

F. No. J-11011/183/2010-IA-II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi - 110 003
E-mail: ahuja.ra@nic.in
Tele/fax: 011 - 2436 3973
Dated: 2nd May, 2012

To,
The DGM (W)
M/s Ramco Industries Limited
47, PSK Nagar, Rajapalayam - 626108

Fax: 02836-244031
E mail: bhufac_head@ril.co.in

Sub: Proposed expansion of Asbestos Fibre Cement Roofing Sheets (Corrugated and Flat) from 72,000 TPA to 1,20,000 MTPA at Village-Sinugra, Dist-Kutchh, Gujarat by M/s Ramco Industries Ltd. - regarding Environmental Clearance

Sir,
This has reference to your letter no. nil dated 15.09.2011 and subsequent communication dated 11.01.2012 along with copies of EIA/EMP and public hearing reports seeking environmental clearance under the provisions of EIA Notification, 2006.

2. The Ministry of Environment and Forests has examined your application. It is noted that M/s Ramco Industries Ltd. have proposed for expansion of Asbestos Fibre Cement Roofing Sheets manufacturing unit from 72,000 TPA to 1,20,000 MTPA at Village-Sinugra, Dist-Kutchh, Gujarat. The existing project is located in an area of 50,180 m² of which green belt has been developed in 12,300 m² of plant area. The proposed expansion will be carried within the existing plant premises and an additional green belt in an area of 4,700 m² is proposed. The additional production capacity would be achieved by optimum utilization of the existing machineries and facilities without any cost investment for the plant and machinery. Raw asbestos fibre, cellulose, cement and fly ash are the raw materials that will be used. No national park/wild life sanctuary/eco-sensitive area is reported within 10 km distance of the project area. No Schedule -1 fauna are reported in the study area.

3. It is noted that Fibre dust, cement dust, fly ash dust and pulverizer dust collection systems would be provided with bag filters followed by a stack of 15 m height for dispersion of emissions.

4. Water requirement of 90 m³/d will be met from the Gujarat Infrastructure Ltd. About 5 m³/d of waste water will be generated, which will be recycled back. There will be no process waste water generation. The domestic effluent will be disposed through septic tank/soak pit. The solid waste generated in the form of waste asbestos will be recycled. The discarded drums and waste lubricating oil will be sold to the authorized recyclers. Power requirement will be met from the Paschim Gujarat Viz Company Limited (PGVCL). Besides, DG set of 750 KVA will be installed.

5. All the Asbestos Plants are listed at S.No.4 (c) under Category 'A' of the Schedule of EIA Notification 2006 and appraised by the Expert Appraisal Committee in the Ministry.

6. The proposal was considered by the Expert Appraisal Committee-1 (industry) in its 30th meeting held during 28th - 29th November, 2011. The Committee sought additional information for reconsideration of project. On receipt of additional information, the committee

reconsidered the project in its 32nd meeting held during 27th - 28th January, 2012. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions. Public hearing for the project was held on 06.09.2011.

7. Based on the information submitted by you, presentation made by you and your consultants, M/s Anand consultants, Ahmedabad, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September 2006 subject to strict compliance of the following Specific and General conditions:

A. SPECIFIC CONDITIONS:

- i. The project proponent shall adhere to the prescribed BIS standards and laws regarding use and handling of asbestos, safety of employees etc. Raw materials like asbestos fibre and cement shall be transported in closed containers. Asbestos fibre shall be brought in pelletized form in impermeable bags and under compressed condition.
- ii. Only Chrysotile white asbestos fibre shall be used. Blue asbestos shall not be utilized as raw material in the manufacturing process.
- iii. There shall be no manual handling/opening of asbestos fiber bags. The company shall install fully automatic asbestos fiber debagging system before commissioning the unit.
- iv. Fugitive emissions shall be controlled by bringing cement and fly ash in closed tankers, and asbestos in impervious bags opening inside a closed mixer. Dust collectors shall be provided to Fibre mill, Bag opening device (BOD), Cement and Fly ash silos to control emissions. Bag filters followed by wet washer shall be provided at automatic bag opening machine, bag shredder, fibre mill and to cement silo to collect the dust and recycle it into the process. Fugitive emissions generated from hopper of Jaw crusher and Pulverizer shall be channelized through hood with proper suction arrangement, bag filter and stack.
- v. The Company shall comply with total dust emission limit of 2 mg/Nm³ as notified under the Environment (Protection) Act, 1986. Adequate measures shall be adopted to control the process emission and ensure that the stack emission of asbestos fibre shall not exceed the emission limit of 0.2 fiber/cc. Asbestos fibre in work zone environment shall be maintained within 0.1 fibre/cc.
- vi. Bags containing asbestos fibre shall be stored in enclosed area to avoid fugitive emissions of asbestos fibre from damaged bags, if any.
- vii. Proper housekeeping shall be maintained within the plant premises. Process machinery, exhaust and ventilation systems shall be laid in accordance with Factories Act. Better housekeeping practices shall be adopted for improvement of the environment within the work environment also. These include:
 - (a) All monitoring transfer points shall be connected to dust extraction system.
 - (b) Leakages or dust from machines and ducts shall be plugged.
 - (c) Floor shall be cleaned by vacuum cleaner only.
 - (d) Enclosed belt conveyer shall be used instead of manual transportation of asbestos within the premises.

- viii. Quarterly monitoring of pollutant (PM₁₀, asbestos fibre count) in the work zone area and stack(s) shall be undertaken by the Project proponents. In addition, the asbestos fibre count in the work zone area shall be monitored by an Independent monitoring agency like NIOH / ITRC / NCB or any other approved agency and reports submitted to the Ministry's Regional Office at Bhopal, SPCB and CPCB.
- ix. Total water requirement shall not exceed 90 m³/day and prior permission for the drawl of water shall be obtained. All the recommendations of the State Ground Water Department, Govt. of Gujarat shall be implemented in time bound manner.
- x. As reflected in the Environmental Management Plan, all the treated effluent shall be recycled and reused in the manufacturing process. No process water shall be discharged outside the premises and 'zero' discharge shall be maintained. All the domestic wastewater shall be treated in septic tank followed by soak pit and used for green belt development.
- xi. The Company shall ensure that the entire solid waste generated including process rejects, cement, fly ash, dust from bag filters and empty asbestos bag shall be recycled back in the manufacturing process. Process sludge shall be 100% recycled and reused in the process. Hazardous waste shall be ground in dust proof pulverizer with integrated bag filter and recycled back to the process. Asbestos fibres which cannot be further recycled due to contamination of iron dust shall be stored in HDPE lined secured landfill. The disposal facilities for asbestos waste shall be in accordance with the Bureau of Indian Standard Code.
- xii. The cut and damaged fibre bags shall immediately be repaired. Empty fibre bags will be shredded into fine particles in a bag shredder and recycled into the process. Piling of AC sheets shall be done in wet condition only.
- xiii. The Company shall obtain a certificate from the supplier of Chrysotile fibre that it does not contain any toxic or trace metals. A copy of certificate shall be submitted to the Ministry of Environment and Forests.
- xiv. Regular medical examination of the workers and health monitoring of all the employees shall be carried out and if cases of asbestosis are detected, necessary compensation shall be arranged under the existing laws. A competent occupational health physician shall be appointed to carry out medical surveillance. Occupational health of all the workers shall be monitored for lung function test, chest x-ray, sputum for acid-fast-bacilli (AFC) and asbestos body (AB), urine for sugar and albumen, blood tests for TLC, DLC, ESR, Hb and records maintained for at least 40 years from the beginning of the employment or 15 years after the retirement or cessation of employment whichever is later. Occupational Health Surveillance shall be carried out as per the directives of the Hon'ble Supreme Court including the recent Kalyaneswari case.
- xv. To educate the workers, all the work places where asbestos dust may cause a hazard shall be clearly indicated as a dust exposure area through the use of display signs which identifies the hazard and the associated health effects.
- xvi. The company shall also undertake rain water harvesting measures and plan of action shall be submitted to the Ministry of Environment and Forests within three months.
- xvii. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 6th September, 2011 shall be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Bhopal.

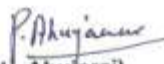
- xviii. Green belt shall be developed in at least 33 % of plant area as per the CPCB guidelines in consultation with the DFO.
- xix. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program should be ensured accordingly in a time bound manner.
- xx. The Company shall submit within three months their policy towards Corporate Environment Responsibility which should inter-alia address (i) Standard operating process/ procedure to bring into focus any infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.

B. GENERAL CONDITIONS:

- i. The project authority shall adhere to the stipulations made by Gujarat State Pollution Control Board (GSPCB) and State Government.
- ii. No further expansion or modification of the plant shall be carried out without prior approval of this Ministry.
- iii. At least four ambient air quality monitoring stations shall be established in the down wind direction as well as where maximum ground level concentration of PM₁₀, SO₂ and NO_x are anticipated in consultation with the SPCB. Data on ambient air quality and stack emissions shall be regularly submitted to this Ministry including its Regional Office and SPCB / CPCB once in six months.
- iv. Industrial wastewater shall be properly collected and 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. The treated wastewater shall be utilized for plantation purpose.
- v. The overall noise levels in and around the plant area shall be kept well within the standards 85 dB(A) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environmental (Protection) Act, 1986 Rules, 1989 viz. 75 dB(A) (day time) and 70 dB(A) (night time).
- vi. Proper housekeeping and adequate occupational health programmes shall be taken up. Occupational Health Surveillance programme shall be done on a regular basis and records maintained properly for at least 30-40 years. The programme shall include lung function and sputum analysis tests once in six months. Sufficient preventive measures shall be adopted to avoid direct exposure to dust etc.
- vii. The company shall undertake eco-development measures including community welfare measures in the project area.
- viii. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP report.

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- ix. A separate environmental management cell with full fledged laboratory facilities to carry out various management and monitoring functions shall be set up under the control of Senior Executive.
 - x. Adequate funds shall be allocated to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. Time bound implementation schedule for implementing all the conditions stipulated herein shall be submitted. The funds so provided shall not be diverted for any other purpose.
 - xi. The Regional Office of this Ministry / CPCB / MPPCB shall monitor the stipulated conditions. The project authorities shall extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports. A six monthly compliance report and the monitored data alongwith statistical interpretation shall be submitted to them regularly.
 - xii. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both on hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the GPCB.
 - xiii. The Project Authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.
 - xiv. Measures shall be taken for control of noise levels below 85 dB(A) in the work environment. Workers engaged in operations of HEMM etc. shall be provided with ear plugs/ muffs.
 - xv. Industrial waste water (workshop and waste water from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.
 - xvi. Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
 - xvii. The project authorities shall inform to the Regional Office located regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
 - xviii. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations if any, were received while processing the proposal. The clearance letter shall also put up on the website of the Company by the proponent.
 - xix. The project authorities shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within seven 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 Gujarat Pollution Control Board and also at web site of the Ministry of Environment and Forests at "<http://envfor.nic.in> and a copy of the same shall be forwarded to the Regional Office of this Ministry.

- xx. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986 as amended subsequently, shall also be put on the website of the Company alongwith the status of compliance of EC conditions and shall also be sent to the respective regional Office of the MoEF by e-mail.
7. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
8. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
9. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.


(Dr. P.L. Ahujara)
Scientist 'F'

Copy to:

1. The Secretary, Department of Environment and Forests, Government of Gujarat, Gandhinagar, Gujarat.
2. The Chief Conservator of Forests (Central), Ministry of Environment and Forests, Regional Office, (West), Link Road No. 3, E-5, Arera Colony, Bhopal – 462 016.
3. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi – 110 032.
4. The Chairman, Gujarat Pollution Control Board, Paryavaran Bhawan, Sector 10-A, Gandhinagar, Gujarat -382010.
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi – 110 003.
7. Guard File / Record File.

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(Dr. P.L. Ahujara)
Scientist 'F'