the temporary OB dumps and the OB benches within the mine to check run-off and siltation should be based on the rain fall data.
- (x) Plantation shall be raised in a 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.
- (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<sub>10</sub> and PM<sub>2,5</sub> 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.
- (xii) 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.
- (xiii) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and 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 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.
- (xiv) 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.

- (xv) Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.
- (xvi) Drills shall either be operated with dust extractors or equipped with water injection system.
- (xvii) 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.
- (xviii) 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.
- (xix) The critical parameters such as PM<sub>10</sub> (size less than 10 micro meter), PM<sub>2.5</sub> (size less than 2.5 micro meter), 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.
- (xx) Conservation measures for protection of flora and fauna in the core & buffer zone should be drawn up in consultation with the local forest and wildlife department and effectively implemented.
- (xxi) Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for  $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2$  & 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.
- (xxii) Data on ambient air quality ( $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2$  &  $NO_x$  and other pollutant as per CPCB Notification) should be regularly submitted to the Ministry of Environment and Forests including its Regional office located at Bangalore and the State Pollution Control Board / Central Pollution Control Board once in six months.
- (xxiii) 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.
- (xxiv) 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.
- (xxv) 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.
- (xxvi) 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.
- (xxvii) 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.
- (xxviii) 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.
- (xxix) 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 and Forests and its Regional Office located at Bangalore.
- (xxx) 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.
- (xxxi) 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.
- (xxxii) The project proponent shall submit six monthly reports on the status of compliance of the stipulated EC 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 CPCB and the SPCB. The proponent shall upload the status of compliance of the EC 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, Forests & Climate Change, Bangalore, the respective Zonal Office of CPCB and the SPCB.
- (xxxiii) 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.

- (xxxiv) 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.
- (xxxv) 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 EC conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Bangalore by e-mail.
- (xxxvi) 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.
- 9. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- 10. 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.
- 11. 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.
- 12. 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. V.P. Upadhyay)
Director

## Copy to:

- 1). The Secretary, Ministry of Mines, Government of India Shastri Bhawan, New Delhi.
- 2). The Secretary, Department of Environment, Government of Karnataka, Bangalore.
- 3). The Secretary, Department of Forests, Government of Karnataka, Bangalore.
- 4). The Secretary, Department of Mines and Geology, Government of Karnataka, Bangalore.
- 5). The Secretary, Department of Industries and Commerce (M-III), Government of Karnataka, Bangalore.
- 6). The Additional Principal Chief Conservator of Forests, Regional Office, Kendriya Sadan, 4<sup>th</sup> Floor E&F, Wings 17<sup>th</sup> Main Road, 1 Block, Koramangala, Bangalore-560 034.
- 7). The Chairman, Karnataka Pollution Control Board, "Parisara Bhavan", 4th & 5th Floor, 9, Church Street, Bangalore 560 001.
- 8). The Member Secretary, Central Ground Water Authority, A2, W- 3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 9). The Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur- 440 001.
- 10). The District Collector, District Gulbarga, Government of Karnataka.
- 11). Guard File.
- 12). MoEF&CC website.

(Dr. V.P. Upadhyay) Director

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