

F. No. J-11011/949/2008- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

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Dated 17th March, 2009

To, ✓
The Vice President (Technical)
M/s Ramco Industries Limited
Auras Corporate Centre, VIth Floor
98-A, Dr. Radhakrishnan Road
Mylapore, Chennai- 600 004
Tamil Nadu.

E-mail : arumugarajan@yahoo.com ; Fax No. : 044-2847 8597

Subject: Asbestos Cement Sheet Manufacturing Facility (1,20,000 TPA) at A-12, SIPCOT Industrial Growth Centre, Gangaikondan, Taluk & District Tirunelveli, Tamil Nadu by M/s Ramco Industries Limited- Environment clearance reg.
Ref. : Your letter no. nil dated 24th November, 2008.

Sir,

This has reference to your letter no. nil dated 24th November, 2008 on the above mentioned subject alongwith Form and EIA/EMP report and subsequent communications dated 30th December, 2008 and e-mail dated 15th January, 2009 seeking environmental clearance under the Environmental Impact Assessment Notification, 2006.

2.0 The Ministry of Environment & Forests has examined the application. It is noted that proposal is for Asbestos Cement Sheet Manufacturing Facility (1,20,000 TPA) at A-12, SIPCOT Industrial Growth Centre, Gangaikondan, Taluk & District Tirunelveli, Tamil Nadu by M/s Ramco Industries Limited. Total land allotted by SIPCOT vide letter dated 24th October, 2008 is 32.31 acres. No national Park/wild life sanctuary/reserve forest is located within 10 km radius of the project site. Total cost of the proposed project is Rs. 25.00 Crores,

✓ 3.0 Asbestos Cement Sheets & Accessories will be manufactured in the proposed plant. Chrysolite Fiber, Fly ash, Cement and other additives will be used as raw materials.

✓ 4.0 Bag filters will be provided to stacks attached to cement / fly ash circuit, fibre circuit and rejected sheet and pipes pulverizer, silo of cement & fly ash. Dust extractor/bag filter will be provided to bag opening device. Total water requirement from SIPCOT supply will be 100 m³/day and is already allotted by SIPCOT vide letter dated 2nd December, 2008. Process water will be recycled and reused for dust suppression and greenbelt development. Rejected and broken sheets alongwith bag filter dust will be reused in the manufacturing process.

5.0 No public hearing/consultation is required due to project being located in notified SIPCOT industrial estate as per Section (iii), Stage (3), Para (i)(b) of EIA Notification 2006.

6.0 The Ministry of Environment and Forests hereby accords environmental clearance to the above unit under the EIA Notification, 2006, subject to the compliance of the terms and conditions mentioned below :

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 palletized 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. A written commitment in this regard shall be furnished within a period of one month.
- 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 in closed tankers, fly ash in covered trucks and asbestos in impervious bags opening inside a closed mixer. Bag filters followed by wet washer shall be provided at automatic bag opening machine, bag shredder and fibre mill to collect the dust and recycle into the process. Bag filters/dust collectors shall be provided to cement and fly ash silos, rejected shell and pipe pulverizer plant etc. to control emissions. Dust extraction and dust suppression system shall be provided at all transfer points. All the internal roads shall be concreted and black topped to reduce fugitive emissions.
- v. The Company shall comply with total dust emission limit of 2 mg/Nm^3 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 fibre/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 house keeping shall be maintained within the plant premises. Process machinery, exhaust and ventilation systems shall be laid in accordance with Factories Act. Better house keeping 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. Regular measurement of pollutants (SPM, asbestos fibre count) in the work zone area and stack(s) shall be undertaken by the Project proponents. In addition, 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. Reports submitted to the Ministry's Regional Office at Bangalore / TNPCB and CF

- ix. Data on ambient air quality, stack emissions and fugitive emissions shall be regularly displayed on the Company's website and also submitted on-line to the Ministry's Regional Office at Bhubaneswar, West Bengal Pollution Control Board (WBPCB) and Central Pollution Control Board (CPCB) as well as hard copy once in six months. Data on SPM, SO₂, NO_x and Asbestos fibres shall also be displayed outside the premises at the appropriate place for the general public.
- ✓ x. Total water requirement from SIPCOT shall not exceed 100 m³/day as allotted by SIPCOT vide letter dated 2nd December, 2008. 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.
- xi. 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.
- ✓ xii. 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. ~~The disposal facilities for asbestos waste shall be in accordance with the Bureau of Indian Standard Code.~~ 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 can not be further recycled due to contamination of iron dust shall be stored in HDPE lined secured landfill. No solid waste will be disposed off outside the premises.
- ✓ xiii. 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.
- 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.
- 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. Green belt shall be developed in 10.5 acres, out of 32.31 acres (approx 33 %) of total land area with local species in consultation with DFO as per CPCB guidelines. Efforts shall be further be made to develop green belt in 33 % area.

- xviii. The company shall provide housing for 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.

B. GENERAL CONDITIONS:

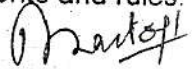
- i. The project authorities must strictly adhere to the stipulations made by the T. N. Pollution Control Board (TNPCB) and the State Government.
- ii. No further expansion/modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
- iii. The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management & Handling) Rules, 2003.
- iv. The project proponent shall also comply with safeguards recommended in the EIA/EMP Report.
- v. The project authorities shall set up a separate environmental management cell for effective implementation of all the above stipulations under control of Senior Executive.
- vi. As mentioned in the EIA/EMP, Rs. 2.00 Crores and Rs. 0.34 Crores kept towards capital cost and recurring cost/annum for environmental pollution control measures shall be judiciously used to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule to comply with all the conditions stipulated herein shall be submitted to the Ministry's Regional Office at Bangalore / CPCB / TNPCB. The funds so provided shall not be diverted for any other purposes.
- vii. The Regional Office of this Ministry at Bangalore / Central Pollution Control Board / T. N. Pollution Control Board shall monitor the stipulated conditions. A six monthly compliance status report and the monitored data alongwith statistical interpretation shall be submitted to them regularly.
- viii. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the T.N. Pollution Control Board and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Bangalore.
- ix. 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, if any.

7.0. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

8.0. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.


9.0. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.

10.0. 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 and Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules.


(Dr. P. B. Rastogi)
Director

Copy to :

1. The Secretary (Environment), Govt. of Tamil Nadu, Fort St. George, Chennai - 560 560, Tamil Nadu.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110 032.
3. The Chairman, Tamil Nadu Pollution Control Board, 100, Anna Salai, Guindly, Chennai-600 032, Tamil Nadu.
4. ✓ The Chief Conservator of Forests (Central), Regional Office (SZ), Kendriya Sadan, 4th Floor, E & F Wings, 7th Main Road, 2nd Block, Koramangala, Bangalore - 560034, Karnataka.
5. Adviser (IA-II), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhawan, CGO Complex, New Delhi.
7. Guard file
8. Monitoring file
9. Record file


(Dr. P. B. Rastogi)
Director