

# Ramco Industries Limited



Ref.: RIL/660/16-17/BSPCB

Date: 27/4/17

Plot No. A1,  
BIADA Industrial Area,  
Opp. Mahathin Mai Temple  
Bihiya - 802152  
Dist : Bhojpur (BIHAR)  
Ph. - 06181 - 241016, 241070

To

**The Member Secretary,**  
**Bihar State Pollution Control Board (BSPCB)**  
Parivesh Bhavan  
NSB-02, Patliputra Industrial Area,  
Patna - 800 010

Sub.: Yearly environmental statement of Form – V for the period of April 2016 to March 2017.

Sir,

With reference to above we are submitting here with the environmental statement Form – V for the period of April 2016 to March 2017, for your kind information and record please.

Receipt of the same may kindly be acknowledged.

Thanks and Regards,

For, Ramco Industries Ltd.,

  
Pankaj Kumar

Works Manager

Encl.: 1. Form – V

2. Stack monitoring, water and ambient air analysis.
3. Work zone noise level & fibre counting report.

CC: MoEF, Ranchi.

File copy.



**FORM V**

Environmental Statement for the financial year ending 31st March 2017.

**Part A**

- i) Name and address of the owner/occupier of the industry operation or process. **P.R.VENKATRAMA RAJA  
RAMAMANDIRAM  
Tenkasi Road  
Rajapalayam – 626 117  
TAMILNADU**
- ii) Industry category: Primary - (STC Code) / Secondary - **RED MEDIUM**
- iii) Production capacity – Units - **120000 MT / Year**
- iv) Year of establishment. - **2011**
- v) Date of the last environmental statement submitted - **2.5.2016**

**Part B**

**Water and Raw Material Consumption**

- i) Water consumption m3/d
- |          |               |
|----------|---------------|
| Process  | } 65.2 m3/day |
| Cooling  |               |
| Domestic |               |

Name of products	Process water consumption per unit of product output (MT)	
	During the previous financial year 15-16	During the current financial year 16-17
	(1)	(2)
( 1 ) Asbestos Cement Roofing Sheets & Accessories (KL/MT)	0.18	0.19



**FORM V**

Environmental Statement for the financial year ending 31st March 2017.

**Raw Material Consumption**

Name of Raw Materials	Name of Products	Consumption of raw materials per unit of output (MT)	
		During the previous financial year 2015-16	During the current financial year 2016-17
1) CEMENT	Asbestos Cement Roofing Sheets & Accessories	0.42	0.414
2) FIBER		0.082	0.082
3) FLYASH		0.267	0.27
4) PULP		0.009	0.013

\* Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

**Part C**

Pollution discharged to environment/unit of output  
(Parameter as specified in the 'Consent' issued)

**C-1, WATER POLLUTION**

(1) Pollutants	Quantity of pollutants discharged (Kg/day)	Concentrations of pollutants in discharges (mg/lit)	Percentage of variation from prescribed standards with reasons
Water	NIL	NIL	NIL



FORM V

Environmental Statement for the financial year ending 31st March 2017.

C-2, AIR POLLUTION

(1) Stack Attached to	Quantity of pollutants discharged (Kg/day)	Concentrations of pollutants in discharges (mg/m3)			Percentage of variation from prescribed standards with reasons
		PM	SO <sub>2</sub>	NO <sub>x</sub>	
1. Asbestos Dust Collector		1.7	Not detectable	Not detectable	- within spec limits -
2. Cement Dust Collector		51.3	Not detectable	20.4	
3. Pulverizer Dust collector		1.57	Not detectable	17.9	
4. DG set 1010 KVA		41.4	52.7	212.1	
5. DG set 750 KVA		35.6	48.7	208.9	

Part D

Hazardous Wastes as specified under Hazardous Wastes (Management and Handling) Rules, 1989

Hazardous Waste	Total Quantity (KL)	
	During the previous financial year	During the current financial year
1) Discarded asbestos containing product	NIL	NIL
2) Used Oil	NIL	NIL
3) Residue containing oil	3.12 (KL)	3.08 (KL)



FORM V

Environmental Statement for the financial year ending 31st March 2017.

Part E

SOLID WASTES

	Total Quantity (MT)	
	During the previous financial year	During the current financial year
(a) From process	1046.92	987.84
(b) From pollution control facilities	Negligible	Negligible
(c) (1) Quantity recycled or re-utilized within the unit	1046.92	987.84
(2) Sold	NA	NIL
(3) Disposed	NA	NIL

Part F

Please specify the characterizations (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Description	Quantity (kg)	Constituent parameter with concentrations	Method of disposal
1) Broken sheets	196.42 MT		Fully recycled
2) Used Oil	3.08 KL		Fully recycled
3) Residue containing oil	NA		Fully recycled



## FORM V

Environmental Statement for the financial year ending 31st March 2017.

## Part G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

Description	Expenditure in lacs	
	2015-16	2016-17
1) Water pollution	1,57,621.23	1,05,705
2) Air pollution	1,67,496.58	6,02,500
3) Hazardous / Solid waste management		
4) Green belt development	97312	1,82,212
5) Others	4,22,438.46	3,26,440

## Part H

Additional measures / investment proposal for environmental protection including abatement of pollution, prevention of pollution.

Description	Investment Projections	Estimated cost (lacs)	Year of Installation
1) Water pollution	-		
2) Air pollution	Dust Collector	4.60	2016-17
3) Green belt development	Landscaping, Trees plantation		
4) Others			





**FORM V**

Environmental Statement for the financial year ending 31st March 2017.

**Part I**

Any other particulars for improving the quality of the environment.

1. We are collecting pulverized powder in jumbo bag with green color marking & recycled. It used in every batch of RM in auto mode.
2. We are using pulverized powder in auto feeding continuously in RM batch.
3. Environment cell meet with specified date (15<sup>th</sup> to 20<sup>th</sup>) on monthly basis and headed by unit head.

Office :  
 10/1 (Chatterjee Lane)  
 Kumbhariya  
 Patna - 800 001 (Bihar)



Laboratory Address :-  
 31<sup>st</sup> Floor, Rajhans Niketan,  
 Near Canal, Rukunpura,  
 Bailey Road,  
 Patna - 800 014 (Bihar)



# SHIVA TEST HOUSE

Tel. : 0612 - 2247538/ 2240752 ; TeleFax : 0612 - 2590705  
 E.mail. : sthpatna1@yahoo.co.in



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 OHSAS Certified

RECOGNISED AS ENVIRONMENTAL LABORATORY BY CENTRAL GOVT. UNDER ENVIRONMENT ( PROTECTION ) ACT 1986 (VALID UPTO MAR. 2018),  
 BY DEPT. OF INDUSTRY, FORESTS & ENVIRONMENT, GOVT. OF BIHAR AND BIHAR STATE POLLUTION CONTROL BOARD

## TEST REPORT

Ref. No. RIL/TR/16-17/543(f) Dt : 05.04.2017 Your Work Order No. MANUAL/RIL/BIH/12 Dt : 28.12.2012

(a) Name and address of the Customer	RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur - 802 152
(b) Report to be submitted to	Sr. General Manager (Works)
(c) Details of Sample	Monitoring of Stack Emission
(d) Sample Collected by	SHIVA TEST HOUSE on 31.03.17
(e) No. & Type of Container	Thimble & Glass Impinger
(f) Items required to be tested	As per contract
(g) Whether any specific Method of Test has been suggested by the party	No
(h) Date of receiving the sample	01.04.17

Parameters	Method of Test	Results	
1. Stack Connected to		Fibre Circuit	
2. Stack No.		I	
3. Height of Stack (as reported)		30.0 m.	
4. Dia of Stack at Top (as reported)		0.4 m.	
5. Draft		Natural	
6. Material of Construction		M.S.	
7. Ambient Temperature, °C		26.0	
8. Flue Gas Temperature, °C		59.0	
9. Velocity, m/sec.	IS 11255 (Part-3)	5.1	
10. Volumetric Flow Rate ( NM <sup>3</sup> /hr.)		2068.8	
11. Sampling Point		10 m.	
		Concentration ( mg / NM <sup>3</sup> )	Limit as per E (P) Rules Schedule I
12. Particulate Matter (P.M.)	IS 11255 (Part-1)	1.7	2.0 mg / NM <sup>3</sup>
13. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-2)	Not Detectable	---
14. Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Part-7)	Not Detectable	---



*[Signature]*  
 05/04/17  
 Authorized Signatory  
 Quality Manager / Dy. Quality Manager

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## TEST REPORT

Ref. No. RIL/TR/16-17/543(g) Dt.: 05.04.2017 Your Work Order No. MANUAL/RIL/BIH/12 Dt : 28.12.2012

[a]	Name and address of the Customer	RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur - 802 152		
[b]	Report to be submitted to	Sr. General Manager (Works)		
[c]	Details of Sample	Monitoring of Stack Emission		
[d]	Sample Collected by	SHIVA TEST HOUSE on 31.03.17		
[e]	No. & Type of Container	Thimble & Glass Impinger		
[f]	Items required to be tested	As per contract		
[g]	Whether any specific Method of Test has been suggested by the party	No		
[h]	Date of receiving the sample	01.04.17		
Parameters		Method of Test	Results	
1.	Stack Connected to		Cement / Fly Ash Circuit	
2.	Stack No.		11	
3.	Height of Stack (as reported)		15.0 m.	
4.	Dia of Stack at Top (as reported)		0.4 m	
5.	Draft		Natural	
6.	Material of Construction		M.S.	
7.	Ambient Temperature, °C		26.0	
8.	Flue Gas Temperature, °C		53.0	
9.	Velocity, m/sec.		IS 11255 (Part-3)	5.8
10.	Volumetric Flow Rate ( NM <sup>3</sup> /hr )			2397.2
11.	Sampling Point			5 m
		Concentration ( mg / NM <sup>3</sup> )	Limit as per E (P) Rules Schedule I	
12.	Particulate Matter (P.M.)	IS 11255 (Part-1)	51.3 100.00 mg / NM <sup>3</sup>	
13.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-2)	Not Detectable ---	
14.	Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Part-7)	20.4 ---	



*[Signature]*  
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 Quality Manager / Dy. Quality Manager

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## TEST REPORT

Ref. No. RIL/TR/16-17/543(h) Dt : 05.04.2017 Your Work Order No. MANUAL/RIL/BIH/12 Dt : 28.12.2012

[a] Name and address of the Customer	RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur - 802 152			
[b] Report to be submitted to	Sr. General Manager (Works)			
[c] Details of Sample	Monitoring of Stack Emission			
[d] Sample Collected by	SHIVA TEST HOUSE on 31.03.17			
[e] No. & Type of Container	Thimble & Glass Impinger			
[f] Items required to be tested	As per contract			
[g] Whether any specific Method of Test has been suggested by the party	No			
[h] Date of receiving the sample	01.04.17			
Parameters	Method of Test	Results		
1. Stack Connected to		Pulveriser Plant		
2. Stack No.		111		
3. Height of Stack (as reported)		15.0 m.		
4. Dia of Stack at Top (as reported)		0.15 m.		
5. Draft		Natural		
6. Material of Construction		M.S.		
7. Ambient Temperature, °C		26.0		
8. Flue Gas Temperature, °C		56.0		
9. Velocity, m/sec.		IS 11255 (Part-3)	5.3	
10. Volumetric Flow Rate ( NM <sup>3</sup> /hr )			305.2	
11. Sampling Point			5 m.	
		Concentration ( mg / NM <sup>3</sup> )	Limit as per I (P) Rules Schedule I	
12. Particulate Matter (P.M.)	IS 11255 (Part-1)	1.57	2.0 mg / NM <sup>3</sup>	
13. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-2)	Not Detectable	---	
14. Oxides of Nitrogen (NOx)	IS 11255 (Part-7)	17.9	---	



*Hasup*  
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 Quality Manager / Dy. Quality Manager

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## TEST REPORT

Ref. No. RIL/TR/16-17/543(i) Dt: 05.04.2017 Your Work Order No. MANUAL/RIL/BIH/12 Dt: 28.12.2012

[a] Name and address of the Customer	RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihya Bhojpur - 802 152
[b] Report to be submitted to	Sr. General Manager (Works)
[c] Details of Sample	Monitoring of Stack Emission
[d] Sample Collected by	SHIVA TEST HOUSE on 31.03.17
[e] No. & Type of Container	Thimble & Glass Impinger
[f] Items required to be tested	As per contract
[g] Whether any specific Method of Test has been suggested by the party	No
[h] Date of receiving the sample	01.04.17

Parameters	Method of Test	Results	
1. Stack Connected to	IS 11255 (Part-3)	DG Set 1010 KVA	
2. Stack No.		IV	
3. Height of Stack (as reported)		9.0 m.	
4. Dia of Stack at Top (as reported)		0.15 m.	
5. Draft		Natural	
6. Material of Construction		M.S.	
7. Ambient Temperature, °C		26.0	
8. Flue Gas Temperature, °C		176.0	
9. Velocity, m/sec.		8.1	
10. Volumetric Flow Rate ( NM <sup>3</sup> /hr.)		341.8	
11. Sampling Point		3.5 m.	
	Concentration ( mg / NM <sup>3</sup> )	Limit as per E (P) Rules Schedule I	
12. Particulate Matter (P.M.)	IS 11255 (Part-1)	41.1	75.00 mg / NM <sup>3</sup>
13. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-2)	52.7	Not Specified
14. Oxides of Nitrogen (NOx)	IS 11255 (Part-7)	212.1	710.00 mg / NM <sup>3</sup>
15. NMHC (as C) (at 15% O <sub>2</sub> )	CPCB	21.0	100.00 mg / NM <sup>3</sup>
16. Carbon Monoxide as CO (at 15% O <sub>2</sub> )	IS 13270 - 2003	38.0	150.00 mg / NM <sup>3</sup>



*[Signature]*  
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 Authorized Signatory  
 Quality Manager / Dy. Quality Manager

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[a] Name and address of the Customer	RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur - 802 152			
[b] Report to be submitted to	Sr. General Manager (Works)			
[c] Details of Sample	Monitoring of Stack Emission			
[d] Sample Collected by	SHIVA TEST HOUSE on 31.03.17			
[e] No. & Type of Container	Thimble & Glass Impinger			
[f] Items required to be tested	As per contract			
[g] Whether any specific Method of Test has been suggested by the party	No			
[h] Date of receiving the sample	01.04.17			
Parameters	Method of Test	Results		
1. Stack Connected to		DG Set 750 KVA		
2. Stack No.		V		
3. Height of Stack (as reported)		9.0 m		
4. Dia of Stack at Top (as reported)		0.15 m		
5. Draft		Natural		
6. Material of Construction		M.S.		
7. Ambient Temperature, °C		26.0		
8. Flue Gas Temperature, °C		169.0		
9. Velocity, m/sec.		IS 11255 (Part-3)	7.9	
10. Volumetric Flow Rate ( NM <sup>3</sup> /hr.)			338.6	
11. Sampling Point			3.5 m.	
		Concentration ( mg / NM <sup>3</sup> )	Limit as per E (P) Rules Schedule I	
12. Particulate Matter (P.M.)	IS 11255 (Part-1)	35.6	75.00 mg / NM <sup>3</sup>	
13. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-2)	48.7	Not Specified	
14. Oxides of Nitrogen (NOx)	IS 11255 (Part-7)	208.9	710.00 mg / NM <sup>3</sup>	
15. NMHC (as C) (at 15% O <sub>2</sub> )	CPCB	15.0	100.00 mg / NM <sup>3</sup>	
16. Carbon Monoxide as CO (at 15% O <sub>2</sub> )	IS 13270 - 2003	33.0	150.00 mg / NM <sup>3</sup>	



*[Signature]*  
 05/04/17  
 Authorized Signatory  
 Quality Manager / Dy. Quality Manager

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## TEST REPORT

Ref. No. **RIL/TR/16-17/543(k)** Dt : **05.04.2017** Your Work Order No. **MANUAL/RIL/BIH/12** Dt : **28.12.2012**

[a] Name and address of the Customer	<b>RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur - 802 152</b>
[b] Report to be submitted to	<i>Sr. General Manager (Works)</i>
[c] Details of Sample	<b>Monitoring of Ambient Air Quality</b>
[d] Sample Collected by	SHIVA TEST HOUSE on 31.03.17
[e] No. & Type of Container	Filter Paper ; Glass Impinger
[f] Items required to be tested	As per contract
[g] Whether any specific Method of Test has been suggested by the party	No
[h] Date of receiving the sample	01.04.17

Parameters	Method of Test	Sampling Station				Limit as NAAQS Nov. '2009.
		Near Office	Near Rear Gate	Near Stripping Area	Near Laboratory	
1. Particulate Matter (PM <sub>10</sub> ), µg / m <sup>3</sup>	IS 5182 (Part-23)	56.1	70.0	73.1	65.1	100 µg / m <sup>3</sup>
		52.9	60.2	69.8	57.4	
		45.7	54.7	65.5	56.4	
2. Particulate Matter (PM <sub>2.5</sub> ), µg / m <sup>3</sup>	USEPA	32.0	40.4	38.1	36.5	60 µg / m <sup>3</sup>
		26.2	35.2	35.6	30.0	
		24.7	28.6	32.1	27.4	
3. Sulphur Dioxide as SO <sub>2</sub> , µg / m <sup>3</sup>	IS 5182 (Part-2)	17.9	24.0	26.8	20.0	80 µg / m <sup>3</sup>
		19.6	28.1	29.3	27.0	
		21.3	21.5	31.9	18.3	
		15.3	17.4	24.2	15.7	
		13.6	13.2	21.5	13.9	
4. Nitrogen Dioxide as NO <sub>2</sub> , µg / m <sup>3</sup>	IS 5182 (Part-6)	24.9	37.7	43.7	37.4	80 µg / m <sup>3</sup>
		29.0	36.2	45.6	39.4	
		31.5	32.4	47.6	31.5	
		23.9	29.3	41.7	28.9	
		22.1	27.7	39.1	27.2	
24.6	30.6	37.8	30.8			
Average Value						
PM <sub>10</sub>		51.6	61.6	69.5	59.6	
PM <sub>2.5</sub>		27.6	34.7	35.3	31.3	
SO <sub>2</sub>		17.5	20.7	25.6	18.7	
NO <sub>2</sub>		26.0	32.3	42.6	32.6	



*Asim*  
 05/04/17  
 Authorized Signatory  
 Quality Manager / Dy. Quality Manager

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## TEST REPORT

Ref. No. *RIL/TR/16-17/543(I)* Dt: *05.04.2017* Your Work Order No. *MANUAL/RIL/BIH/12* Dt: *28.12.2012*

[a] Name and address of the Customer	<b>RAMCO INDUSTRIES LTD.</b> Plot No. A 1, BIADA Industrial Area Bihya Bhojpur - 802 152
[b] Report to be submitted to	<i>Sr. General Manager (Works)</i>
[c] Details of Sample	<i>Monitoring of Ambient Air Quality</i>
[d] Sample Collected by	SHIVA TEST HOUSE on: <i>31.03.17</i>
[e] No. & Type of Container	Filter Paper ; Glass Impinger
[f] Items required to be tested	As per contract
[g] Whether any specific Method of Test has been suggested by the party	No
[h] Date of receiving the sample	<i>01.04.17</i>

Parameters	Method of Test	Sampling Station				Limit as per EPA Notification ( $\mu\text{g} / \text{m}^3$ )
		Near Office	Near Rear Gate	Near Stripping Area	Near Laboratory	
1. Carbon Monoxide (CO) , $\mu\text{g} / \text{m}^3$	IS 5182 (Part-10)	56.0	81.0	BDL	BDL	4000 $\mu\text{g} / \text{m}^3$
2. Lead (Pb) , $\mu\text{g} / \text{m}^3$	IS 5182 (Part-22)	BDL	BDL	BDL	BDL	1 $\mu\text{g} / \text{m}^3$
3. Ammonia as $\text{NH}_3$ , $\mu\text{g} / \text{m}^3$	IS 5182 (Part-5)	NIL	NIL	NIL	NIL	400 $\mu\text{g} / \text{m}^3$
4. Ozone ( $\text{O}_3$ ) , $\mu\text{g} / \text{m}^3$	IS 5182 (Part-9)	19.6	39.2	BDL	BDL	180 $\mu\text{g} / \text{m}^3$
5. Benzene ( $\text{C}_6\text{H}_6$ ) , $\mu\text{g} / \text{m}^3$	IS 5182 (Part-22)	BDL	BDL	BDL	BDL	5 $\mu\text{g} / \text{m}^3$
6. Arsenic (As) , $\text{ng} / \text{m}^3$	AAS Method	BDL	BDL	BDL	BDL	6 $\text{ng} / \text{m}^3$
7. Nickel as Ni , $\text{ng} / \text{m}^3$	AAS Method	BDL	BDL	BDL	BDL	20 $\text{ng} / \text{m}^3$

CO : BDL Denotes Below Detectable Limit < 21.09 ( $\mu\text{g} / \text{m}^3$ )  
 Pb : BDL Denotes Below Detectable Limit < 0.02 ( $\mu\text{g} / \text{m}^3$ )



*Handwritten signature*  
*05/04/17*

Authorized Signatory  
 Quality Manager / Dy. Quality Manager

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Office :  
 (Chatterjee Lane)  
 Ambabagh  
 Patna - 800 001 (Bihar)



Laboratory Address :-  
 01<sup>st</sup> Floor, Rajhans Niketan,  
 Near Canal, Rukunpura,  
 Bailey Road,  
 Patna - 800 014 (Bihar)



# SHIVA TEST HOUSE

Tel : 0612 - 2247538/ 2240752 ; TeleFax : 0612 - 2590705  
 E.mail : sthpatna1@yahoo.co.in



RECOGNISED AS ENVIRONMENTAL LABORATORY BY CENTRAL GOVT. UNDER ENVIRONMENT ( PROTECTION ) ACT 1986 (VALID UPTO MAR. 2018),  
 DEPTT. OF INDUSTRY, FORESTS & ENVIRONMENT, GOVT. OF BIHAR AND BIHAR STATE POLLUTION CONTROL BOARD

## TEST REPORT

Ref. No. RII/TR/16-17/543(m) Dt: 05.04.2017 Your Work Order No. MANUAL/RII/BIH/12 Dt: 28.12.2012

(a) Name and address of the Customer	RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur - 802 152					
(b) Report to be submitted to	Sr. General Manager (Works)					
(c) Details of Sample	Monitoring of Ambient Air Quality					
(d) Sample Collected by	SHIVA TEST HOUSE on 31.03.17					
(e) No. & Type of Container	Filter Paper ; Glass Impinger					
(f) Items required to be tested	As per contract					
(g) Whether any specific Method of Test has been suggested by the party	No					
(h) Date of receiving the sample	01.04.17					
Parameters	Method of Test	Sampling Station				Limit as per EPA Notification ( $\mu\text{g} / \text{m}^3$ )
		Near Office	Near Rear Gate	Near Stripping Area	Near Laboratory	
1 Benzo (a) Pyrene, (Particulate Phase only) $\text{ng} / \text{m}^3$	IS 5182 (Part-10)	<0.1	<0.1	< 0.1	< 0.1	1.0 $\text{ng} / \text{m}^3$



*[Handwritten Signature]*  
 05/04/17

Authorized Signatory  
 Quality Manager / Dy. Quality Manager

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01<sup>st</sup> Floor, Rajhans Niketan,  
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## TEST REPORT

Ref. No. RIL/TR/16-17/543 Dt: 05.04.2017 Your Work Order No. MANUAL/RIL/BIH/12 Dt: 28.12.2012

[a] Name and address of the Customer	RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur - 802 152
[b] Report to be submitted to	Sr. General Manager (Works)
[c] Details of Sample	Borewell Water (Near Godown)
[d] Sample Collected by	SHIVA TEST HOUSE on 31.03.17
[e] No. & Type of Container	One poly Jar & Glass Bottle
[f] Items required to be tested	As per contract
[g] Whether any specific Method of Test has been suggested by the party	No
[h] Date of receiving the sample	01.04.17

S.N.	Parameters	Limit as per IS 10500 : 2012		Method of Test	Results in mg/l. except colour, Odour, Taste, Turbidity, & pH
		Limit (mg/l.) Desirable	Permissible Limit in the absence of alternative source		
1	Colour	5.0 Hazen Limit	25	IS 3025 (Part-4)	<5.00
2	Odour	Unobjectionable	---	IS 3025 (Part-5)	Odourless
3	Taste	Agreeable	---	IS 3025 (Part-7))	Agreeable
4	pH	6.5 to 8.5	--	IS 3025 (Part-11)	7.21
5	Turbidity on NTU	1.00	5.00	IS 3025 (Part-10)	<1.0
6	Total Dissolved Solids (TDS)	500.00	2000.00	IS 3025 (Part-15)	417.0
7	Total Hardness as CaCO <sub>3</sub>	200.00	600.00	IS 3025 (Part-21)	284.0
8	Calcium as Ca	75.00	200.00	IS 3025 (Part-40)	52.9
9	Magnesium as Mg	30.00	100.00	IS 3025 (Part-40)	36.9
10	Iron as Fe	0.30	No relaxation	IS 3025 (Part-53)	0.15
11	Residual Free Chlorine	0.20	1.00	IS 3025 (Part-26)	<0.1
12	Total Alkalinity as CaCO <sub>3</sub>	200.00	600.00	IS 3025 (Part-23)	304.0
13	Chloride as Cl	250.00	1000.00	IS 3025 (Part-32)	24.0
14	Sulphate as SO <sub>4</sub>	200.00	400.00	IS 3025 (Part-24)	18.3
15	Nitrate as NO <sub>3</sub>	45.00	No relaxation	IS 3025 (Part-34)	4.8
16	Fluoride as F	1.00	1.50	APHA (4500 F-D)	0.19



*[Signature]*  
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Authorized Signatory  
Quality Manager / Dy. Quality Manager

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# SHIVA TEST HOUSE

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## TEST REPORT

Ref. No. RIL/TR/16-17/543(a) Dt : 05.04.2017 Your Work Order No. MANUAL/RIL/BIH/12 Dt : 28.12.2012

[a] Name and address of the Customer	RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur - 802 152
[b] Report to be submitted to	Sr. General Manager (Works)
[c] Details of Sample	Borewell Water (Near Godown)
[d] Sample Collected by	SHIVA TEST HOUSE on 31.03.17
[e] No. & Type of Container	One sterilized glass bottle
[f] Items required to be tested	As per contract
[g] Whether any specific Method of Test has been suggested by the party	No
[h] Date of receiving the sample	01.04.17

### BACTERIOLOGICAL EXAMINATION OF WATER AS PER IS 1622 - 1981

Coliform ( Most Probable Number of Organisms per 100 ml. of sample and confidence limit using 1 tube of 50 ml., 5 tubes of 10 ml. and 5 tubes of 1 ml. )

Sample	Media Strength	No. of Tubes	Observation for Acid / Gas formation at 37 °C after	
			24 Hr.	48 Hr.
50 ml.	Double Strength	1	-	-
10 ml.	-- do --	5	-	-
1 ml	Single Strength	5	-	-

Result - MPN Organisms Values - Not Detected in 100 ml. ( Limit - Shall not be Detectable in 100 ml. )



*Handwritten Signature*  
 05/04/17  
 Authorized Signatory  
 Quality Manager / Dy. Quality Manager

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## TEST REPORT

Ref. No. *RIL/TR/16\*17/543(b)* Dt : *05.04.2017* Your Work Order No. *MANUAL/RIL/BIH/12* Dt : *28.12.2012*

[a]	Name and address of the Customer	<b>RAMCO INDUSTRIES LTD.</b> Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur - 802 152
[b]	Report to be submitted to	<i>Sr. General Manager (Works)</i>
[c]	Details of Sample	<i>Drinking Water from Canteen Aquaguard</i>
[d]	Sample Collected by	SHIVA TEST HOUSE on <i>31.03.17</i>
[e]	No. & Type of Container	One poly Jar & Glass Bottle
[f]	Items required to be tested	As per contract
[g]	Whether any specific Method of Test has been suggested by the party	No
[h]	Date of receiving the sample	<i>01.04.17</i>

S.N.	Parameters	Limit as per IS 10500 : 2012		Method of Test	Results in mg/l. except colour, Odour, Taste, Turbidity & pH
		Limit (mg/l.) Desirable	Permissible Limit in the absence of alternative source		
1	Colour	5.0 Hazen Limit	25	IS 3025 (Part-4)	<5.00
2	Odour	Unobjectionable	---	IS 3025 (Part-5)	Odourless
3	Taste	Agreeable	---	IS 3025 (Part-7))	Agreeable
4	pH	6.5 to 8.5	--	IS 3025 (Part-11)	7.12
5	Turbidity on NTU	1.00	5.00	IS 3025 (Part-10)	<1.00
6	Total Dissolved Solids (TDS)	500.00	2000.00	IS 3025 (Part-15)	268.0
7	Total Hardness as CaCO <sub>3</sub>	200.00	600.00	IS 3025 (Part-21)	168.0
8	Calcium as Ca	75.00	200.00	IS 3025 (Part-40)	36.8
9	Magnesium as Mg	30.00	100.00	IS 3025 (Part-40)	18.5
10	Iron as Fe	0.30	No relaxation	IS 3025 (Part-53)	0.11
11	Residual Free Chlorine	0.20	1.00	IS 3025 (Part-26)	<0.1
12	Total Alkalinity as CaCO <sub>3</sub>	200.00	600.00	IS 3025 (Part-23)	200.0
13	Chloride as Cl	250.00	1000.00	IS 3025 (Part-32)	14.0
14	Sulphate as SO <sub>4</sub>	200.00	400.00	IS 3025 (Part-24)	12.6
15	Nitrate as NO <sub>3</sub>	45.00	No relaxation	IS 3025 (Part-34)	3.0
16	Fluoride as F	1.00	1.50	APHA (4500 F D)	0.13



*Hasim*  
*05/04/17*  
Authorized Signatory  
Quality Manager - *Dr. Quality Manager*

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## TEST REPORT

Ref No. RIL/TR/16-17/543(c) Dt: 05.04.2017 Your Work Order No. MANUAL/RIL/BIH/12 Dt: 28.12.2012

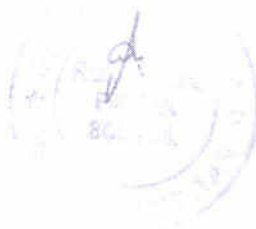
[a]	Name and address of the Customer	RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur - 802 152
[b]	Report to be submitted to	Sr. General Manager (Works)
[c]	Details of Sample	Drinking Water from Canteen Aquaguard
[d]	Sample Collected by	SHIVA TEST HOUSE on 31.03.17
[e]	No. & Type of Container	One sterilized glass bottle
[f]	Items required to be tested	As per contract
[g]	Whether any specific Method of Test has been suggested by the party	No
[h]	Date of receiving the sample	01.04.17

### BACTERIOLOGICAL EXAMINATION OF WATER AS PER IS 1622 - 1981

Coliform ( Most Probable Number of Organisms per 100 ml. of sample and confidence limit using 1 tube of 50 ml., 5 tubes of 10 ml. and 5 tubes of 1 ml. )

Sample	Media Strength	No. of Tubes	Observation for Acid / Gas formation at 37 °C after	
			24 Hr.	48 Hr.
50 ml.	Double Strength	1	-	-
10 ml.	-- do --	5	-	-
1 ml.	Single Strength	5	-	-

Result - MPN Organisms Values -- Not Detected in 100 ml. ( Limit : Shall not be Detectable in 100 ml. )



Handwritten signature: *Hasan*  
Authorized Signatory  
Quality Manager / Dy. Quality Manager

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BY DEPTT OF INDUSTRY, FORESTS & ENVIRONMENT, GOVT. OF BIHAR AND BIHAR STATE POLLUTION CONTROL BOARD**TEST REPORT**Ref No. *RIL/TR/16-17/543(d)* Dt : *05.04.2017* Your Work Order No. *MANUAL/RIL/BIH/12* Dt : *28.12.2012*

(a)	Name and address of the Customer	<b>RAMCO INDUSTRIES LTD.</b> Plot No. A 1, BIADA Industrial Area Bihya Bhojpur - 802 152		
(b)	Report to be submitted to	<i>Sr. General Manager (Works)</i>		
(c)	Details of Sample	<i>Effluent Sample from Final Discharge Point</i>		
(d)	Sample Collected by	SHIVA TEST HOUSE on <i>31.03.17</i>		
(e)	No. & Type of Container	Plastic Bottle		
(f)	Items required to be tested	As per request		
(g)	Whether any specific Method of Test has been suggested by the party	No		
(h)	Date of receiving the sample	<i>01.04.17</i>		
S. N.	Parameters	Method of Test	Limit as per E (P) Rules Schedule VI	Result (in mg/l.) except pH, Colour
1	Colour	IS 3025 (Part-4)	Not Specified	Colourless
2	pH	IS 3025 (Part-11)	5.5 to 9.0	7.15
3	Suspended Solids	IS 3025 (Part-17)	100.00	61.0
4	Oil & Grease	IS 3025 (Part-39)	10.00	<1.0
5	B.O.D. (3 days at 27°C)	IS 3025 (Part-44)	30.00	22.0
6	C.O.D.	APHA 5220 B	250.00	112.0
7	Dissolved Phosphate as P	APHA (4500-P-D)	5.00	1.4
8	Fluoride as F	APHA 4500 (F D)	5.00	0.41
9	Ammonical Nitrogen as N	IS 3025 (Part-34)	50.00	14.7
10	Total Kjeldahl Nitrogen as N	APHA (4500 N org)	100.00	25.1



*[Signature]*  
05/04/17  
✓ Authorized Signatory  
Quality Manager - *Dy. Quality Manager*

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## TEST REPORT

Ref. No. <i>RIL/TR/16-17/543(e)</i> Dt : <i>05.04.2017</i> Your Work Order No. <i>MANUAL/RIL/BIH/12</i> Dt : <i>28.12.2012</i>	
[a] Name and address of the Customer	RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihya Bhojpur - 802 152
[b] Report to be submitted to	<i>Sr. General Manager (Works)</i>
[c] Details of Sample	<i>Monitoring of Ambient Noise Level</i>
[d] Monitored by	SHIVA TEST HOUSE on <i>31.03.17</i>
[f] Whether any specific Method of Test has been suggested by the party	No
<b>Sampling Location</b>	<b>Time Weighted Average (TWA) of Noise Level in dB(A)</b>
1. Near Main Gate	59.1
2. Near Office	55.7
3. Near Stripping Area	61.4
4. Near Fibre Mill	64.3
5. Near DG Room	71.4
N.B.	<i>The Ambient Air Quality Standards in respect of Noise as per Noise Pollution (Regulation and Control ) Rules 2000 for Industrial area is 75.0 dB(A), for Commercial area is 65.0 dB(A), for Residential area is 55.0 dB(A) &amp; for Silence Zone is 50.0 dB(A) in daytime i.e. 6.00 am to 9.0 p.m. As per Rule 7(1&amp;2) the authority shall take action against violator if the noise level exceed the ambient noise standards by 10 dB(A) or more against any area/zone.</i>



*[Signature]*  
05/04/17  
Authorized Signatory  
Quality Manager : *Dr. Quality Manager*

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# JR LABS

ENVIRONMENT & OCCUPATIONAL HEALTH SERVICES

Rated as 'No.1' Laboratory for Counting of Asbestos Fibre by Institute of Occupational Medicine, Edinburgh U.K., World Health Organization Collaborating Centre for Occupational Health.

02.02.2017

## REPORT ON RESPIRABLE ASBESTOS FIBRE DUST CONCENTRATION

**Project** : M/s. RAMCO INDUSTRIES Ltd.,  
PLOT NO.A-1, BIADA INDUSTRIAL AREA OPP. MAHATHIN MAI TEMPLE  
AT & PO- BHHYA, DT. - BHOJPUR, BIHAR, PIN- 802152.

**Sampler used** : Samples collected by J R Labs using **Analyzed under** : Olympus make, Japan,  
Spectro : SLE-PS-154:II, B X 40 Phase Contrast  
S K C AirLite & Microscope  
Casella T13180 - II

**Flow rate** : 1.0 L P M **Specifications** : As per A I A - R T M 1  
**Sampling Duration** : 60 minutes each - (IS : 11450) Membrane  
Filter Method

### PERMISSIBLE EXPOSURE LIMIT VALUE (PELV) AS PER MoEF & P C B = 0.1 fibre per cc of air.

Sl. No.	Date of Sampling	Location	Condition	Dust Concentration fibre /cc of air	Remarks
1	19.01.2017	<u>Static</u> Fibre Godown	Fibre bags were stored properly. Torn bags are sealed. Different Grades of Fibre bags are stored in the Fibre Godown.	< 0.1 (0.060)	---
2	19.01.2017	<u>Personal</u> B O D - E R Mill	The worker carrying the Sampler was feeding fibre bags through the Roller Conveyor. E R Mill and Dust Collector in operation.	< 0.1 (0.096)	---
3	19.01.2017	<u>Static</u> E R Mill - Hydro disintegrator	The Static Sample is collected from near E R Mill - Hydro disintegrator during the production of F C C Sheets. E R Mill in Operation.	< 0.1 (0.072)	---

For J R LABS

Environmental Hygienist

# 305 & 309, Vasudha Apartments,  
2nd/3rd floor, Bullapur Road, New Jeedimetla,  
Hyderabad - 500 067,  
TELENGANA, INDIA.



AN ISO 9001 : 2008 CERTIFIED LAB

☎ : 040-42300546, 27230750, 27230966

Fax : 040-23775321

E-mail : jr labs@rediffmail.com

jr labs@gmail.com

jr.labs@yahoo.in



# JR LABS

ENVIRONMENT & OCCUPATIONAL HEALTH SERVICES

Rated as 'No.1' Laboratory for Counting of Asbestos Fibre by Institute of Occupational Medicine, Edinburgh U.K., World Health Organization Collaborating Centre for Occupational Health.

02.02.2017

## REPORT ON RESPIRABLE ASBESTOS FIBRE DUST CONCENTRATION

**Project** : M/s. RAMCO INDUSTRIES Ltd.,  
PLOT NO.A-1, BIADA INDUSTRIAL AREA OPP. MAHATHIN MAI TEMPLE  
AT & PO- BIHIYA, DT.- BHOJPUR, BIHAR, PIN- 802152

**Sampler used** : Samples collected by J R Labs using Envirotech - I,  
Casella T13180 - I &  
Casella AFC 123      **Analyzed under** : Olympus make, Japan,  
B X 40 Phase Contrast  
Microscope

**Flow rate** : 1.0 L P M      **Specifications** : As per A I A - R T M 1  
**Sampling Duration** : 60 minutes each      (IS : 11450) Membrane  
Filter Method

### PERMISSIBLE EXPOSURE LIMIT VALUE (PELV) AS PER MoEF & P C B = 0.1 fibre per cc of air.

Sl. No.	Date of Sampling	Location	Condition	Dust Concentration fibre /cc of air	Remarks
4	19.01.2017	<u>Personal</u> S F Drum - Cutter Off	The worker carrying the Sampler was cutting the Sheets at Green Stage on main Machine along with another worker.	< 0.1 (0.048)	---
5	19.01.2017	<u>Static</u> Stripping	The Static Sample is collected during the stripping of F C C Sheets. Plant was in production of F C C Sheets.	< 0.1 (0.076)	---
6	19.01.2017	<u>Personal</u> M G section - Moulding	The worker carrying the Sampler was making R1 & R2 types of moulded articles during the period of Sampling. Semi wet process.	< 0.1 (0.052)	---

For J R LABS

Environmental Hygienist

# B-305 & 309, Vasudha Apartments,  
Quthbullapur Road, New Jeedimetla,  
HYDERABAD - 500 067,  
TELENGANA, INDIA.



ISO 9001:2008 CERTIFIED LAB

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# JR LABS

ENVIRONMENT & OCCUPATIONAL HEALTH SERVICES

Rated as 'No.1' Laboratory for Counting of Asbestos Fibre by Institute of Occupational Medicine, Edinburgh U.K., World Health Organization Collaborating Centre for Occupational Health.

02.02.2017

## REPORT ON RESPIRABLE ASBESTOS FIBRE DUST CONCENTRATION

**Project** : M/s. RAMCO INDUSTRIES Ltd.,  
PLOT NO.A-1, BIADA INDUSTRIAL AREA OPP. MAHATHIN MAI TEMPLE  
AT & PO- BIHIYA, DT.- BHOJPUR, BIHAR, PIN- 802152

**Sampler used** : Samples collected by J R Labs using S K C Side Kick 51 Ex, Casella T13180 - II & Envirotech - II

**Flow rate** : 1.0 L P M

**Sampling Duration** : 60 minutes each

**Analyzed under** : Olympus make, Japan, B X 40 Phase Contrast Microscope

**Specifications** : As per A I A - R T M 1 (IS : 11450) Membrane Filter Method

### PERMISSIBLE EXPOSURE LIMIT VALUE (PELV) AS PER MoEF & P C B = 0.1 fibre per cc of air.

Sl. No.	Date of Sampling	Location	Condition	Dust Concentration fibre /cc of air	Remarks
7	19.01.2017	<u>Personal</u> Salvaging Section	The worker carrying the Sampler was reclaiming the Sheets. F C C rejected Sheets were getting reclaimed. Wet process.	< 0.1 (0.092)	---
8	19.01.2017	<u>Personal</u> Ball Mill	The worker carrying the Sampler was engaged in operation of Ball Mill. Wet process.	< 0.1 (0.040)	---
9	19.01.2017	<u>Personal</u> Pulverizer	The worker carrying the Sampler was feeding broken F C C Sheets through the chute of Pulverizer.	< 0.1 (0.088)	---

For J R LABS

Environmental Hygienist





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PLOT NO.A-1, BIADA INDUSTRIAL AREA OPP. MAHATHIN MAI TEMPLE  
AT & PO- BIHIYA, DT.- BHOJPUR, BIHAR, PIN- 802152

**Sampler used** : Samples collected by JR Labs using S K C 224-PCXR8:II & S K C AirLite

**Analyzed under** : Olympus make, Japan, B X 40 Phase Contrast Microscope

**Flow rate** : 1.0 L P M

**Specifications** : As per A I A - R T M 1 (IS : 11450) Membrane Filter Method

**Sampling Duration** : 60 minutes each

### PERMISSIBLE EXPOSURE LIMIT VALUE (PELV) AS PER MoEF & P C B = 0.1 fibre per cc of air.

Sl. No	Date of Sampling	Location	Condition	Dust Concentration fibre /cc of air	Remarks
10	19.01.2017	<u>Personal</u> Fork Lift Operator	The Fork Lift Operator carrying the Sampler was engaged in different work activities like; shifting of Sheets from Destacking Area to Stock Yard during the period of sampling.	< 0.1 (0.016)	---
11	19.01.2017	<u>Personal</u> Q C Lab Assistant	The Q C Lab Assistant carrying the Sampler was engaged in different Lab activities during the period of Sampling.	< 0.1 (0.088)	---

For JR LABS

Environmental Hygienist

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## REPORT ON RESPIRABLE ASBESTOS FIBRE DUST CONCENTRATION

**Project** : M/s. RAMCO INDUSTRIES Ltd.,  
PLOT NO.A-1, BIADA INDUSTRIAL AREA OPP. MAHATHIN MAI TEMPLE  
AT & PO- BIHIYA, DT.- BHOJPUR, BIHAR, PIN- 802152

**Sampler used** : Samples collected by J R Labs using Spectro : SLE-PS-154:III      **Analyzed under** : Olympus make, Japan, B X 40 Phase Contrast Microscope

**Flow rate** : 1.0 L P M      **Specifications** : As per A I A - R T M 1  
**Sampling Duration** : 60 minutes      (IS : 11450) Membrane Filter Method

### PERMISSIBLE EXPOSURE LIMIT VALUE (PELV) AS PER MoEF & P C B = 0.1 fibre per cc of air.

Sl. No.	Date of Sampling	Location	Condition	Dust Concentration fibre /cc of air	Remarks
12	19.01.2017	<u>Static</u> Work Zone Area of the Plant	The Static Sample is collected during the production of F C C Sheets.	< 0.1 (0.032)	---

For J R LABS

Environmental Hygienist

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02.02.2017

## REPORT ON RESPIRABLE ASBESTOS FIBRE DUST CONCENTRATION

**Project** : M/s. RAMCO INDUSTRIES Ltd.,  
PLOT NO.A-1, BIADA INDUSTRIAL AREA OPP. MAHATHIN MAI TEMPLE  
AT & PO- BIHIYA, DT.- BHOJPUR, BIHAR, PIN- 802152

**Sampler used** : Samples collected by J R Labs using **Analyzed under** : Olympus make, Japan,  
Spectro : SLE-PS-154:1, B X 40 Phase Contrast  
S K C 224-PCXR8:1 & Microscope  
Envirotech - II

**Flow rate** : 1.0 L P M **Specifications** : As per A I A - R T M 1  
**Sampling Duration** : 60 minutes each (IS : 11450) Membrane  
Filter Method

### PERMISSIBLE EXPOSURE LIMIT VALUE (PELV)

AS PER MoEF & P C B = 0.1 fibre per cc of air.

Sl. No.	Date of Sampling	Location	Condition	Dust Concentration fibre /cc of air	Remarks
13	19.01.2017	<u>Static</u> Ambient Air: Stock Yard- Sheet Loading Area	The Static Sample is collected from Stock Yard - Sheet Loading Area during loading of different sizes of F C C Sheets into the Truck.	< 0.1 (0.056)	---
14	19.01.2017	<u>Static</u> Ambient Air: Near Main Gate	The Static Sample is collected from near the Main Gate. Plant was in operation.	< 0.1 (0.028)	---
15	19.01.2017	<u>Static</u> Ambient Air :- Near Canteen	The Static Sample is collected from near Canteen. Plant was in operation.	< 0.1 (0.064)	---

For J R LABS

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TC : January'17 - Stack - ERM - AFC :

02.02.2017

## REPORT ON RESPIRABLE ASBESTOS FIBRE DUST CONCENTRATION

### FIBRE D E STACK

Project : M/s. RAMCO INDUSTRIES Ltd.,  
PLOT NO.A-1, BIADA INDUSTRIAL AREA OPP. MAHATHIN MAI TEMPLE  
AT & PO-BHIYA, DT.- BHOJPUR, BIHAR, PIN- 802152

Sampler used : Envirotech VSS1 Analyzed under : Olympus make, Japan,  
B X 40 Phase Contrast  
Microscope

Flow rate : 10 L P M Specifications : As per A I A - R T M 1  
(IS:11450) & ISO:10397

Sampling Duration : 10 minutes Membrane Filter Method

### PERMISSIBLE EXPOSURE LIMIT VALUE (PELV) AS PER MoEF & PCB = 0.2 fibre per cc of air.

Date of sampling	Location	Condition	Dust concentration fibre /cc of air	Remarks
19.01.2017	Fibre D E Stack connected to B O D & Edge Runner Mill	---	< 0.1 (0.053)	---

For JR LABS

Environmental Hygienist

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LC : January '17 - Stack - ERM - AFC :

02.02.2017

## REPORT ON RESPIRABLE ASBESTOS FIBRE DUST CONCENTRATION

### FIBRE D E STACK

**Project** : M/s. RAMCO INDUSTRIES Ltd.,  
PLOT NO.A-1, BIADA INDUSTRIAL AREA OPP. MAHATHIN MAI TEMPLE  
AT & PO- BIHIYA, DT.- BHOJPUR, BIHAR, PIN- 802152

**Sampler used** : Envirotech VSS1      **Analyzed under** : Olympus make, Japan,  
B-X 40 Phase Contrast  
Microscope

**Flow rate** : 10 L P M      **Specifications** : As per A J A - R T M 1  
(IS:11450) & ISO:10397

**Sampling Duration** : 10 minutes      Membrane Filter Method

### PERMISSIBLE EXPOSURE LIMIT VALUE (PELV) AS PER MoEF & PCB = 0.2 fibre per cc of air.

Date of sampling	Location	Condition	Dust concentration fibre /cc of air	Remarks
19.01.2017	Fibre D E Stack connected to Pulverizer	---	0.103	---

For J R LABS

Environmental Hygienist

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# Ramco Industries Limited



Ref.:RIL/172/16-17/CPCB

Date: 2.5.16

Plot No. A1,  
BIADA Industrial Area,  
Opp. Mahathin Mai Temple  
Bihiya - 802152  
Dist : Bhojpur (BIHAR)  
Ph. - 06181 - 241016, 241070

To

The Member Secretary,  
Bihar State Pollution Control Board (BSPCB)  
Beltron Bhavan, Shastri Nagar,  
Patna – 800 023.

**Sub.: Yearly environmental statement of Form – V for the period of April 2015 to March 2016.**

Sir,

With reference to above we are submitting here with the environmental statement Form – V for the period of April 2015 to March 2016, for your kind information and record please.

Receipt of the same may kindly be acknowledged.

Thanks and Regards,

For, Ramco Industries Ltd.,

Pankaj Kr.

Works Manager

Encl.: 1. Form – V

2. Work place, ambient and stack monitoring report.

CC: MoEF, Ranchi.

FORM V

Environmental Statement for the financial year ending 31st March 2016.

**Part A**

- i) Name and address of the owner/occupier of the industry operation or process. P.R.VENKATRAMA RAJA  
RAMAMANDIRAM  
Tenkasi Road  
Rajapalayam – 626 117  
TAMILNADU
- ii) Industry category: Primary - (STC Code) / Secondary - RED MEDIUM
- iii) Production capacity – Units - 120000 MT / Year
- iv) Year of establishment. - 2011
- v) Date of the last environmental statement submitted - 10.5.2015

**Part B**

Water and Raw Material Consumption

i) Water consumption m3/d

Process }  
Cooling } 64.8 m3/day  
Domestic }

Process water consumption per unit of product output (MT)

Name of products	Process water consumption per unit of product output (MT)	
	During the previous financial year 14-15	During the current financial year 15-16
	(1)	(2)
( 1 ) Asbestos Cement Roofing Sheets & Accessories	NA	0.18

For RAMCO INDUSTRIES LTD.

*Parthiv*  
2.5.15  
(Work Manager)



FORM V

Environmental Statement for the financial year ending 31st March 2016.

Raw Material Consumption

Name of Raw Materials	Name of Products	Consumption of raw materials per unit of output (MT)	
		During the previous financial year 2014-15	During the current financial year 2015-16
1) CEMENT	Asbestos Cement Roofing Sheets & Accessories	0.435	0.42
2) FIBER		0.084	0.082
3) FYLASH		0.266	0.267
4) PULP		0.001	0.009

\* Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

Part C

Pollution discharged to environment/unit of output  
(Parameter as specified in the 'Consent' issued)

C-1, WATER POLLUTION

(1) Pollutants	Quantity of pollutants discharged (Kg/day)	Concentrations of pollutants in discharges (mg/lit)	Percentage of variation from prescribed standards with reasons
Water	NIL	NIL	NIL

For RAMCO INDUSTRIES LTD.

*Pankaj K*  
2.5.16  
(Work Manager)

FORM V

Environmental Statement for the financial year ending 31st March 2016.

C-2, AIR POLLUTION

(1) Stack Attached to	Quantity of pollutants discharged (Kg/day)	Concentrations of pollutants in discharges (mg/m <sup>3</sup> )			Percentage of variation from prescribed standards with reasons
		PM	SO <sub>2</sub>	NO <sub>x</sub>	
1. Asbestos Dust Collector	0.14	54.1	1.4	Not detectable	- within spec limits -
2. Cement Dust Collector	6.431		43.4	Not detectable	
3. DG Set 1010 KVA	0.520			51.6	
					No t detectable
					19.4
					227.6

Part D

Hazardous Wastes as specified under Hazardous Wastes (Management and Handling) Rules, 1989

Hazardous Waste	Total Quantity (KL)	
	During the previous financial year	During the current financial year
1) Discarded asbestos containing product	NIL	NIL
2) Used Oil	NIL	NIL
3) Residue containing oil	3.04 (KL)	3.12 (KL)

For RAMCO INDUSTRIES LTD.

*Parthajit*  
2.5.18  
(Work Manager)



**FORM V**  
Environmental Statement for the financial year ending 31st March 2016.

**Part E**

**SOLID WASTES**

	Total Quantity (MT)	
	During the previous financial year	During the current financial year
(a) From process	997.58	1046.92
(b) From pollution control facilities	Negligible	Negligible
(c) (1) Quantity recycled or re-utilized within the unit	997.58	1046.92
(2) Sold	NA	NIL
(3) Disposed	NA	NIL

**Part F**

Please specify the characterizations (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Description	Quantity (kg)	Constituent parameter with concentrations	Method of disposal
1) Broken sheets	532.8 MT	16.2	Fully recycled
2) Used Oil	3.12 KL	5.1	Fully recycled
3) Residue containing oil	NA	15.1	Fully recycled

For RAMCO INDUSTRIES LTD.

*Rajiv*  
02/03/16  
(Work Manager)

**FORM V**

Environmental Statement for the financial year ending 31st March 2016.

**Part G**

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

Description	Expenditure in lacs	
	2014-15	2015-16
1) Water pollution	82,112	1,57,621.23
2) Air pollution	88,238	1,67,496.58
3) Hazardous / Solid waste management		
4) Green belt development	39,649	97312
5) Others	2,09,999	4,22,438.46

**Part H**

Additional measures / investment proposal for environmental protection including abatement of pollution, prevention of pollution.

Description	Investment Projections	Estimated cost (lacs)	Year of Installation
1) Water pollution	-		
2) Air pollution	Dust Collector		
3) Green belt development	Landscaping, Trees plantation		
4) Others			

For RAMCO INDUSTRIES LTD.

*Pankaj*  
2015-16  
(Work Manager)



FORM V

Environmental Statement for the financial year ending 31st March 2016.

Part I

Any other particulars for improving the quality of the environment.

For RAMCO INDUSTRIES LTD.

*Pankaj Kumar*  
(Work Manager) 02-05-15