

By Speed Post

F. No. J-11015/391/2010.IA-II (M)
Government of India
Ministry of Environment, Forests & Climate Change
Impact Assessment Division

3rd Floor, Vayu Wing,
Indira Paryavaran Bhawan,
Jorbagh Road, Aliganj,
New Delhi-110 003

Dated: 04th February, 2015

To,

M/s Penna Cement Industries Ltd.
705, Sriniketan Colony
Road No. 3 Banjara Hills
Hyderabad-500034
Andhra Pradesh
Fax: 040-23355941
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**Subject: Limestone Mine of M/s Penna Cement Industries Ltd.,
Talaricheruvu village Tadipatri Mandal, District-Anantpur, A.P.
(106.86 ha) (1,50,000TPA) -Environment Clearance regarding.**

This has reference to your letter No. PCIL/MINES/2010-11 dated 20.11.2010 on the subject mentioned above and subsequent letters dated 28.02.2011, 22.02.2013, 03.04.2013, 19.12.2013 and 18.08.2014. The TORs were issued by MoEF vide letter No. J-11015/ 391 /2010-IA.II (M) dated 28.03.2011. Request for extension of TOR was considered in EAC meeting held during 16-18th April 2013. TOR extension letter was issued on 22nd May, 2013. The proposal for environmental clearance was considered in the Expert Appraisal Committee (Mining) held on during June 26-28, 2013 and reconsidered in EAC meeting held during March 20-21, 2014 and October 27-28, 2014 wherein the Committee recommended the proposal for Environmental Clearance.

2. The proposal is for opening a new mine in the Mine Lease Area of 106.86 ha located at Talaricheruvu Village, Tadipatri Mandal, Anantapur District, A.P. The mine area falls under the Survey of India Topo sheet No. 57 I/4 & 57 J/1 and is located between 14^o58'55.55" to 15^o0'7.62" N Latitudes and 78^o03'24.90" to 78^o05'9.11" E Longitudes. The Altitude of the mine ranges from 300 – 340 m above MSL.

3. The proposal was considered for TOR by the Expert Appraisal Committee in its meeting held during 23-25th February, 2011. The TORs were issued by MoEF vide letter No. J-11015/ 391 /2010-IA.II (M) dated 28.03.2011. Request for extension of TOR was considered in EAC meeting held during 16-18th April 2013. TOR extension letter was issued on 22nd May, 2013.

4. The Proponent submitted their Application to the Ministry on 18.04.2013 for

seeking environmental clearance after conducting Public Hearing. The mine covers an area of 106.86 ha (94.55 ha. area is Govt. waste land, 12.31 ha area is Patta land owned by the Company). Mining will be carried out by opencast mechanized method with the help of drilling, blasting, loading and transporting equipment. The entire limestone is out cropping without any waste cover of soil or rock. Limestone mined is used for consumption in Cement Plant for the manufacture of Clinker. The mine is situated at a distance of 3.5 km from the Cement Plant.

5. There is no solid waste or top soil generation from the mine. The total water requirement of the mine is 65m³/day and this requirement will be met from supply system of the Cement Plant initially and later from the mine pit proposed to store rain water. No ground water will be drawn. The water table in the area as per observations from nearby villages and other available information is at a depth of about 40m from surface during summer and about 35 m during rainy season. As far as the ground water is concerned, the formations are not permeable. The permanent ground water table is struck at more than 40 meters depth. Since average depth of mining is not more than 15 meters, it is not likely to go below the ground water table. The mining will not intersect the ground water table. The deepest level to be reached will be 294 m RL and the ground water level around this place shall be 278 m RL i.e. a depth difference of about 16m.

6. It has been reported that there are no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves existing/proposed within 10 km of the mine lease. There were no Schedule - I species recorded in the study area.

7. Baseline studies were carried out during Winter season 2011-12 covering the months of December 2011-February 2012. The Public Hearing for the Project was conducted on 26.3.2013. The issues raised during public hearing were also considered and discussed during the meeting, which inter-alia, included, air pollution control measures need to be adopted, raising of plantation, sprinkling of water etc. As per the villager's requirements, it was informed by the PP that they would give preference to locals in employment; health issues, providing education, and assistance in vocational training etc.

8. The estimated capital cost of the project is 10 cores. The capital cost for Environmental protection measures would be Rs 1.0 cores with annual recurring cost of Rs 10.5 lakhs. It was reported by the PP that there is no court case/litigation pending against the project and no violation.

9. The Ministry of Environment, Forests and Climate Change has examined the application in accordance with the EIA Notification, 2006 and hereby accords Environmental Clearance under the provisions thereof to the above mentioned

proposal of M/s Penna Cement Industries Limited located at Talaricheruvu village Tadipatri Mandal, District-Anantpur, Andhra Pradesh for production of 1,50,000TPA (ROM) over mining lease area of 106.86 ha subject to implementation of the following conditions and environmental safeguards.

A. SPECIFIC CONDITIONS:

- (i) The Project will implement and comply with all applicable safeguard measures as provided in OM No. Z-11013/57/2014-IA.II(M) dated 29th October, 2014.
- (ii) A skill development and vocational training centre shall be initiated by PP within three months from the date of issue of EC for students with stipend.
- (iii) Not less than 300 acre of land at suitable location shall be allocated as grazing land for cattle as already committed by the Project.
- (iv) The project proponent shall obtain Consent to Establish and Consent to Operate from the State Pollution Control Board and effectively implement all the conditions stipulated therein.
- (v) The mining operations shall be restricted to above ground water table and it should not intersect the groundwater table.
- (vi) The loose 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 1st and 2nd 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, Forests 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, Forests 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, Forests

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 inhaling 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.

- (xxx) 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.
- (xxxix) The critical parameters such as RSPM (Particulate matter with size less than 10 micron i.e., PM₁₀) and NO_x in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment, Forests and Climate Change, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.
- (xxxixii) A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment, Forests and Climate Change 5 years in advance of final mine closure for approval.
- (xxxixiii) 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, Forests 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., PM₁₀) 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 10micron i.e., PM₁₀) & NO_x should be regularly submitted to the Ministry of Environment, Forests 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 19th May, 1993 and 31st 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, Forests 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, Forests 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, Forests 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, Forests 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, Forests 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 Andhra Pradesh 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. Sonu Singh)
Scientist 'C'

Copy to:

- i. The Secretary, Ministry of Mines, Government of India Shastri Bhawan, New Delhi.
- ii. The Secretary, Department of Environment, Government of Andhra Pradesh, Hyderabad.
- iii. The Secretary, Department of Forests, Government of Andhra Pradesh, Hyderabad.
- iv. The Secretary, Department of Mines and Geology, Government of Andhra Pradesh, Hyderabad.
- v. The Secretary, Department of Industries and Commerce (M-III), Govt of Andhra Pradesh, Hyderabad.
- vi. The Additional Principal Chief Conservator of Forests, Regional Office Chennai, Kendriya Sadan, 4th Floor E&F, Wings 17th Main Road, 1 Block, Koramangala, Bangalore-560 034.
- vii. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
- viii. The Chairman, Andhra Pradesh State Pollution Control Board, Paryavaran Bhawan, A-3 Industrial Estate, Sanath Nagar, Hyderabad - 500 018
- 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, Anantapur District, Government of Andhra Pradesh.
- xii. Guard File.

(Dr. Sonu Singh)
Scientist 'C'