Ramco Industries Limited

Factory : Plot No. A-12, SIPCOT Industrial Growth Centre, Gangaikondan, Thirunelveli District 627 352
☎ : 0462 - 2445003 RIL CIN : L26943TN1965PLC005297

RIL/GKN/MOEF/QC/23-24/2023

DATE: 20.10.2023

To
The Joint Director,
Government of India,
Ministry of Environment and Forests,
Regional Office (South Eastern Zone),
4th floor, HEPC Building
No.34, Cathedral garden road,
Nungampakkam.
Chennai-34.

Ref: F.No-J-11011/949/2008-IA II (I)-Dated 17TH March 2009

Sir

Sub: Submitting Half Yearly report from April' 2023 to September'2023-Regarding

We are herewith sending the Half Yearly report from April'2023 to September'2023 for your perusal records.

I. Compliance Status report
II. Monitored data's along with Statistical interpretation reports
III. Third Party Analysis report

We request you kindly acknowledge the receipt of the same.

Thanking You
Yours Faithfully

For RAMCO INDUSTRIES LIMITED

T.VIJAYKUMAR
Deputy General Manager

CC:
The District Environment Engineer
Tamil Nadu Pollution Control Board
Pettai, Tirunelveli District.

Compliance Status of Ministry of Environment and Forests & Climate Change

Name of the Project: Ramco Industries Ltd.

Clearance Letter No & date : F.No.J-11011/949/2008-IA II (1)

Period of Compliance Report: From April'2023 to September'2023

CONDITIONS	COMPLIANCE STATUS
A Specific conditions	
i. The project proponent shall adhere to the prescribed BIS standards and law regarding use and handling of asbestos, safety of employee etc. Raw material like asbestos fibre and cement shall be transported in closed containers. Asbestos fibre shall be brought in palletized form in impermeable Bags and under compress condition.	We strictly adhere to the prescribed BIS standards and law regarding use and handling of asbestos safety of employee etc. Raw materials like asbestos fibre and cement are always transported in closed containers. Asbestos fibre always brought in palletized form in impermeable bags and under compress condition.
ii. Only Chrysotile white asbestos fibre shall be used. Blue asbestos shall not utilized as raw material in the manufacturing process.	We use only CHRYSOTILE Fibre as raw material in the manufacturing process and we do not use blue asbestos.
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.	There is no manual handling/opening of asbestos fibre bags. Fibre is stored in polythene woven bags and unloaded in the automatic bag opening device (BOD) wherein the bags are automatically shredded. Thus no manual handling comes into picture due to installation of fully automatic asbestos fibre debagging system.
Iv.Fugitive emissions shall be controlled by bringing cement in closed tankers, fly ash 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 fiber mill to collect the dust and recycle into the process. Bag filter/dust collectors shall be provided to cement and fly ash silos, rejected sheets and pipe pulverizer plant etc. to control emissions. Dust extraction and dust suppression system shall be provided at all transfer points.	Cement and fly ash are received in closed containers and are stored in respective silos, hence reducing the possibility of fugitive emissions. Bag filters are provided at automatic bag opening machine, bag shredder and fiber mill and is connected to an effective dust extraction system with stack to control the emissions.
v. The company shall comply with total dust emission limit of 2mg/Nm3 as notification under the Environment (Protection) Act, 1986. Adequate measures shall be adopt to control the process emission and ensure that the stack emission of asbestos fiber shall not exceed the emission limit of 0.2 fiber/cc. Asbestos fiber in work zone environment shall be maintained with in 0.1fiber/cc.	We are complying with total dust emission limit of 2mg/Nm3 as notification under the Environment (Protection) Act, 1986. Adequate measures have been adopted to control the process emission. We ensure that the stack emission of asbestos fiber will not exceed the emission limit of 0.2 fiber/cc. Asbestos fiber in work zone environment is maintained with in 0.1fiber/cc. Stack Monitoring record – **Annexure 1** Work place monitoring record – **Annexure 2**

vi. Bags containing asbestos fiber shall be stored in enclosed area to avoid fugitive emissions of asbestos fiber from damaged bags, if any	The bags containing asbestos are stored in an enclosed asbestos fiber storage area of about 1000 sq. m.
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. 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.	Proper housekeeping maintained within the plant premises, process and machinery. Exhaust ventilation system is installed in accordance with factories Act. For better housekeeping, following practices are adopted for improvement of the environment within the work environment. i) Wet mopping being done in shop floor. ii) Vacuum cleaning done at BOD & ER mill are. iii) Wet waste is collected in clarifier and recycled in the process. iv) Process water is collected in two Cone tank and recycled in the process. v) Broken sheets are collected and pulverized & reused in the process. a) We are cleaning the shop floor with the help of Vacuum Cleaner. b) Asbestos fibre is being transported from fibre godown through Forklift & through roller conveyor fibre bag are fed into the BOD.
viii. Regular measurement of pollutants (SPM, asbestos fiber count) in the work zone area and stack(s) shall be undertaken by the project proponents. In addition asbestos fiber count in the work 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 Bangalore/TNPCB and CPCB	We have our own laboratory set up for workplace monitoring. We have phase contrast microscope to measure fibre/cc. In addition to that regular measurement of air pollutants and fibre count in the work zone and the stack are tested by a competent & approved third party monitoring agency, M/s JR Lab, Hyderabad. – **Annexure 3**
ix .Data on ambient air quality, stack emissions shall be regularly displayed on the company's website and also submitted online to the ministry's Regional office at Chennai, Tamilnadu Pollution Control Board(TNPCB) and Central Pollution Control Board(CPCB) as well as hard copy once in six months. Data on SPM, SO2, NOX and asbestos fibres shall also be displayed outside the premises at the appropriate place for the general public.	We have uploaded the six monthly compliance reports in our company website (www.ramcoindltd.com). We are regularly sending six monthly compliance reports to MOEF regional office every 6 months. We have installed an electronic display board above our periphery wall near main gate and the monitoring data SPM, SO2, NOx and asbestos fibre/cc are displayed for the general public.
x. Total water requirement from SIPCOT shall not exceed 100m3/day as allotted by SIPCOT vide letter dated 2ND December, 2008.Treated effluent shall be recycled and reused in the manufacturing process. No	We ensure that total water requirement from SIPCOT do not exceed 100m3/day. The entire process water is recycled and reused in the manufacturing process. There are no process

<table>
<tr><td>process water shall be discharged outside the premises and 'ZERO' discharge shall be maintained.</td><td>water discharged outside the premises and we are maintaining ZERO discharge.</td></tr>
<tr><td>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 waste water shall be treated in septic tank followed by soak pit and used for green belt development.</td><td>There is no industrial effluent waste generation in our process. The entire process water is recycled and reused in the manufacturing process. There is no process water discharged outside the premises and we are maintaining ZERO discharge. The domestic waste water is treated in septic tank followed by soak pit.</td></tr>
<tr><td>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.</td><td>We ensure that the entire solid waste generated including process rejects, dust from bag filters and empty asbestos bags are recycled the manufacturing process.
<table>
<tr><td>Waste type</td><td>Qty.</td><td>Remarks</td></tr>
<tr><td>Broken AC Sheets</td><td>32.073 MT/month</td><td>Reused in the process</td></tr>
<tr><td>Asbestos Containing Residues</td><td>15 KG/month</td><td>Reused in the process</td></tr>
</table></td></tr>
<tr><td>xiii. Empty fiber bags will be shredded into fine particles in a bag shredder and recycled into the process.</td><td>The cut and damaged fibre bags if any found are being repaired immediately by fixing the adhesive tape. Empty fiber bags are shredded into fine particles in a bag shredder and recycled into the process.</td></tr>
<tr><td>xiv. Regular medical examination of the workers and health monitoring of all the employees shall be carried out and if cases of asbestos are detected, necessary compensation shall be arranged under the existing laws. A competent occupations 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, bloat 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.</td><td>Regular medical examination of the workers and health monitoring of all the employees are carried out. We will maintain record up to minimum 15 years after retirement or cessation of employment whichever is lower.
A competent occupational health physician will be appointed to carry out surveillance.
The occupational health monitoring is being done as stipulated.
We have provided medical and health care facilities at the work place and carry out health surveillance as per the directives of the supreme court. Annexure 4</td></tr>
<tr><td>xv. To educate the workers, all the work places where asbestos dust may cause hazard shall be clearly indicated as a dust exposure area through the use of</td><td>We educate the workers, all the work places where asbestos dust may cause a hazard is clearly indicated as a dust exposure area through the use</td></tr>
</table>

display signs which identifies the hazard and the associated health effects.	of display signs which identifies the hazard and the associated health effects.
xvi. The company shall also undertake rain water harvesting measures.	The rain water harvesting system is being adopted.
xvii. Green belt shall be developed in 10.5acres, out of 32.31acres (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.	An effective green belt is being developed with local species in consultation with DFO as per CPCB guidelines. We have developed greenbelt of 11.55 acres out of total area of 32.31 acres which is around 35%.
xviii.The company shall provide housing for construction labour with in site with all necessary infrastructure and facilities such a 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.	We have provided all necessary infrastructure and facilities to our construction labour within the site.
B GENERAL CONDITIONS	
i. The projects authorities must strictly adhere to the stipulations made by the TN pollution control board (TNPCB) and the state government	We strictly adhere to the stipulations made by the Tamil Nadu Pollution Control Board 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.	No further expansion/ modifications in the plant will 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	We strictly comply with the stipulated hazardous wastes management and handling rules, 2003.
iv. The project authorities shall also comply with safe guards recommended in the EIA/EMP report.	We are complying with safe guards 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	We have complied with the stated condition. We have a separate environmental management cell with members comprising from production, quality, engineering and human resources and is headed by the factory manager.
vi. As mentioned in the EIA/EMP, Rs 2.00crores and Rs0.34crores 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.	Environmental Expenses details are Recurring Expenses: - April' 2023 to September'2023 – Rs 18,42,822/-. **Annexure 5**

vii. The regional office of this ministry at Bangalore /central pollution control board/TN pollution control board shall monitor the stipulated conditions. A six monthly compliance status report and the monitored data along with statistical interpretation shall be submitted to them regularly.	We are regularly sending six monthly compliance reports to the MOEF, Regional Office, and Chennai.
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 TN 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 be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the regional office at Bangalore.	We have published in local newspapers about the Environmental clearance accorded.
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	Date of financial closure is 31st March. Date of Consent for Operation is 01.07.2010 by TNPCB. Date of commencing the production is 01.07.2010.
7.0 The ministry may revoke or suspended the clearance, if implementation of any of the above conditions is not satisfactory.	We are complying regularly all the stated conditions.
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.	We will implement additional conditions if any stipulated by ministry in a time bound manner.
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 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.	We are complying to the act and conditions made.

For *Ramco Industries Limited*

(T.Vijayakumar)
Deputy General Manager

AMBIENT AIR QUALITY ANALYSIS FROM APRIL'2023 TO SEPTEMBER'2023

	MAIN GATE				STOCK YARD				NEAR GUEST HOUSE				NEAR FIBRE GODOWN			
	PM (2.5)	PM10	SO2	NO2	PM (2.5)	PM10	SO2	NO2	PM (2.5)	PM10	SO2	NO2	PM (2.5)	PM10	SO2	NO2
	u/m3	u/m3	u/m3	u/m3	u/m3	u/m3	u/m3	u/m3	u/m3	u/m3	u/m3	u/m3	u/m3	u/m3	u/m3	u/m3
April	27.4	65.8	8.5	26.6	27.4	68.5	7.5	22.8	17.5	44.8	4.2	16.6	20.4	55.8	6.5	23.5
May	36.8	75.4	8.1	18.5	37.1	79.4	9.6	22.7	22.1	49.9	5.7	10.3	29.1	64.8	8.4	19.3
June	32.3	71.4	6.9	15.1	33.8	72.5	8.1	24.5	21.1	53.2	6.8	16.4	25.4	60.6	6.8	21.1
July	30.6	67.9	7.3	12.6	31.7	68.5	7.2	21.4	19.4	50.6	5.1	12.8	27.2	63.5	8.4	24.6
August	24.5	62.6	6.8	15.5	33.7	63.8	6.8	24.5	21.3	46.8	3.9	15.4	24.8	57.9	7.5	20.9
September	18.7	55.2	5.5	12.5	28.7	60.4	5.8	21.5	17.5	41.3	5.3	19.5	21.2	51.3	8.1	25.5
Average	**28.38**	**66.38**	**7.18**	**16.80**	**32.07**	**68.85**	**7.50**	**22.90**	**19.82**	**47.77**	**5.17**	**15.17**	**24.68**	**58.98**	**7.62**	**22.48**
Maximum	**36.80**	**75.40**	**8.50**	**26.60**	**37.10**	**79.40**	**9.60**	**24.50**	**22.10**	**53.20**	**6.80**	**19.50**	**29.10**	**64.80**	**8.40**	**25.50**
Minimum	**18.70**	**55.20**	**5.50**	**12.50**	**27.40**	**60.40**	**5.80**	**21.40**	**17.50**	**41.30**	**<1.0**	**10.30**	**20.40**	**51.30**	**6.50**	**19.30**

STACK EMISSION ANALYSIS REPORT FROM APRIL'23 TO SEPTEMBER'2023

MONTH	FIBRE STACK			CEMENT & FLYASH STACK			DG SET STACK-750 KVA			DG SET STACK-380 KVA			PULVERIZER STACK		
	SPM	SO2	NO2	SPM	SO2	NO2	SPM	SO2	NO2	SPM	SO2	NO2	SPM	SO2	NO2
April	1.1	<1.0	<1.0	38.4	<1.0	<1.0	40.4	15.7	35.8	41.5	11.9	27.4	1.2	<1.0	<1.0
May	1.1	<1.0	<1.0	24.5	<1.0	<1.0	38.9	11.2	25.8	36.9	11.9	26.7	1.3	<1.0	<1.0
June	1.3	<1.0	<1.0	28.5	<1.0	<1.0	41.4	8.9	21.5	33.4	9.3	24.7	1.2	<1.0	<1.0
July	1.1	<1.0	<1.0	25.7	<1.0	<1.0	38.3	7.2	18.6	35.4	10.7	26.8	1.5	<1.0	<1.0
August	1.2	<1.0	<1.0	28.4	<1.0	<1.0	33.8	9.5	26.5	30.4	6.5	22.4	1.4	<1.0	<1.0
September	1.1	<1.0	<1.0	24.5	<1.0	<1.0	30.2	8.1	24.2	32.9	7.9	25.9	1.3	<1.0	<1.0
Average	1.2	<1.0	<1.0	28.3	<1.0	<1.0	37.2	10.1	25.4	35.1	9.7	25.7	1.3	<1.0	<1.0
Maximum	1.3	<1.0	<1.0	38.4	<1.0	<1.0	41.4	15.7	35.8	41.5	11.9	27.4	1.5	<1.0	<1.0
Minimum	1.1	<1.0	<1.0	24.5	<1.0	<1.0	30.2	7.2	18.6	30.4	6.5	22.4	1.2	<1.0	<1.0

Note

I. DG SET IS STANDBY

Personal sample -Workzone(Asbestos Dust Concentration)

Period from APRIL'2023 to SEPTEMBER'2023

Location	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
Unit	fibre/cc	fibre/cc	fibre/cc	fibre/cc	fibre/cc	fibre/cc
ASBESTOS STORAGE GODOWN	0.029	0.020	0.0265	0.024	0.029	0.024
BAG OPENING DEVICE/ERM	0.020	0.018	0.0331	0.029	0.031	0.027
SLURRY MIXER	0.015	0.020	0.0176	0.020	0.022	0.020
SHEETING MACHINE	0.018	0.015	0.0132	0.018	0.018	-
CORRUGATOR	0.015	0.015	0.0220	0.018	0.020	0.018
MOULDING AREA	0.015	0.018	0.0154	0.015	0.018	0.020
LABORATORY	0.018	0.013	0.0176	0.015	0.015	0.013
LOADING AREA	0.018	0.015	0.0220	0.020	0.015	0.018
NEAR MAIN GATE (OUT SIDE)	0.011	0.011	0.0132	0.011	0.013	0.015
SEGREGATION	0.020	0.015	0.0265	0.022	0.020	0.018
SALVAGE	0.015	0.013	0.0331	0.022	0.022	0.020
PULVERIZER	0.020	0.015	0.0220	0.022	0.022	0.022
FIBRE DE STACK	**0.0212**	**0.0212**	**0.0159**	**0.0212**	**0.0160**	**0.0210**
PULVERIZER DE-STACK	**0.0265**	**0.0159**	**0.0212**	**0.0265**	**0.0210**	**0.0160**

PERMISSIBLE LIMIT'S

WORKZONE - 0.1Fibre/cc

STACK EMISSION- 0.2 Fibre/cc
(Fibre Stack)