Environmental Management Plan		
EMP Compliance attached for EC: J11011/949/2008-IA II **Dated :** 17th March, 2009		
S.No	Condition	Complied Status
	Air Environment	
1	Chrysotile Fiber, Fly ash, Cement and other additives will be used as raw materials.	We use the following as our raw material Cement, Fly ash, Chrysotile fibre and other additives.
2	Raw materials like asbestos fibre and cement shall be transported in closed containers.	a) Our Raw material asbestos fiber is being packed in impermeable bags and is being transported in closed container only b) Another Raw material cement and fly ash is being transported in bulker/ Closed containers only.
3	Asbestos fibre shall be brought in palletized form in impermeable bags and under compressed condition.	Asbestos fibre is brought in palletized form and packed in impermeable bags under compressed condition. Photos enclosed for your kind information. (Annexture I)
4	There shall be no manual handling/opening of asbestos fiber bags. The Unit shall install fully automatic asbestos fiber debagging system before commissioning the unit.	We have fully automatic fibre bag opening device, where in all our fibers are opened and processed in closed condition.
5	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.	We have a dust collector with bag filter connected to bag opening machine as a process with wet washer, shredder and Edge runner mill to collect the dust and recycle into the process.
6	Bag filters will be provided to stacks attached to cement/fly ash circuit, fiber circuit and rejected sheet and pipes pulverizer, silo of cement & fly ash.	We have dust collectors with bag filter attached to Cement/fly ash circuit, fiber circuit and Pulverizer machine. Also we have bin filters attached to our raw material Silos to collect all dust and recycle into the process.
7	Dust extraction and dust suppression system shall be provided to all transfer points.	We have dust extraction hood connected to all raw material transfer points and the same is connected to the dust collectors.
8	All efforts shall be undertaken to maintain the SPM emission levels from the main stacks within 20mg/Nm3.	All our stacks are being maintained and measured at regular frequency by PCB approved third party. Fiber mill stack - <2mg/Nm3, Cement/fly ash stack - <50mg/Nm3, DG Set stack - < 50mg/Nm3 (Annexure II)

9	Asbestos emissions due to storage, transportation, etc. and spillages shall be continuously monitored and controlled as per CPCB Norms & Guidelines.	Asbestos fiber emission at stack and workplace are being monitored by in house every month and third party every six months and found to be well within norms of 0.1f/cc at workplace and 0.2f/cc at fiber stack. Emission report for the same is enclosed for your kind reference. (Annexture III)
10	The unit shall adhere to the prescribed BIS standards and laws regarding use and handling of asbestos, safety of employees etc.	The raw materials are transported in closed containers. Asbestos is brought in impermeable bags under compressed conditions, stretch wrapped with polythene covers. These are stacked in wooden pallets and are handled with fork lift only and no manual handling is involved.
11	The periodical evaluation for the efficiency performance of Bag filters shall be carried out.	Manometers are connected to all our dust collectors and same are monitored daily for efficiency of Dust Collectors. (Annexure IV)
12	Rejected and broken sheets along with bag filter dust shall be reused in the manufacturing process.	We have pulverizer machine to powder the rejected and broken sheets and the same will be consumed in the process along with dust collected from bag filter.
13	All the internal roads shall be concreted and black topped to reduce fugitive emissions.	All our internal roads are made with concrete and black topped, there by no dust emissions due to vehicle movement.
14	Periodical Monitoring Reports on Ambient Air Quality, Stack Emissions, Fugitive emissions, Noise Levels, etc. Shall be submitted to the Statutory Authorities.	All our Periodic monitoring reports on air quality, Stack emission & noise levels are submitted once in 3 months to the board.
	Noise Levels	
1	All rotating items are well lubricated and provided with enclosures as far as possible to reduce noise termination.	All our rotating parts are lubricated and provided with safety guards to minimise noise levels.
2	Extensive vibration monitoring systems are provided to check and reduce vibrations.	All our machines are subjected to preventive maintenance once in a fortnight and ensure repaired parts are changed to ensure no vibrations.
3	Provisions of silencers are made wherever possible.	We have provided silencers for all noise generating equipment.
4	Green Belt will also act as noise reducers.	We have developed more than 33% of greenbelt in our factory area.
5	Proper lubrication and house keeping are maintained to avoid excessive noise generation.	Housekeeping work is being carried out on a daily basis.
	Water Environment	
1	No waste water discharge from the Plant and Zero Discharge practice shall be adopted.	All our process waste water are 100% reused in our process itself and thereby we adopt Zero discharge system in our Plant.
2	Water control measures shall be undertaken.	We take water from SIPCOT for our daily usage. We have water meter to monitor usage on a continuous

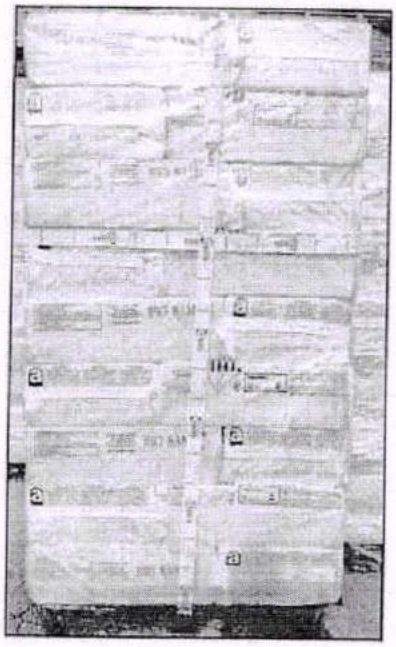
		basis. Also we have adopted water disposal measures of domestic waste water are connected to septic tank, followed by soak pit.
3	The domestic sewages shall be treated in a septic tank so as to meet the TNPCB Discharge Norms and the treated sewage shall be used for Green Belt.	Domestic waste water generation is very low hence, all our domestic sewages are connected to septic tank, followed by soakpit.
4	No percolation of treated sewage to the ground water table shall be done.	Our domestic waste water generation is very minimal. The domestic waste water is generated mainly from three points, Restroom near factory, Administrative building and Canteen. Since all the above points are being generated from different place, the per hour discharge from each point will be very minimal. This quantity is very minimal and we are having 3 separate septic tank to handle. There is no possibility of sewage percolating to the ground.
5	Periodical monitoring of Raw & Treated Sewage shall be undertaken for the TNPCB Consent Norms.	Domestic waste water generation is very low hence, all our domestic sewages are connected to septic tank, followed by soak pit.
6	Rain Water Harvesting shall be undertaken as proposed from the Roof Tops of Plant to supplement the raw water supply.	We have provided 2 nos of rain water harvesting structure where all the run offs rain water will be harvested. Photos of the same enclosed. (Annexure V)
	Land Environment	
1	Dust collected from various Air Pollution Control Measures like Bag Filters etc. are totally recycled in the process.	Dust collected from dust collectors are consumed along with raw materials in the process on a daily basis.
2	No solid wastes/hazardous wastes generation from the plant.	There is no solid/Hazardous waste generation from the plant as all our process wastes are completely recycled back into the process.
	Green Belt	
1	An effective Green Belt of about 33% of the total area shall be maintained with trees of local species having a thick canopy cover.	We have provided 33% of the total area for green belt development. Local species and trees are planted all across the plant premises.
2	The treated sewage shall be used fully for the Green Belt development.	We are Utilising all our treated domestic waste for the development of green belt
3	A mixture of fruit , fuel, fodder and quick growing timber tree saplings, predominantly local flora/vegetations shall be preferred by keeping in view the agro-ecological and edaphic conditions of the areas.	Following are the list of trees & Plants developed for green belt. (Annexure VI)
4	Green Belt maintenance contract may be awarded to the Women Self Hel Groups and Local Panchayats of the nearby villages.	We have provided manpower from nearby area for the maintenance of green belt.

For Ramco Industries Limited

(T.Vijayakumar)
Deputy General Manager

ANNEXURE – I

Impermeable bag compressed condition



ANNEXURE - 5

Enviro Care®
INDIA PRIVATE LIMITED
(Certified by ISO 9001:2015 | ISO 14001:2015 | ISO 45001:2018)

TEST REPORT

Accredited by NABL (Chemical & Biological)

Report No :	ECI-SM-2023/09/011	**Report Date :**	05.09.2023
Customer Name & Address	**M/s. Ramco Industries Ltd** Plot No:12A, Sipcot Industrial Growth Centre Gangaikondan Tirunelveli Dist-627352		
Customer Reference :	IWO Date: 01/09/2023	**Sample Reference No :**	ECI-SM-2023/09/011
Sample Drawn By :	ECI	**Sample Received On :**	01.09.2023
Sample Collected Date :	01.09.2023	**Test Commenced On :**	01.09.2023
Qty of Sample Received :	Thimble & 50 ml Soln	**Test Completed On :**	05.09.2023
Sample Description :	Stack	**Sampling Method :**	IS 11255 Part 01
Sample Mark:	Fibre Mill Dust Collector – (Chimney)		

S.No	PARAMETERS	UNITS	RESULTS	TEST METHOD	Max. Permissible TNPCB norms for General Emission Standards
1.	Ambient Temperature	°C	32	IS 11255:Part 03	NA
2.	Carbon dioxide (as CO_2)	% (v/v)	< 0.2	IS 13270	NA
3.	Carbon Monoxide (as CO)	% (v/v)	< 0.2	IS 13270	1.0
4.	Flow rate	Nm^3/hr	2853	IS 11255:Part 03	NA
5.	Flue Gas velocity	m/sec	10.2	IS 11255:Part 03	NA
6.	Oxides of Nitrogen (as NO_x)	mg/Nm^3	< 1.0	IS 11255:Part 07	NA
7.	Particulate Matter (PM)	mg/Nm^3	1.1	IS 11255:Part 01	2.0
8.	Port hole Height from G Level	m	5.0	----	NA
9.	Stack Diameter at port hole	m	0.35	---	NA
10.	Stack Height from G Level	m	26.0	----	NA
11.	Stack Temperature	°C	105	IS 11255:Part 03	NA
12.	Sulphur Dioxide (as SO_2)	mg/Nm^3	< 1.0	IS 11255:Part 02	NA

<--- End of Report --->

Verified By : S.d.

Remarks : In the above mentioned stack meets the requirements of TNPCB standards with respect to the parameters tested
NA – Not Applicable

For ENVIRO CARE INDIA PRIVATE LIMITED
(Chemical Testing Laboratory)

Authorized Signatory

#43, 2nd Street, Harvey Nagar, Arasaradi, Madurai - 625016 Tel: 0452 4355103
Email: lab@envirocareindia.com | Web: www.envirocareindia.com

Note:
1. The results relate only to this item tested.
2. Any Correction not attested shall invalidate this report.
3. Report shall not be reproduced anywhere except in full and in the same format without the permission of the laboratory.
4. Unless informed by customer, the test items will not be retained for more the 15 days from date of issue of test report.
5. Total liability of our laboratory is limited to the invoice amount
6. Any dispute arising out of this report is subjected to Madurai Jurisdiction Only.

Enviro Care®
INDIA PRIVATE LIMITED
(Certified by ISO 9001:2015 | ISO 14001:2015 | ISO 45001:2018)

TEST REPORT

Accredited by NABL (Chemical & Biological)

Report No :	ECI-SM-2023/09/013	Report Date :	05.09.2023
Customer Name & Address	M/s. Ramco Industries Ltd Plot No:12A, Sipcot Industrial Growth Centre Gangaikondan Tirunelveli Dist-627352		
Customer Reference :	IWO Date: 01/09/2023	Sample Reference No :	ECI-SM-2023/09/013
Sample Drawn By :	ECI	Sample Received On :	01.09.2023
Sample Collected Date :	01.09.2023	Test Commenced On :	01.09.2023
Qty of Sample Received :	Thimble & 50 ml Soln	Test Completed On :	05.09.2023
Sample Description :	Stack	Sampling Method :	IS 11255 Part 01
Sample Mark:	DG 750 KVA - (Chimney)		

S.No	PARAMETERS	UNITS	RESULTS	TEST METHOD	Max. Permissible TNPCB norms for General Emission Standards
1.	Ambient Temperature	°C	32	IS 11255:Part 03	NA
2.	Carbon dioxide (as CO_2)	% (v/v)	0.2	IS 13270	NA
3.	Carbon Monoxide (as CO)	% (v/v)	0.3	IS 13270	1.0
4.	Flow rate	Nm^3/hr	1911	IS 11255:Part 03	NA
5.	Flue Gas velocity	m/sec	10.7	IS 11255:Part 03	NA
6.	Oxides of Nitrogen (as NO_x)	mg/Nm^3	24.2	IS 11255:Part 07	NA
7.	Particulate Matter (PM)	mg/Nm^3	30.2	IS 11255:Part 01	50
8.	Port hole Height from G Level	m	5.0	----	NA
9.	Stack Diameter at port hole	m	0.30	---	NA
10.	Stack Height from G Level	m	15.0	----	NA
11.	Stack Temperature	°C	163	IS 11255:Part 03	NA
12.	Sulphur Dioxide (as SO_2)	mg/Nm^3	8.1	IS 11255:Part 02	NA

<--- End of Report --->

Verified By : S.C.L.

Remarks : In the above mentioned stack meets the requirements of TNPCB standards with respect to the parameters tested
NA – Not Applicable

For ENVIRO CARE INDIA PRIVATE LIMITED
(Chemical Testing Laboratory)

Authorized Signatory

ENVIRO CARE INDIA PRIVATE LIMITED * MADURAI .16.

#43, 2nd Street, Harvey Nagar, Arasaradi, Madurai - 625016 Tel: 0452 4355103
Email: lab@envirocareindia.com | Web: www.envirocareindia.com

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TEST REPORT

Accredited by NABL (Chemical & Biological)

Report No :	ECI-SM-2023/09/012	Report Date :	05.09.2023
Customer Name & Address	M/s. Ramco Industries Ltd Plot No:12A, Sipcot Industrial Growth Centre Gangaikondan Tirunelveli Dist-627352		
Customer Reference :	IWO Date: 01/09/2023	Sample Reference No :	ECI-SM-2023/09/012
Sample Drawn By :	ECI	Sample Received On :	01.09.2023
Sample Collected Date :	01.09.2023	Test Commenced On :	01.09.2023
Qty of Sample Received :	Thimble & 50 ml Soln	Test Completed On :	05.09.2023
Sample Description :	Stack	Sampling Method :	IS 11255 Part 01
Sample Mark:	Pulverizer Dust Collector (Chimney)		

S.No	PARAMETERS	UNITS	RESULTS	TEST METHOD	Max. Permissible TNPCB norms for General Emission Standards
1.	Ambient Temperature	°C	32	IS 11255:Part 03	NA
2.	Carbon dioxide (as CO_2)	% (v/v)	< 0.2	IS 13270	NA
3.	Carbon Monoxide (as CO)	% (v/v)	< 0.2	IS 13270	1.0
4.	Flow rate	Nm^3/hr	3712	IS 11255:Part 03	NA
5.	Flue Gas velocity	m/sec	9.3	IS 11255:Part 03	NA
6.	Oxides of Nitrogen (as NO_x)	mg/Nm^3	< 1.0	IS 11255:Part 07	NA
7.	Particulate Matter (PM)	mg/Nm^3	1.3	IS 11255:Part 01	2.0
8.	Port hole Height from G Level	m	6.0	----	NA
9.	Stack Diameter at port hole	m	0.40	----	NA
10.	Stack Height from G Level	m	9.0	----	NA
11.	Stack Temperature	°C	73	IS 11255:Part 03	NA
12.	Sulphur Dioxide (as SO_2)	mg/Nm^3	< 1.0	IS 11255:Part 02	NA

<--- End of Report --->

Verified By : S.C.

Remarks : In the above mentioned stack meets the requirements of TNPCB standards with respect to the parameters tested
NA – Not Applicable

For ENVIRO CARE INDIA PRIVATE LIMITED
(Chemical Testing Laboratory)

Authorized Signatory

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RAMCO INDUSTRIES LIMITED

Assistant General Manager Production,
Ramco Industries Limited ,
SIPCOT Industrial Area,
Gangaikondan,
TIRUNELVELI,Tamil Nadu.

Arakkonam

Date:06.09.2023

We are giving below the count report of fibre dust samples received from Gangaikondan factory for the month of Aug 2023.

Ref.No.	Date of sampling	Location	S/P	Flow Rate (ml/min)	Sampling duration (min)	Fibre Count (nos)	Fibre concentration (f/cc)
1	01.08.2023	ASBESTOS STORAGE GODOWN	S	1000	240	13	0.029
2	02.08.2023	BAG OPENING DEVICE / ERM	P	1000	240	14	0.031
3	03.08.2023	SLURRY MIXER	S	1000	240	10	0.022
4	04.08.2023	SHEETING MACHINE	P	1000	240	8	0.018
5	05.08.2023	CORRUGATOR	P	1000	240	9	0.020
6	06.08.2023	MOULDING AREA	P	1000	240	8	0.018
7	07.08.2023	LABORATORY	P	1000	240	7	0.015
8	08.08.2023	LOADING AREA	S	1000	240	7	0.015
9	16.08.2023	NEAT MAIN GATE(OUT SIDE)	S	1000	240	6	0.013
10	17.08.2023	SEGGREGATION	P	1000	240	9	0.020
11	18.08.2023	SALVAGE	S	1000	240	10	0.022
12	19.08.2023	PULVERIZER	P	1000	240	10	0.022

Remarks:-

*P-Personal
*S-Static
Un able to process

Hard copy of report along with sample boxes will be sent through courier

SENIOR MANAGER QUALITY

Annexe - III

Manometer