### Ramco Industries Limited

Ref.:RIL/BIH/423/18-19/MoEF

Date: 26.10.2018

To

The Director,
Ministry of Env. and Forest, Climate Change
Ranchi Regional Office (ECZ),
Bungalow No. A-2, Shyamali Colony,
Ranchi-834 001

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Ghat 1600 266 80500



Plot No. A1, BIADA Industrial Area, Opp. Mahathin Mai Temple Bihiya - 802152

Dist : Bhojpur (BIHAR) Ph. - 06181 - 241016, 24107(

Sub: Half yearly compliance report for the period of April-2018 to Sep-2018.

Sir,

With reference to above we are submitting here with the half yearly compliance report of the Environment clearance condition including result of the monitored data for your kind information and record please.

Receipt of the same may kindly be acknowledged.

Yours Faithfully,

For, Ramco Industries Limited,

Pankaj Kumar

Works Manager

CC: Monitoring Cell, MoEFCC, Delhi

CPCB, Calcutta.

BSPCB, Patna

File copy.

#### Encl:

- 1. Half Yearly compliance report.
- 2. Work place, Ambient & stack monitoring report, Quarterly.
- 3. Stack monitoring report, Monthly.
- 4. Ambient report weekly.
- 5. Green belt development of our site.
- 6. Medical Checkup & associated Picture.
- 7. Production Details.



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COUNTER NO:1,29/10/2018,13:24

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Provides No.: TO MAY TO 15125

TO THE PROVIDENCE NEW SELFS

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TO THE PARTY WITH

Chennai - 600 004.

Regd. Office: 47, P.S.K. Nagar, Rajapalayam - 626 Head Office: "Auras Corporate Centre", VI Floor, 98 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 925 sq. m.

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 includes;

We have complied with the said condition. Proper housekeeping facility with vacuum cleaning of the floor is provided in the plant area. We have a complete closed circuit manufacturing process with enclosed belt conveyer. The asbestos bags are being brought through conveyor to BOD.

- 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. Area and stacks shall be undertaken by the project proponents, in addition, the Asbestos fibre count in the work zone area shall be monitor by an independent monitoring agency like;NIOS-ITRC/NCB or any other approved agency and report submitted to the Ministry's Regional Office at Bhubaneswar SPCB and CPCB.

We have our own laboratory set up for workplace. We are sending fibre count slide to the R & D center, Chennai with the Phase contrast Microscope Olympus BX-50, every month wise.

In addition to that the Asbestos fibre count in the work zone and the stack are tested by a competent & approved third party monitoring agency (by J R Lab). The details of tested datas at our site by the third party is enclosed in **ANNEXURE –1** 

ix .Total water requirement from ground water shall not exceed 80 cum/day . All the recommendations of the State Ground Water Deptt.,Govt. of Bihar shall be implemented in time bound manner.

We have a pond of holding capacity 2070 m3 for rain water harvesting. And we have three recharge pit in different angles to recharge ground water with rain. Daily monitoring is done for consumption of water and consumed as per limit 80cum/day.

x. After five years operation of plant, no ground water shall be used and only rain water shall be used.

At present we are taking water from our pond and ground. We applied to the MoEF for giving the permission to use continue the ground water. Proper inspection and all formalities done, now in waiting for final order in this regard.

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.

We have complied the said condition. There is no discharge of process effluent and entire process water is recycled back into the system & It is ensured zero discharge. All waste water is used for green belt development through pond.

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. Process sludge shall be 100% recycled and reuse 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

We have complied with the said condition. The entire Solid waste generated including process rejects, dust from bag filters and empty asbestos bags are recycled back in the manufacturing process.

For RAMCO INDUSTRIES LTD.

Parkyth

### COMPLIANCE STATUS OF MOFF CONDITIONS

Letter No F.No.J-11011/17/2010-IA II (I)

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 fiber and cement shall be transported in closed containers. Asbestos fiber shall be brought in palletized form in impermeable Bags and under compress condition.	I IS-11450-For determination of airborne asbestos fibro concentration in work environment. IS-11451-For Safety and health requirements.		
ii. Only Chrysotile white asbestos fiber 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.		
lii.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 de bagged 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 brining cement in closed tankers, fly ash covered trucks and asbestos in impervious bags opening inside a closed mixer. Dust collectors shall be provided to Fibre mill, Bag opening device (BOD), Cement & Flyash silos to control emissions. Bag filters followed by wet washer shall be provided at automatic bag opening machine, bag shredder, fiber mill and to cement silo to collect the dust and recycle it into the process fugitive emissions generated from hopper of Jaw Crusher & Pulverizer shall be channelized through hood with proper suction arrangement, Bag filter and stack.	Cement & Flyash are bought in closed Bulker.  Fibre bags are opened in fully automatic closed circuit area – called BOD (Bag Opening Device).  Duct collectors with cyclone type are used in cement, flyash, fibre silo.  In above circuit and pulverized the positive fugitive emission are recycled and used in RM.  Heavy duty vacuum cleaner is being used in Fibre mill area.  Cement and fly ash are storage in separate silos.		
v. The company shall comply with total dust emission limit of 2mg/Nm3 as notified 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 0.1 fiber/cc.	We comply with the stated emission standards. The details of Stack Monitoring record and Work place Fibre counting record is attached in ANNEXURE -1.		

For RAMCO INDUSTRIES LTD.

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can not be further recycled due to contamination of iron dust shall be stored in SDPE lined secured landfill. The disposal facilities for asbestos waste shall be in accordance with the Bureau of Indian Standard Code. xiii. The cut and damaged fibre bags shall ensured that we get fibre bags with intact. immediately be repaired. Empty fibre bags will be Damages if any, would immediately be sealed before shredded into fine particles in a bag shredder and unloading at our site. There is no manual handling recycled into the process, piling of AC sheets shall be opening of the fibre bags. The fibre bags are fed into a done in wet condition only. Bag opening device (BOD) wherein bags are automatically shredded. xiv. The company shall obtain a certificate from the We receive certificates from the suppliers for every lot . supplier of chrysotile fibre that it does not contain Chemical analysis report of chrysotile fibre from any toxic or trace metals. A copy of certificate shall be supplier has been sent to MoEF. submitted to the Ministry of Environment and forest. A copy of certificate is attached for your reference . ANNEXURE -3 xv. Regular medical examination of the workers and Medical examination of employees carried out by health monitoring of all the employees shall be competent occupational health physician periodically carried out and if cases of asbestos are detected, for Sputum test, Lungs Function Test (PFT), bloat tests necessary compensation shall be arranged under the for TLC,DLC,ESR, Hb , Chest X Ray and general medical existing laws. A competent occupations health check up. physician shall be appointed to carry out medical surveillance. Occupational health of all the workers Pre employment tests are carried out as per factory act shall be monitored for lung function test, chest x-ray, and all records pertaining to health checkup are sputum for acid-fast-bacilli (AFC) and asbestos maintained as per IS: 11451 and factory act. body(AB) ,urine for sugar and albumen, bloat tests for TLC,DLC,ESR, Hb and records maintained for at •The directive of Supreme court is followed strictly . All least 40 years from the beginning of the employment records are well maintained and available in office. or 15 years after the retirement or cessation of employment whichever is later. Occupational health A sample of medical report is attached for your surveillance shall be carried out as per the directives reference. ANNEXURE -4 of the Hon'ble supreme court. To educate the workers, all the work places We have provided display signs of Asbestos fibre for where asbestos dust may cause hazard shall be identifying the hazards and associated health effects, at clearly indicated as a dust exposure area through the various locations inside the factory. use of display signs which identifies the hazard and Picture attached for your reference. ANNEXURE -5 the associated health effects. xvii. The company shall also undertake rain water We made a pond with a size of 2070 m3 for a depth of harvesting measures and plan of action shall be 5 m for rain water harvesting system. Apart from these, submitted to the Ministry of Environment and forest we made three rain water recharge pit in tri angle within three months. position. xviii. All the commitments made to the public during Public hearing points are as follows: the public hearing / public consultation meeting held 1. Controlling emission from chimney - it is well  $22^{nd}$ Nov., 2010 shall be satisfactorily controlled and time to time checked by third party. implemented and a separate budget for There is no coal based activity. implementing the same should be allocated and 2. Implementing rain water harvesting: Rain water information submitted to the Ministry's Regional harvesting pond and recharge pit are made available. Office at Bhubneswar. xix. Green belt shall be developed in at least 33% of effective green belt area is developed in plant area as per the CPCB guidelines in consultation consultation with DFO as per CPCB guidelines. Our with DFO. developed green belt area is 8 acres which is 40% of

For RAMCO INDUSTRIES LTD.

(AUTHORISED SIGNATORY)

	our total land area. The details of green belt development of our site are attached in ANNEXURE – 6.
xx. At least 5% of the total cost of the projectiould be ear marked towards the corporate social responsibility and item wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhubneswar. Implementation of such programme should be ensured accordingly in a time bound manner.	Under Corporate Social Responsibilities an amount of Rs.4264552 expended till 31 <sup>st</sup> September-2018.
xxi. The company shall provide housing for construction labour within the 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 Bihar Pollution control board and the state government.	We strictly adhere to the stipulations made by the Bihar Pollution Control Board and the State Government.
ii. No further expansion/modifications in the plant shall be carried out with out 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 gaseous emissions from various process unit shall conform to the load / mass based standards notified by this Ministry on 19 <sup>th</sup> May, 1993 and standards prescribed from time to time. The state board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.	Our Gaseous emission details  Fibre dust emission fibre stack is 1.60 mg/Nm³ against 2.0 mg/Nm³  SPM in cement stack is 41.6 μg/m³ against 100 μg/m³  SPM in DG set 48.4 μg/m³ against 75 μg/m³
iv. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM 10, SO2 and NOx are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including it's Regional Office at Bhubneswar and the SPCB /CPCB once in six months.	The ambient air quality at four places are monitored and coplied with the stated condition.  The report of Ambient Air Quality sampling is attached for your reference.  Annexure – 2
v. Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 <sup>th</sup> May, 1993 and 31 <sup>st</sup> Dec., 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	All our process water is 100% reused in our manufacturing process .
vi. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including	Noise levels in around the Plant area is well under the limit and it is measured by third party agency — $M/s$ . Shiva Test House (Patna) quarterly at different five

For RAMCO INDUSTRIES LTD.

(AUTHORISED SIGNATORY)

acoustic hoods, silencers, ericlosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz 75 dBA (daytime) and 70 dBA (nighttime).

vii. Occupational health surveillance of the workers

places in the factory premises as well as shop floor.
A report is enclosed for your reference ANNEXURE -2

vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

All first aid facilities are available with all resources. One doctor and compounder is available. Half yearly health check up through the third party — M/s. Ria Diagnostic, Bangalore is done.

viii. The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.

Diagnostic, Bangalore is done.

We have complied with the said condition.

Rain water harvesting pond of size 23x18x5 meter has

ix. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report further, the company must undertake socio economic development activities in the surrounding villages like community development programmes , educational programmes , drinking water supply and health care etc.

- 1. **Rs.23541** (35 Asbestos Sheets donation Ara Police station )CSR Activity at on Sep-2018.
- 2. **Rs.4000** Smoke Fogging in Bihiya township for the eradication of mosquitoes
- 3. Park Development in Bihiya (In Progress Rs.80000 Approx) Likely complete.
- 4. 100 Nos MS drum donation to Gram panchyat Bihiya for Dustbin purpose.

x.Requiste amount shall be earmarked towards capital cost and recurring cost / annum for environment pollution control measures to implement the conditions stipulated by the Ministry of environment and forest as well as the State Government. An implementation schedule for implementing all the condition stipulated herein shall be submitted to the Regional Office of the Ministry at Bhubaneswar. The funds so provided shall not be diverted for any other purchase.

Environmental Expenses details are

Capital Expenses :-

been developed.

April 2018 to Sep- 2018 -Rs.00.00

Recurring Expenses :-

April-2018 to Sep- 2018 - Rs.734148.00

xi. A copy of clearance letter shall be sent by the proponent to concerned Panchayat , Zila Parishad / Municipal Corporation , Urban Local Body and the Local NGO , If any , from whom suggestions/ Representations . If any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.

We have complied with the said condition.

xii. The project proponent shall upload the status of compliance of the stipulated environment clearance condition, including results of monitor data on your website and shall update the same periodically. It shall simultaneously be sent to the Regional office of the MOEF at Bhubaneswar. The respective Zonal office of CPCB and the SPCB. The criteria pollutant levels namely: PM10, SO2, NOx, (ambient levels as well as stack emission) or critical sectoral parameters, indicated for the projects shall be monitored and

The status of complains of the environment clearance condition along with all data has been being uploaded on the website and the same is being send to MoEF Ranchi, CPCB Calcutta, Monitoring cell MoEF Delhi and BSPCB Patna.

The relevant display board for critical parameters has been displayed near the main gate in the public domain.

For RAMCO INDUSTRIES LTD.

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displayed at a convenient location near the main gate	
of the company in the public domain.	
and the same and t	
xiii. The project proponent shall also submit Six	The monitoring data has already been sent to the office
Monthly report on the status of the compliance of	along with the compliance report for the period of Oct-
the stipulated environmental condition including	2017 to March-2018.
results of monitored data (both in hard copies as well	
as by e-mail) to the regional office of MOEF, the	
respective Zonal office of CPCB and the SPCB. The	
regional office of this ministry at Bhubaneswar	
/CPCB/SPCB shall monitor the stipulate condition.	
xiv. The environmental statement for each financial	
voor anding 21st Marsh in 5	Already sent for the financial year 2017-18 . A receipt of
year ending 31 <sup>st</sup> March in Formed – V as is mandated	BSPCB is attached for your reference . ANNEXURE –7
to be submitted by the project proponent to the	
concerned State Pollution Control Board as	
prescribed under the Environment (Protection) Rules,	
1986, as amended subsequently, shall also be put on	
the Website of the Company along with the status of	
compliance of environmental condition and shall also	
be sent to the respective Regional office of MOEF at	
Bhubaneswar by Email.	
xv. The project proponent shall inform the public that	It is compiled and information given trough newspaper
the project has been accorded environmental	in the Vernacular language of the locality i.e. in Hindi.
clearance by the Ministry and copies of the clearance	anguage of the locality her in thinks.
letter are available with SPCB and may also be seen at	
the Website of the Ministry of Environment and	
Forests at http://envfor.nic.in This shall be advertised	
within seven days from the date of the issue of the	
clearance letter , at least in two Local News Papers	
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 Bhubaneswar.	
xvi. Project authorities shall inform the regional office	Complied & it was informed.
as well as the Ministry, the date of financial closer	
and final approval of the project by the concerned	
authorities and the date of commencing the land	
development work.	

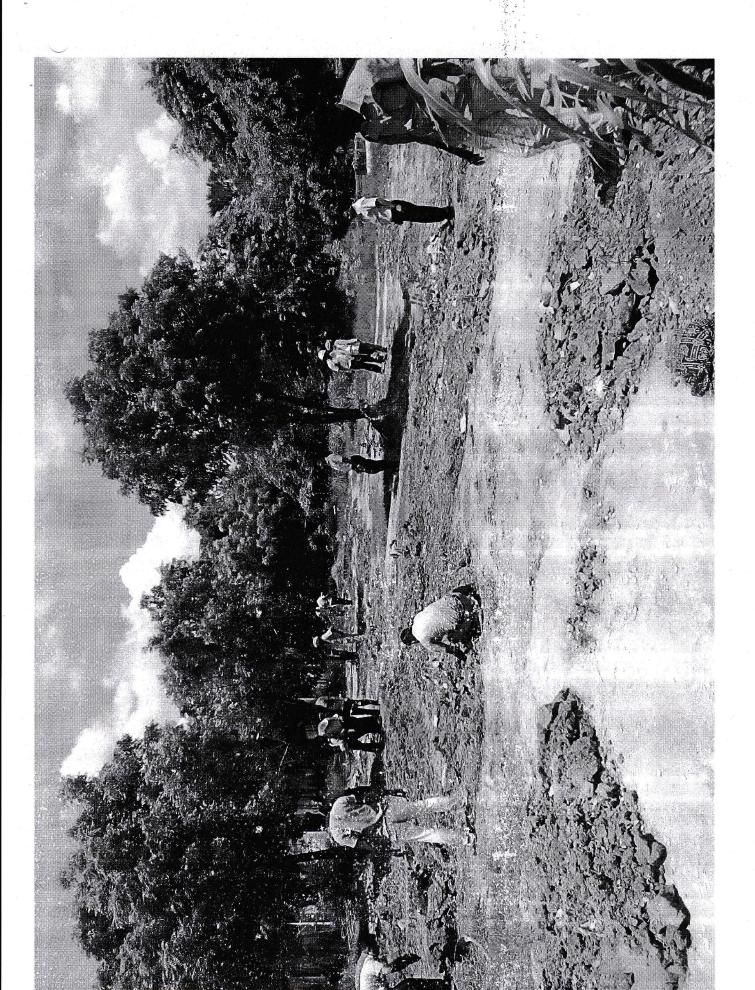
FOR RAMCO INDUSTRIES LTD.

(AUTHORISED SIGNATORY)

## Trees details in Bihiya Plant are given below:

Sr. No.	Name of Trees	Qty. in Nos.
1.	Neem Tree	431
1. 2.	Jack fruit Tree	52
2. 3.	Mango Tree	211
3. 4.	Semar Jiren Tree	98
5.	Semar Tree	252
6.	Amla Tree	40
7.	Guava Tree	131
8.	Pinut Tree	20
9.	Ashoka Tree	67
10.	Bakin Tree	265
11.	Sagwan Tree	59
12.	Jamun (Syzgium Cumini) Tree	148
13.	Lichee Tree	45
14.	Black Sheesham Tree	294
15.	Sheesham Tree	78
16.	Kadamb Tree •	210
17.	Badahal Tree	52
18.	Bel (Shree phal) Tree	6
19.	Banyan Tree	48
20.	Peepal Tree	59
20.	Pakad Tree	70
22.	Gular Tree	27
23.	Gulmohor Tree	111
24.	Cheta Chap Tree (Forest tree)	185
	Arjun Tree (Forest tree)	78
25. 26.	Brad Tree (Forest tree)	209
	Local Tree	310
Total	numbers of Trees	3556

FOR RANCO INDUSTRIES LTD.



### **Ramco Industries Limited**

Ref.: RIL/BIH/ 03 /18-19/BSPCB

Date:-13.04.2018

To
The Member Secretary,
BIHAR STATE POLLUTION CONTROL BOARD
Parivesh Bhavan
NSB-02, Patliputra Industrial Area,
Patna - 800 010



Plot No. A1, BIADA Industrial Area, Opp. Mahathin Mai Temple Bihiya - 802152

Dist: Bhojpur (BIHAR)

Ph. - 06181 - 241016, 24107(

Sub: Yearly Environmental Statement of Form-V for the Period of April-2017 to March-2018.

Sir,

With reference to above subject, we are submitting here with the environmental statement form-V for the period of April-2017 to March-2018, for your kind information and record please.

Receipt of the same may kindly be acknowledged.

Thanking you, Yours faithfully,

For, Ramco Industries Limited,

Pankaj Kumar

(Works Manager)

Encl:

1.Form-V

पाटलीपुत्रा डॉल्योगिक क्षेत्र, पटना-13

1 3 APR 2018

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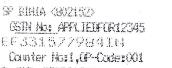
22934

विकार राज्य प्रदुषण नियंत्रण पार्वद

2. Stack monitoring, water and ambient air analysis report.

3. Work zone noise level & fibre count report.

CC: MoEF, Ranchi File copy. «Track on L



To: WE DISCOURT,
RANCHI, PIN: 834XXI

From:THE FAMOUR HAVE AND ALGORITHM OF THE COURT OF THE CO

Regd. Office: 47, P.S.K. Nagar, Rajapalayam - 626 108

# **Production Details**

Month	Total Qty In Mt.
Apr-18	8003
May-18	8015
Jun-18	8700
Jul-18	10001
Aug-18	10070
Sep-18	9722
Total Production	54511



### **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 House

06.10.2018

### 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. BHOPUR, BIHAR PIN 802152

Sampler used

: Samples collected by J R Labs using Analyzed under : Olympus make, Japan,

Spectro: SLE-PS-154:III,

B X 40 Phase Contrast

SKC AirLite & SKC 224-PCXR8:II

60 minutes each

Microscope

Flow rate

**Sampling Duration** 

1.0 L P M

**Specifications** 

: As per AIA - RTM1

(IS: 11450) Membrane Filter Method

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

	P. O. O. Will				
Sl. No.	Date of Sampling	Location	Condition •	Dust Concentration fibre/cc of air	Remarks
1	24.09.2018	Static 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	24.09.2018	Personal BOD-ER Mill	The worker carrying the Sampler was engaged in feeding of fibre bags through the Roller Conveyor. Fibre bags are shifted through conveyor from Fibre Godown to B O D. E R Mill and Dust Collector in operation.	< 0.1 (0.064)	
3	24.09.2018	Static 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 (0.048)	

For JR LABS

Research Fibre Analyst

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



**3**: 040-42300546, 27230750, 27230966

Fax: 040-23775321 E-mail: jrlabs@gmail.com jrlabs@rediffmail.com 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

06.10.2018

## 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,

S K C Side Kick 51 Ex,

B X 40 Phase Contrast

Spectro: SLE-PS-154:I &

Microscope

Envirotech – II

Flow rate

: 1.0 L P M

**Specifications** 

: As per AIA - RTM1

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.

	of the per ce of an.				
Sl. No.	Date of Sampling	Location	Condition	Dust Concentration fibre /cc of air	Remarks
4	24.09.2018	Personal 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 (0.068)	
5	24.09.2018	Static Stripping	The Static sample is collected during the stripping of F C C sheets. Plant was in production.	< 0.1 (0.040)	
6	24.09.2018	Personal  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 (0.036)	

For JR LABS

Research Fibre Analyst

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



🕿 : 040-42300546, 27230750, 27230966

Fax: 040-23775321

E-mail: jrlabs@gmail.com jrlabs@rediffmail.com



### **ENVIRONMENT & OCCUPATIONAL HEALTH SER/ICES**

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

06.10.2018

### 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,

B X 40 Phase Contrast

SKC 224-PCXR8:I, Casella T13180 – I & Casella T13180 – II

Microscope

Flow rate

: 1.0 L P M

**Specifications** 

: As per AIA-RTM1

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
7	24.09.2018	Personal Salvaging Section	The worker carrying the Sampler was reclaiming the sheets. F C C rejected sheets were getting reclaimed. Wet process.	< 0.1 (0.080)	<u></u>
8	24.09.2018	Personal Ball Mill	The worker carrying the Sampler was engaged in operation of Ball Mill. Wet process.	< 0.1 (0.024)	
9	24.09.2018	Personal Pulverizer	The worker carrying the Sampler was feeding broken F C C sheets through the chute of Pulverizer.	< 0.1 (0.096)	

For JR LABS

Research Fibre Analyst



jrlabs@rediffmail.com



## **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.

06.10.2018

### 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 &

Analyzed under:

Olympus make, Japan,

B X 40 Phase Contrast

Microscope

Flow rate

: 1.0 L P M

Sampling Duration: 60 minutes each

SK C AirLite

**Specifications** 

As per AIA - RTM1

(IS:

(IS: 11450) Membrane

Filter Method

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

S1. No.	Date of Sampling	Location	Condition	Dust Concentration fibre /cc of air	Remarks
10	24.09.2018	Personal 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 (0.092)	
11	24.09.2018	Personal 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 (0.028)	

For J R LABS

Sommo.

Research Fibre Analyst

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



**\$\times\$**: 040-42300546, 27230750, 27230966

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## **ENVIRONMENT & OCCUPATIONAL HEALTH SERVICES**

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06.10.2018

### 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:II

Analyzed under:

Olympus make, Japan,

B X 40 Phase Contrast

Microscope

Flow rate

1.0 L P M

**Specifications** 

As per AIA - RTM1

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	24.09.2018	Static Work Zone Area of the Plant	The Static sample is collected during the production of F C C sheets.	< 0.1 (0.036)	<del></del>

For J R LABS

Research Fibre Analyst

# B-305 & 309, Vasudha Apartments, Quthubullapur Road, New Jeedimetla, HYDERABAD - 500 067,



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# IR 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 ..... re for Occupational Health.

06.10.2018

## 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,

B X 40 Phase Contrast

Microscope

Flow rate

Sampling Duration:

1.0 L P M

Envirotech – III,

60 minutes each

Casella AFC 123 &

S K C 224 - PCXR8: II

**Specifications** 

As per AIA - RTM1

(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	24.09.2018	Static 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 (0.052)	
14	24.09.2018	Static Ambient Air: Near Main Gate	The Static sample is collected from near the Main Gate. Plant was in operation.	< 0.1 (0.072)	
15	24.09.2018	Static Ambient Air :- Near Canteen	The Static sample is collected from near Canteen. Plant was in operation.	< 0.1 (0.056)	

For JR LABS

Research Fibre Analyst

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



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# IR 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

TC: September'18 - Stack - ERM - AFC:

06.10.2018

### REPORT ON RESPIRABLE ASBESTOS FIBRE DUST CONCENTRATION

### FIBRE DE 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 I A - R T M 1

(IS:11450) & ISO:10397 Membrane Filter Method

Sampling Duration:

10 minutes

### 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
24.09.2018	Fibre D E Stack connected to B O D & Edge Runner Mill		0.014	

For JR LABS

Research Fibre Analyst



jrlabs@rediffmail.com



### **ENVIRONMENT & OCCUPATIONAL HEALTH SERVICES**

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

T C: September'18 - Stack - Pulverizer - A F C:

06.10.2018

### REPORT ON RESPIRABLE ASBESTOS FIBRE DUST CONCENTRATION

#### FIBRE DE 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

24.09.2018

: 10 L P M

Fibre D E Stack

connected to

Pulverizer

**Specifications** 

: As per A I A - R T M 1

(IS:11450) & ISO:10397 Membrane Filter Method

Sampling Duration: 10 minutes

PERMISSIBLE EXPOSURE LIMIT VALUE (PELV)

#### AS PER MoEF & P C B = 0.2 fibre per cc of air. Dust Date of Remarks Condition concentration Location sampling fibre /cc of air

For J R LABS

0.168

Research Fibre Analyst

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# IR 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.

15.06.2018

## 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,

Casella AFC 123, SKC 224-PCXR8:I &

B X 40 Phase Contrast

Casella T13180 - II

Microscope

Flow rate

1.0 L P M

**Specifications** 

: As per AIA-RTM1

**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.

			of the per cc	or air.	
Sl. No.	r8		. Condition	Dust Concentration fibre/cc of air	Remarks
	06.06.2018	Static Fibre Godown	Fibre bags were stored properly. Torn bags are sealed. Different Grades of Fibre bags are stored in the Fibre Godown.	< 0.1 (0.040)	
	06.06.2018	Personal BOD-ER Mill	The worker carrying the Sampler was engaged in feeding of fibre bags through the Roller Conveyor. Fibre bags are shifted through conveyor from Fibre Godown to B O D. E R Mill and Dust Collector in operation.	< 0.1 (0.092)	
		Static  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 (0.088)	

For JR LABS

Research Fibre Analyst

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# IR 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.

15.06.2018

## 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

Olympus make, Japan,

Analyzed under: SKC AirLite,

B X 40 Phase Contrast

Microscope

Flow rate

: 1.0 L P M

**Specifications** 

: As per AIA - RTM1

Sampling Duration: 60 minutes each

Casella T13180 - I &

SKC 224-PCXR8:II

(IS: 11450) Membrane

Filter Method

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

SI. No.	Date of Sampling	Location	Condition	Dust Concentration fibre /cc of air	Remarks
4	06.06.2018	Personal 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 (0.032)	
5	06.06.2018	Static Stripping	The Static sample is collected during the stripping of F C C sheets. Plant was in production.	< 0.1 (0.084)	
6	06.06.2018	Personal  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 JR LABS

Research Fibre Analyst

# B-305 & 309, Vasudha Apartments, Quthubullapur Road, New Jeedimetla, HYDERABAD - 500 067, TELANGANA, INDIA



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#### **ENVIRONMENT & OCCUPATIONAL HEALTH SERVICES**

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15.06.2018

### 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,

B X 40 Phase Contrast

Mi

Microscope

Flow rate

1.0 L P M

Envirotech - I,

S K C 224-PCXR8:I &

S K C Side Kick 51Ex

**Specifications** 

: As per AIA - RTM1

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	
7	Salvaging Section was reclaiming rejected sheets		The worker carrying the Sampler was reclaiming the sheets. F C C rejected sheets were getting reclaimed. Wet process.	< 0.1 (0.072)	
8	06.06.2018	Personal Ball Mill	The worker carrying the Sampler was engaged in operation of Ball Mill. Wet process.	< 0.1 (0.092)	
9	06.06.2018	<u>Personal</u> Pulverizer	The worker carrying the Sampler was feeding broken F C C sheets through the chute of Pulverizer.	< 0.1 (0.080)	

For JR LABS

Bassarah Filos

Research Fibre Analyst

# B-305 & 309, Vasudha Apartments, Quthubullapur Road, New Jeedimetla,

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ENVIRONMENT & OCCUPATIONAL HEALTH SERVICES

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15.06.2018

### 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: Olympu

Olympus make, Japan,

B X 40 Phase Contrast

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SKC 224-PCXR8:II &

Microscope

Flow rate

: 1.0 L P M

Sampling Duration: 60 minutes each

SKC AirLite

**Specifications** 

As per AIA-RTM1

(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
10	06.06.2018	Personal 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 (0.056)	
11	06.06.2018	Personal 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 (0.060)	

For JR LABS

Research Fibre Analyst

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



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15.06.2018

### 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:I

Analyzed under:

Olympus make, Japan,

B X 40 Phase Contrast

Microscope

Flow rate

0

Sampling Duration:

1.0 L P M

60 minutes

**Specifications** 

: As per AIA - RTM1

(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	06.06.2018	Static Work Zone Area of the Plant	The Static sample is collected during the production of F C C sheets.	< 0.1 (0.068)	<del></del>

For JR LABS

Research Fibre Analyst

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



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**ENVIRONMENT & OCCUPATIONAL HEALTH SERVICES** 

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15.06.2018

## 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:II,

Analyzed under: Olympus

Olympus make, Japan, B X 40 Phase Contrast

Spectro: SLE-PS-154:III &

Microscope

Envirotech - II

Flow rate

: 1.0 LPM

Sampling Duration: 60 minutes each

Specifications

As per AIA - RTM1

(IS: 11450) Membrane

Filter Method

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

		of there per ce of air.						
Sl. No	Sampling		Condition	Dust Concentration fibre /cc of air	Remarks			
13	06.06.2018	Static 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 (0.040)				
14	06.06.2018	Static Ambient Air: Near Main Gate	The Static sample is collected from near the Main Gate. Plant was in operation.	< 0.1 (0.072)				
15	06.06.2018	Static Ambient Air :- Near Canteen	The Static sample is collected from near Canteen. Plant was in operation.	< 0.1 (0.020)	7			

For JR LABS

Research Fibre Analyst

# B-305 & 309, Vasudha Apartments, Quthubullapur Road, New Jeedimetla, HYDERABAD - 500 067, TELANGANA, INDIA



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# RLABS

### **ENVIRONMENT & OCCUPATIONAL HEALTH SERVICES**

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

TC: June'18 - Stack - ERM - AFC:

15.06.2018

### REPORT ON RESPIRABLE ASBESTOS FIBRE DUST CONCENTRATION

FIBRE DE 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 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
06.06.2018	Fibre D E Stack connected to B O D & Edge Runner Mill		0.067	

For JR LABS

Research Fibre Analyst





# IR LABS

#### ENVIRONMENT & OCCUPATIONAL HEALTH SERVICES

Fizzed 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.

T C: June'18 - Stack - Pulverizer - A F C:

15.06.2017

### REPORT ON RESPIRABLE ASBESTOS FIBRE DUST CONCENTRATION

#### FIBRE DE 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 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
06.06.2018	Fibre D E Stack connected to Pulverizer		0.113	<del></del>

For JR LABS

Research Fibre Analyst

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



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regd. Office: 8D Extn.; (Chatterjee Lane) Cardanibagh

7 \TNA - 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

**OHSAS** Certified

E.mail.: sthpatna1@yahoo.co.in

RECOGNISED AS ENVIRONMENTAL LABORATORY BY CENTRAL GOVT. UNDER ENVIRONMENT (PROTECTION) ACT 1986), BY DEPTT. OF INDUSTRY, FORESTS & ENVIRONMENT, GOVT. OF BIHAR AND BIHAR STATE POLLUTION CONTROL BOARD & ACCREDITED BY NABL TEST REPORT

Name and address of the Customer			RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152		
[b] Details of Sample			nitoring of Stack Emi		
[c] Sample Collected by	* * * * * * * * * * * * * * * * * * * *		IVA TEST HOUSE		
[d] Sampling Location			mises of Ramco Bihi		
[e] Method of Sampling			11255 (Part-1,2,3 &	7)	
[f] Sampling Environmental Condition			np. (°C)   32	Humidity (%) 76	
g] Details of Sample Container (No. &	Type of Container)	Thi	mble & Glass Impir	iger	
[h] Sample Quantity		11	<u> </u>	<u> </u>	
ij Items required to be tested jj Whether any specific Method of Te	of boo boon	As	per contract		
<ul><li>[j] Whether any specific Method of Te suggested by the customer</li></ul>	st nas been	No			
[k] Date of receiving the sample in Lab	oratory	01.	01.10.18		
I Analysis Start Date / Analysis Com		01.	10.18 / 04.10.18		
Parameters	Method of Te	est		Results	
Stack Connected to			F	ibre Circuit	
2. Stack No.	The same			1	
3. Height of Stack (as reported)			. T	30.0 m.	
4. Dia of Stack at Top (as reported)				0.4 m.	
5. Draft				Natural	
6. Material of Construction			N	M.S.	
7. Ambient Temperature, <sup>0</sup> C			9 W	32.0	
B. Flue Gas Temperature, <sup>0</sup> C				49.0	
9. Velocity, m/sec.	IS 11255 (Par	t-3)	5.9		
10. Volumetric Flow Rate ( NM³/hr.)		1.	υ - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	2468.9	
11. Sampling Point			9 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	10 m.	
			Concentration (mg/NM³)	Limit as per E (P) Rules Schedule I	
12. Particulate Matter (P.M.)	IS 11255 (Part	l-1)	1.6	2.0 mg / NM <sup>3</sup>	
3. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part	l-2)	Not Detectable		
		-7)			



Authorized Signatory Quality Manager / Dy. Quality Manager

This report applies only to sample tested as above.

Total Liability of our Laboratory is limited to invoiced amount.

Test Report endorsed only the tests and not the product certificate.

Test Report can not be reproduced partially or full for legal/court purpose without written permission of the Laboratory.

Extn.; (Chatterjee Lane) *s*ardanibagh PATNA - 800 001 (Bihar)



Laboratory Address:-01st Floor, Rajhans Niketan. NEAR CANAL, RUKUNPURA, BAILEY ROAD, PATNA - 800 014 (BIHAR)

### SHIVA TEST HOUSE

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ISO 18001:2007 **OHSAS** Certified

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#### TEST REPORT

[a] Name and address of the Customer		Plo Bih	MCO INDUSTRIES t No. A 1, BIADA li iya pipur – 802 152		
[b] Details of Sample			itoring of Stack Emis	sion	1 5.0 8
[c] Sample Collected by			VA TEST HOUSE		
[d] Sampling Location	S		nises of Ramco Bihiy		
[e] Method of Sampling		IS 1	1255 (Part-1,2,3 &	7)	4
f] Sampling Environmental Condition		Ten	np. (°C) 32	Humidity (%)	76
g] Details of Sample Container (No. & Typ	e of Container)		nble & Glass Impin	ger	
h] Sample Quantity	a de la companya de l	2		8	
<ul><li>Items required to be tested</li><li>Whether any specific Method of Test ha</li></ul>		As p	er contract		
suggested by the customer	s been	No			
k] Date of receiving the sample in Laborate	orv	01 1	0.18		
Analysis Start Date / Analysis Completic	n Date		0.18/04.10.18		
Parameters	Method of T		T	Results	1
. Stack Connected to	•	- S	Cemen	t / Fly Ash Circuit	
Stack No.				II ·	
. Height of Stack (as reported)				15.0 m.	
. Dia of Stack at Top (as reported)				0.4 m.	
. Draft				Natural	
Material of Construction				M.S.	
Ambient Temperature, <sup>0</sup> C				32.0	
. Flue Gas Temperature, <sup>0</sup> C	H			54.0	
Velocity, m/sec.	IS 11255 (Par	t-3)	5.6		
0. Volumetric Flow Rate ( NM³/hr.)		4		2307.5	
Sampling Point				5 m.	
	8	١.	Concentration (mg/NM³)	Limit as per Rules Schedi	E (P)
2. Particulate Matter (P.M.)	IS 11255 (Par	t-1)	41.6	100.00 mg/	
3. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Par	-2)	Not Detectable		
<ol> <li>Oxides of Nitrogen (NO<sub>2</sub>)</li> </ol>	IS 11255 (Par	7)	12.4		



Authorized Signatory Quality Manager / Dy. Quality Manager

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n.; (Chatterjee Lane) iibagh  $A - 800\ 001\ (Bihar)$ 



Laboratory Address :-01st Floor, Rajhans Niketan, NEAR CANAL, RUKUNPURA, BAILEY ROAD, PATNA - 800 014 (BIHAR)

### SHIVA TEST HOUSE

Tel.: 0612 - 22+1000/ 2240752; TeleFax: 0612 - 2590705 E.mail.: sthpatna1@yahoo.co.in



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[a] Name and address of the Gustomer		Plo Bih	MCO INDUSTRIES t No. A 1, BIADA I iya pipur 802 152	
[b] Details of Sample			nitoring of Stack Emis	ssion
[c] Sample Collected by			VA TEST HOUSE	
[d] Sampling Location		Pre	mises of Ramco Bihi	ya
[e] Method of Sampling		IS 1	1255 (Part-1,2,3 &	7)
f] Sampling Environmental Condition			np. (°C)   32   1	Humidity (%) 76
g] Details of Sample Container (No. & 7	Type of Container)	Thir	nble & Glass Impin	ger
h] Sample Quantity ii] Items required to be tested		2		
<ul> <li>iii items required to be tested</li> <li>ii) Whether any specific Method of Test</li> </ul>	t has been	As	per contract	
suggested by the customer	i ilas Deeli	No		
[k] Date of receiving the sample in Labo	pratory	01.50.18		
<ul> <li>Analysis Start Date / Analysis Compl</li> </ul>	letion Date	01.10.18 / 04.10.18		
Parameters	Method of T	est		Results
Stack Connected to			Pu	Iveriser Plant
2. Stack No.				III
B. Height of Stack (as reported)				15.0 m.
Dia of Stack at Top (as reported)				0.15 m.
5. Draft				Natural
6. Material of Construction				M.S.
. Ambient Temperature, <sup>0</sup> C				32.0
B. Flue Gas Temperature, <sup>0</sup> C				47.0
. Velocity, m/sec.	IS 11255 (Par	t-3)	5.3	
0. Volumetric Flow Rate ( NM <sup>3</sup> /hr.)		,		313.8
Sampling Point				5 m.
			Concentration ( mg / NM³)	Limit as per E (P) Rules Schedule I
	IS 11255 (Par	:-1) ,	1.87	2.0 mg/NM <sup>3</sup>
Particulate Matter (P.M.)     Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part			2.0 mg / NM <sup>3</sup>



Authorized Signatory Quality Manager / Dy. Quality Manager

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Extn.: (Chatterjee Lane) rdanibagh ATN - 800 001 (Bihar)



Laboratory Address:-01<sup>ST</sup> FLOOR, RAJHANS NIKETAN, NEAR CANAL, RUKUNPURA, BAILEY ROAD, PATNA - 300 014 (BIHAR)

### SHIVA TEST HOUSE

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	TEST REPOR	T	G ACCREDITED BY NAL	
Ref. No, RIL/TR/18-19/548(d) Dt: 08.	.10.2018 Your Wor	k Oruer No. MANUAL/	RIL/BIH Dt: 18.09.2018	
[a] Name and address of the Customer		RAMCO INDUSTRIE Plot No. A 1, BIADA Bihiya Bhojpur – 802 152		
[b] Details of Sample		Monitoring of Stack En		
[c] Sample Collected by		SHIVA TEST HOUSE		
[d] Sampling Location		Premises of Ramco Bil		
[e] Method of Sampling		IS 11255 (Part-1,2,3	& 7)	
[f] Sampling Environmental Condition		Temp. (°C) 32	Humidity (%) 76	
[g] Details of Sample Container (No. & T)	pe of Container)	Thimble & Glass Impi	nger	
[h] Sample Quantity		5		
<ul><li>[i] Items required to be tested</li><li>[j] Whether any specific Method of Test h</li></ul>	ana haan	As per contract		
suggested by the customer	las been	No		
[k] Date of receiving the sample in Labora	atory	01.10.18		
[I] Analysis Start Date / Analysis Comple	tion Date	01.10.18 / 04.10.18		
Parameters	Method of Te		Results	
Stack Connected to		DG	Set 1010 KVA	
2. Stack No.	•	IV 9.0 m.		
3. Height of Stack (as reported)				
4. Dia of Stack at Top (as reported)		0.15 m.		
5. Draft			Natural	
6. Material of Construction		i i	M.S.	
7. Ambient Temperature, <sup>0</sup> C		32.0		
B. Flue Gas Temperature, <sup>0</sup> C			196.0	
9. Velocity, m/sec.	IS 11255 (Part-	3)	10.3	
10. Volumetric Flow Rate ( NM³/hr.)			323.2	
11. Sampling Point			3.5 m.	
		Concentration (mg/NM³)	Limit as per E (P) Rules Schedule I	
12. Particulate Matter (P.M.)	IS 11255 (Part-	1) 48.4	75.00 mg/NM <sup>3</sup>	
13. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-	2) 33.2	Not Specified	
14. Oxides of Nitrogen (NOx)	IS 11255 (Part-	7) 218.1	710.00 mg/NM <sup>3</sup>	
15. NMHC (as C) (at 15% O <sub>2</sub> )	CPCB	. 14.0	100.00 mg/NM <sup>3</sup>	
16. Carbon Monoxide as CO (at 15% O <sub>2</sub> )	IS 13270 - 200	3 42.0	150.00 mg/NM <sup>3</sup>	



Authorized Signatory Quality Manager / Dy. Quality Manager

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d. Office:

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## SHIVA TEST HOUSE

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Ref. No. RIL/TR/18-19/548(e) Dt: 08.	10.2018 Your Wo	RAM Plot Bihiy	GO INDUSTRIES I	LTD.			
[b] Details of Sample		Monitoring of Stack Emission					
[c] Sample Collected by			A TEST HOUSE o				
[d] Sampling Location		Premises of Ramco Bihiya					
[e] Method of Sampling		IS 11	255 (Part-1,2,3 &.7	7)			
[f] Sampling Environmental Condition		Temp	o. (°C) 32	Humidity (%) 76			
[g] Details of Sample Container (No. & Ty	pe of Container)		ble & Glass Imping	er			
[h] Sample Quantity		5					
[i] Items required to be tested		As pe	er contract				
[j] Whether any specific Method of Test h suggested by the customer	Total and the second	No					
[k] Date of receiving the sample in Labora		01.10		A CONTRACTOR OF THE CONTRACTOR			
[I] Analysis Start Date / Analysis Comple	01.10.18 / 04.10.18						
Parameters	Method of T	est		Results			
1. Stack Connected to		8.5	DG	Set 750 KVA			
2. Stack No.				V			
3. Height of Stack (as reported)		1 10	8 8	9.0 m.			
4. Dia of Stack at Top (as reported)		V <sub>e</sub> i M	. 8	0.15 m.			
5. Draft			2	Natural			
6. Material of Construction				M.S.			
7. Ambient Temperature, <sup>0</sup> C		8	- 0	32.0			
8. Flue Gas Temperature, <sup>0</sup> C		a u		181.0			
9. Velocity, m/sec.	IS 11255 (Par	t-3)	8.9				
10. Volumetric Flow Rate ( NM³/hr.)				371.4			
11. Sampling Point			- 3	3.5 m.			
			Concentration ( mg / NM³ )	Limit as per E (P) Rules Schedule I			
12. Particulate Matter (P.M.)	IS 11255 (Par	t-1)	31.6	75.00 mg/NM³			
13. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Par	t-2)	33.1	Not Specified			
14. Oxides of Nitrogen (NOx)	IS 11255 (Par	t-7)	187.1	710.00 mg/NM <sup>3</sup>			
15. NMHC (as C) (at 15% O <sub>2</sub> )	CPCB		10.0	100.00 mg/NM <sup>3</sup>			
16. Carbon Monoxide as CO (at 15% O <sub>2</sub> )	IS 13270 – 20	003	24.0	150.00 mg/NM <sup>3</sup>			



Authorized Signatory Quality Manager / Dy. Quality Manager

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Extn.; (Chatterjee Lane) ardanibagh ATNA - 800 001 (Bihar)



Laboratory Address:-01<sup>ST</sup> FLOOR, RAJHANS NIKETAN, NEAR CANAL, RUKUNPURA, BAILEY ROAD, PATNA - 800 014 (BIHAR)

### SHIVA TEST HOUSE

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#### TEST REPORT

K	ef. No. RIL/TR/18-19/548(f) Dt	:08.10.2018 Your			MANUAL/RIL/BI		Ot: 18.09.2018
[a] N	lame and address of the Custor	mer	P	lot No. A ihiya	NDUSTRIES LTD. A 1, BIADA Indust - 802 152		Area
	Details of Sample			orewell \		-	
	Sample Collected by				ST HOUSE on 30.	.09.	18
	Sampling Location		N	ear God	own		
	Method of Sampling	e a a a a a a a a a a a a a a a a a a a		3025, A			
[f] S	Sampling Environmental Condition	on	$\frac{T}{2}$	emp. (°C		umic	lity (%) 76
[g] [ [h] S	Details of Sample Container (No Sample Quantity	. & Type of Contain		lastic Bo	ttle (02)		*
	ems required to be tested			Litres s per cor	stroot		*
[j] V	Whether any specific Method of	Test has been			iliact.		
, IO	suggested by the customer	. COL HOU DOON	N	0			
	ate of receiving the sample in L		0	1.10.18			· · · · · · · · · · · · · · · · · · ·
[I] A	nalysis Start Date / Analysis Co				04.10.18		
S.N.	Parameters	Limit as per IS  Limit (mg/l.)  Desirable	Permis Limit in absendalterna source	ssible of the ce of ative	Method of Test		Results in mg/l except colour, Odour, Taste, Turbidity, & pH
1	Colour	5.0 Hazen Limit	25	IS 3025 (Part-4			<5.00
2	Odour	Agreeable		IS 3025 (Part-5)		5 7	Agreeable
3	Taste	Agreeable			IS 3025 (Part-7))		Agreeable
4	pН	6.5 to 8.5		2	IS 3025 (Part-11	)	7.28
5	Turbidity on NTU	1.00	5.00		IS 3025 (Part-10)	-	<1.0
6	Total Dissolved Solids (TDS)	500.00	2000.0	00	IS 3025 (Part-15)		411.0
7 .	Total Hardness as CaCO <sub>3</sub>	200.00	600.00	)	IS 3025 (Part-21)		268.0
8	Calcium as Ca	75.00	200.00	)	IS 3025 (Part-40)	,	48.1
9	Magnesium as Mg	30.00	100.00	)	IS 3025 (Part-40)		36.0
10	Iron as Fe	0.30	No rela	axation	IS 3025 (Part-53)		0.16
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)		252.0
13	Chloride as Cl	250.00	1000.0		IS 3025 (Part-32)		
14	Sulphate as SO <sub>4</sub>	200.00	400.00				18.0
15	Nitrate as NO <sub>3</sub>	45.00	No rela		IS 3025 (Part-24)		15.7
16	Fluoride as F	1.00			IS 3025 (Part-34)		5.1
· <u>·</u>	Tagindo do I	TEST 4	1.50	\.	APHA (4500 F D)	)	0.48

Authorized Signatory Quality Manager / Dy. Quality Manager

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### SHIVA TEST HOUSE

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#### TEST REPORT

[a] Nam	e and address of the	Customer		RAMCO IND Plot No. A 1 Bihiya Bhojpur – 80	, BIADA Ir	LTD. ndustrial Area		
	ils of Sample			Sorewell Wa				
	ole Collected by			SHIVA TEST	HOUSE o	on 30.09.18		
	oling Location			Near Godow				
	od of Sampling			IS 3025, API	lA .			
[f] Samı	oling Environmental	Condition		Temp. (°C)	32	Humidity (%)	76	
	ls of Sample Contair	ner (No. & Type of C	ontainer)	Glass Bottle	(01)			
	ole Quantity			300 ml				
[i] Items required to be tested				As per contract.				
by :	her any specific Met the customer		No					
	of receiving the sam		01.10.18					
[l] Analy	sis Start Date / Anal	ysis Completion Dat	01.10.18 / 04.10.18					
	the growing to	BACTERIOLOGICAL EXAM	MINATION OF WATE	ER AS PER IS 1622	1981	Project of Springs		
Coliform ( of 10 ml. c	Most Probable Numbered 5 tubes of 1 ml.)	er of Organisms per 10	0 ml. of sample	and confidence	imit using 1	tube of 50 ml., 5 tu	bes	
Sample Media Strength		No. of Tubes Obser		vation for Acid / Gas formation at 37 °C after				
		Tto. or Tubes	24 Hr.			48 Hr.		
50 ml.	Double Strength	1		-		-		
10 ml.	do	5		<b>-1.</b>		-		
1 ml.	Single Strength	5		-		_		



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#### TEST REPORT

Ref	. No. RIL/TR/18-19/548(h) Dt	: 08.10.2018 Your	Worl	Order No.				Dt: 18.0	9.2018
[a] Name and address of the Customer				RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152					
[b] Details of Sample			Drinking V		Salaran a				
	ample Collected by			SHIVA TE				).18	
	ampling Location			from Cant		quaguar	d		21
	lethod of Sampling			IS 3025, A					
	ampling Environmental Condition			Temp. (°C		32	Humi	dity (%)	76
	petails of Sample Container (No. cample Quantity	& Type of Contain	ier)	Plastic Bo 2 Litres	ttle (U	2)		-	
	ems required to be tested			As per cor	tract		<del></del> .		*
	Whether any specific Method of	Test has been			maci.				
D1 .	suggested by the customer	root had boom		No					
[k] D	ate of receiving the sample in L	aboratory		01.10.18					
[I] A	nalysis Start Date / Analysis Co			01.10.18/	04.10	0.18		NI .	3.000
		Limit as per IS	1050	00:2012					
S.N.	Parameters	Limit (mg/l.) Desirable	Lim abs	missible it in the ence of rnative rce	Method of Test		except o		
1	Colour	5.0 Hazen Limit	25		IS 3025 (Part-4		art-4)		<5.00
2	Odour	Agreeable		F 12 27	IS:	3025 (Pa	art-5)	Ag	reeable
3	Taste	Agreeable			IS 3	3025 (Pa	rt-7))	Ag	reeable
4	рН	6.5 to 8.5		s		3025 (Pa	rt-11)		7.24
5	Turbidity on NTU	1.00	5.0	0 .	IS 3	3025 (Pa	rt-10)		<1.00
6	Total Dissolved Solids (TDS)	500.00	200	2000.00		3025 (Pa	rt-15)	7, 11	249.0
7	Total Hardness as CaCO <sub>3</sub>	200.00	600	600.00		3025 (Pa	rt-21)		144.0
8 -	Calcium as Ca	75.00	200	.00	IS 3	025 (Pa	rt-40)		32.0
9	Magnesium as Mg	30.00	100	.00	IS 3	025 (Pa	rt-40)		15.5
10	Iron as Fe	0.30	No	relaxation	_	025 (Pa			0.13
11	Residual Free Chlorine	0.20	1.0	1.00		025 (Pai			<0.1
12	Total Alkalinity as CaCO <sub>3</sub>	200.00	600	.00	-	025 (Pai		-2	200.0
13	Chloride as Cl	250.00	100	0.00		025 (Pai			14.0
14	Sulphate as SO <sub>4</sub>	200.00	400	.00	-	025 (Par		,	12.8
15	Nitrate as NO <sub>3</sub>	45.00	No	relaxation		025 (Par			2.1
16	Fluoride as F	1.00	1.50	)		A (4500			0.34



Authorized Signatory
Quality Manager / Dy. Quality Manager

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## SHIVA TEST HOUSE

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		8(i) Dt: 08.10.201	7001 1101			/BIH Dt: 18.09.2018			
[a] Name and address of the Customer			RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152						
	ils of Sample		new S	Drinking Water					
	ole Collected by	0		SHIVA TEST H	OUSE or	n 30.09.18			
	oling Location			from Canteen A					
	od of Sampling			IS 3025, APHA					
f] Sam	oling Environmental	Condition		Temp. (°C)	32	Humidity (%) 76			
g] Detai	ls of Sample Contair	ner (No. & Type of	Container)	Ghass Bottle (0	1)	, , , , , , ,			
	ole Quantity			300 ml					
	required to be teste		As per contract.						
[j] Whether any specific Method of Test has been suggested by the customer				No					
[k] Date of receiving the sample in Laboratory				01.10.18					
] Analy	sis Start Date / Anal	ysis Completion Da	01.10.18 / 04.10.18						
		BACTERIOLOGICAL EXA	MINATION OF W	ATER AS PER IS 1622	- 1981				
Coliform ( of 10 ml. a	Most Probable Numbe and 5 tubes of 1 ml. )	r of Organisms per 1	00 ml. of samp	ole and confidence	limit using	1 tube of 50 ml., 5 tubes			
Sample	Media Strength	No. of Tubes Obs		ervation for Acid / Gas formation at 37 °C after					
	3			24 Hr.		48 Hr.			
0 ml.	Double Strength	1		- , , , , ,	8	-			
0 ml.	do	5		% <b>±</b> °	_				
ml.	Single Strength	5		_					



Authorized Signatory Quality Manager / Dy. Quality Manager

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d. Office:

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Laboratory Address :-01st Floor, Rajhans Niketan, NEAR CANAL, RUKUNPURA, BAILEY ROAD, PATNA - 800 014 (BIHAR)

### SHIVA TEST

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



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Re	ef. No. RIL/TR/18-19/548(j) Dt: 08.	10.2018 Your Work C	Order No. MANUAL	L/RIL/BIH Dt: 18.09.2018		
[a] I	Name and address of the Customer	Secretary of	RAMCO INDUSTI Plot No. A 1, BIAI Bihiya Bhojpur – 802 15	DA Industrial Area		
[b] I	Details of Sample		Effluent Sample			
	Sample Collected by		SHIVA TEST HOL			
	Sampling Location		from Final Discharg	ge Point		
[e]	Method of Sampling	Y. Carlotte and the second	IS 3025, APHA			
[f]	Sampling Environmental Condition		Temp. (°C) 32	Humidity (%) 76		
[g]	Details of Sample Container (No. & T	ype of Container)	Plastic Bottle (02)	* * * * * * * * * * * * * * * * * * *		
[h] Sample Quantity			2 Litres			
[i] Items required to be tested		As per contract.				
			No.			
[k]	Date of receiving the sample in Labo	ratory	01.10.18			
[1]	Analysis Start Date / Analysis Compl	etion Date	01.10.18 / 04.10.1	18		
S. N.	Parameters	Method of Test	Limit as per (P) Rules Schedi VI	Result(in mg/l.) except pH, Colour		
1	Colour	IS 3025 (Part-4)	Not Specified	Colourless		
2	рН	IS 3025 (Part-11)	5.5 to 9.0	7.21		
3	Suspended Solids	IS 3025(Part-17)	100.00	60.0		
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	76.0		
7	Dissolved Phosphate as P	APHA ( 4500-P-D )	5.00	1.1		
8	Fluoride as F	APHA 4500 (F D)	5.00	0.32		
9	Ammonical Nitrogen as N	IS 3025 (Part-34)	<u>.</u> 50.00	13.7		
10	Total Kjeldahl Nitrogen as N	APHA (4500 N org)	100.00	21.8		



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### SHIVA TEST HOUSE

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ISO 18001:2007

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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] Sampling Environmental Condition	Temp. ( <sup>0</sup> C) 32 Humidity (%) 76
[c] Details of Sample	Monitoring of Ambient Noise Level at Ramco Bihiya
[d] Monitored by	SHIVA TEST HOUSE on 30.09.18
[e] Whether any specific Method of Test has been suggested by the party	No
Sampling Location	Time Weighted Average (TWA) of Noise Level in dB(A)
Near Main Gate	• 61.4
2. Near Office	58.1
3. Near Stripping Area	63.8
4. Near Fibre Mill	65.6
5. Near DG Room	71.6
N.B.: Residential area is 55.0 dB(A) & for S	n respect of Noise as per Noise Pollution (Regulation and area is 75.0 dB(A), for Commercial area is 65.0 dB(A), for Silence Zone is 50.0 dB(A) in daytime i.e. 6.00 am to 9.0 p.m. As action against violator if the noise level exceed the ambient noise any area/zone.



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### IVA TEST HOUSE

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	Ref. No. RIL/TR/18-19/548(l) Dt: 08.10.20.  Name and address of the Customer	10 de 10	Bihiya Bhojpur – 802	ADA Industrial Area	
[b]	Details of Sample		Area	espirable Dust in Work Zone	
[c]	Sample Collected by		Shiva Test Hous	se on 30.09.18	
	Sampling Location		Premises of Ram		
	Method of Sampling		IS 5182 (Part - 1		
fl	Sampling Environmental Condition	8 - 2 - 2		32 Humidity (%)   76	
g]	Details of Sample Container (No. & Type or	Filter Paper ; GI	ass Impinger		
h]	Sample Quantity	04			
i]	Items required to be tested	As per contract			
j]			No		
k]	Date of receiving the sample in Laboratory		01.10.18		
11	Analysis Start Date / Analysis Completion I	Date	01.10.18 / 04.10	0.18	
S.	Sampling Point	The second secon	of Respirable (PM <sub>10</sub> )	Limit as NAAQS Nov.'2009	
N.	Gampung 1 om	[ 08 hrs.	J (μg/M³)	(μg/M³)	
1.	Fibre Mill Area	46	5.2		
2	Hatscheck Machine Area	Machine Area 2		100.0	
3	Stripping Machine Area	24	1.6	100.0	
4	Pulverizer Area	36	5.1		



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Ref. No. RIL/TR/18-19/548(m)	Dt: 08.10.2018	Your Work				18.09.2018
[a] Name and address of the Customer			Sr. Gen RAMCO Plot No Bihiya	eral Manager ( ) INDUSTRIES . A 1, BIADA In r – 802 152	Works) LTD.	
II Datelle ef Commile				ring of Ambien	t Air Quality	
b] Details of Sample				est House on 3		0 1 2
c] Sample Collected by				s of Ramco Bihiy		
d] Sampling Location e] Method of Sampling				(Part - 14)		
			Temp. (		Humidity	(%) 76
	Type of Container )		Filter Pa	aper ; Glass Imp	inger	
**	Type of Container /		12			
h] Sample Quantity i] Items required to be tested			As per	contract	2 2 2	
Whether any specific Method of Tes	t has been suggested by	the custome	r No		7.	
k Date of receiving the sample in Labo			01.10.1	8		
Analysis Start Date / Analysis Comp			01.10.1	8/04.10.18		
<u>j</u>				Sampling Statio	n	
5	Method of		Near	Near		Limit as
Parameters	Test	Near	Rear	Stripping	Near	NAAQS
		Office	Gate	Area	Laboratory	Nov.'2009
		67.0	83.6	87.3	77.7	
. Particulate Matter (PM <sub>10</sub> ), μg / m <sup>3</sup>	IS 5182 (Part-23)	61.4	71.8	83.4	68.5	100 μg / m
	13 3102 (1 att-23)	52.7	65.3	78.2	67.4	
	<del>                                     </del>	38.3	118.2	45.5	43.5	
			42.1	42.6	35.8	60 μg / m <sup>3</sup>
<ol> <li>Particulate Matter (PM<sub>2.5</sub>), μg / m<sup>3</sup></li> </ol>	USEPA	31.2		2.000.00	32.7	ου μα / ιιι
		29.5	34.2	38.4 16.2	11.0	
		10.8	14.5		A 100 STATES	
	the property of the terms of th	11.8	17.0	17.6	14.8	The same of the sa
2 Culabina Dispide on SO and Im <sup>3</sup>	IS 5182 (Part-2)	12.9	13.0	19.3	10.1	80 μg / m <sup>3</sup>
3. Sulphur Dioxide as SO <sub>2</sub> , μg / m <sup>3</sup>	1,5 5 162 (Fait-2)	9.3	10.5	14.6	8.6	ου μg /
		8.2	8.0	13.0	7.6	
		10.3	12.0	11.9	9.6	1 × 5 1 2
V I		29.8	45.0	52.2	40.7	2
		34.7	43.2	54.5	42.9	
** 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		37.6	38.7	56.8	34.3	
<ol> <li>Nitrogen Dioxide as NO<sub>2</sub>, μg / m<sup>3</sup></li> </ol>	IS 5182 (Part-6)	28.5	34.9	49.8	31.5	80 μg / m
	2 × 2 2	26.4	33.1	46.7	29.6	
	A	29.4	36.5	45.1	33.6	
		29.4	30.3	45.1	33.0	
Average Value						
PM₁o		60.4	73.6	83.0	71.2	
PM <sub>2.5</sub>		33.0	41.5	42.1	37.4	
SO <sub>2</sub>		10.5	12.5	15.4	10.3	
NO <sub>2</sub>		31.1	38.6	50.9	35.4	80.00



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### SHIVA TEST HOUSE

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[a]	Name and address of the Customer		*	RAM( Plot I Bihly		S LTD.	
[b]	Details of Sample				our – 802 152 toring of Ambie	nt Air Quality	
[0]	Sample Collected by				Test House on		
[d]	Sampling Location		7		ses of Ramco Bih		
[e]	Method of Sampling	A	y _E 2 - 1		82 (Part - 14)	<del>7</del>	
[f]	Sampling Environmental Condition			Temp	). (°C) 32	Humid	ity (%) 76
[g]	Details of Sample Container (No. & T	ype of Container)	2 2 60	Filter	Paper; Glass In	npinger	
[h]	Sample Quantity			5			
[i]	Items required to be tested				er contract		
	Whether any specific Method of Test		the custom				-
[k]	Date of receiving the sample in Laboratory  Analysis Start Date / Analysis Complete  Output  Date of receiving the sample in Laboratory  Analysis Complete  Date of receiving the sample in Laboratory  Date of receiving the sample in Laboratory			01.10	).18 ).18 / 04.10.18		
Ш	Analysis Start Date / Analysis Comple	etion Date	8 20	1 01.10	Sampling Stati		
	Parameters	Method of Test	Near Office	Near Rear Gate	Near Stripping Area	Near Laboratory	Limit as per EPA Notification (μg/m³)
1.	Carbon Monoxide (CO), mg/m <sup>3</sup>	IS 5182 (Part-10)	0.18	0.88	0.15	. 0.11	4 mg / m <sup>3</sup>
2.	Lead (Pb) , μg / m <sup>3</sup>	IS 5182 (Part-22)	BDL	BDL	BDL	BDL	1 μg / m³
3.	Ammonia as NH <sub>3</sub> , μg / m <sup>3</sup>	IS 5182 (Part-5)	NIL	NIL	NIL	NIL	400 μg / m³
4.	Ozone (O <sub>3</sub> ) , μg / m <sup>3</sup>	IS 5182 (Part-9)	8.9	12.1	16.4	10.2	180 μg / m <sup>3</sup>
5.	Benzene (C <sub>6</sub> H <sub>6</sub> ) , μg / m <sup>3</sup>	IS 5182 (Part-22)	BDL	*SDL	BDL	BDL	5 μg / m³
6.	Arsenic (As), ng/m <sup>3</sup>	AAS Method	BDL	BDL	BDL	BDL	6 ng / m <sup>3</sup>
7.	Nickel as Ni, ng / m <sup>3</sup>	AAS Method	BDL	BDL	BDL	BDL	20 ng / m <sup>3</sup>
00	: BDL Denotes Below Detectable Limit	< 21 00 ( ··· / m <sup>3</sup> )		DL . DD/	Denotes Below I		



Quality Manager / Dy. Quality Manager

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	Ref. No. RIL/TR/18-19/548(o)	Dt: 08.10.2018	Your Work	Orde	er No.	MANUAL/	RIL/BIH Dt	: 18.09.2018
[a]	Name and address of the Customer		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		RAMO Plot N Bihiya	eneral Manage CO INDUSTRIE Io. A 1, BIADA Bur – 802 152	S`LTD.	
[b]	Details of Sample					oring of Ambie	ent Air Quality	
[c]	Sample Collected by					Test House on		
[d]	Sampling Location	· · · · · · · · · · · · · · · · · · ·		}		ses of Ramco Bih		
[e]	Method of Sampling			7 6	IS 5182 (Part - 14)			
[f]	Sampling Environmental Condition			1	Temp		Humid	ity (%) 76
[g]	The state of the s				Filter Paper ; Glass Impinger			
[h]	Sample Quantity		HO 31 6 H		1			
[i]	Items required to be tested				As per contract			
[i]	Whether any specific Method of Test had	as been suggested by	the custome	er	No			
[k]	Date of receiving the sample in Labora	tory			01.10.18			
	Analysis Start Date / Analysis Completi	on Date	1 1 1 1 1		01.10.	18/03.10.18		
				- 150		Sampling Stati	on	Limit as per
	Parameters	Method of Test	Near Office	R	ear ear ate	Near Stripping Area	Near Laboratory	EPA Notification ( μg / m³)
1.	Benzo (a) Pyrene, (Particulate Phase only) ng / m³	IS 5182 (Part-10)	•<0.1	<(	0.1	< 0.1	< 0.1	1.0 ng / m <sup>3</sup>



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#### TEST REPORT

a]	Name and address of the Customer		RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152				
bj	Details of Sample		Monitoring of Stack Emission				
c]	Sample Collected by		1	VA TEST HOUSE (			
d]	Sampling Location			mises of Ramco Bihiy			
e]	Method of Sampling		1	11255 (Part-1,2,3 &			
F]	Sampling Environmental Condition			np. ( <sup>0</sup> C)   32	Humidity (%)	85	
g}		tails of Sample Container (No. & Type of Container)		mble & Glass Impin	ger		
h]	Sample Quantity						
i]	Items required to be tested			per contract			
j]	Whether any specific Method of Test h suggested by the customer	ias peen	een No				
k]	Date of receiving the sample in Labora	atory	12.1	08.18			
7	Analysis Start Date / Analysis Complete	tion Date					
	Parameters	Method of Te	st		Results		
	Stack Connected to			Fi	bre Circuit	_	
)	Stack No.			Annual Control of the			
3.	Height of Stack (as reported)				30.0 m		
	Dia of Stack at Top (as reported)				0.4 m.		
5.	Draft				Natural		
3.	Material of Construction				M.S.	and the same	
	Ambient Temperature, <sup>0</sup> C				32.0	7	
3.	Flue Gas Temperature, <sup>0</sup> C				41.0		
}.	Velocity, m/sec.	IS 11255 (Par	-3)		7.3		
0.	Volumetric Flow Rate ( NM³/hr.)			i .	3132.5		
11.	Sampling Point				10 m.		
				Concentration ( mg / NM³)	Limit as per Rules Sched	E (P) ule 1	
2.	Particulate Matter (P.M.)	IS 11255 (Par	-1)	1.58	2.0 mg / N	$M^3$	
3.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Par	-2)	Not Detectable			
14.	Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Par	-7)	Not Detectable			



Authorized Signatory
Quality Manager / Dy. Quality Manager

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#### TEST REPORT

a] Name and address of the Customer		RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152				
b] Details of Sample		Monitoring of Stack Emission				
Sample Collected by Sampling Location			VA TĔŚT HOUSE o			
			ises of Ramco Bihiyo			
e] Method of Sampling			1255 (Part-1,2,3 & 7			
f] Sampling Environmental Condition			p. (°C) 32	Humidity (%)	85	
g] Details of Sample Container (No. & h) Sample Quantity	Type of Container)		nble & Glass Imping	<u>er                                    </u>		
Sample Quantity Items required to be tested		2	er contract			
<ul> <li>i] Items required to be tested</li> <li>j] Whether any specific Method of Tess suggested by the customer</li> </ul>	of Test has been		As per contract No			
k] Date of receiving the sample in Labor	oratory	12.0	08.18			
Analysis Start Date / Analysis Comp		13.0	08.18 / 16.08.18			
Parameters	Method of T	est		Results		
Stack Connected to			Cement	/ Fly Ash Circuit		
2. Stack No.	2 2 2			11		
B. Height of Stack (as reported)				15.0 m.		
Dia of Stack at Top (as reported)	* Y 1			0.4 m.		
5. Draft				Natural		
6. Material of Construction	* A			M.S.	1	
7. Ambient Temperature, <sup>0</sup> C			2.8	32.0		
B. Flue Gas Temperature, <sup>0</sup> C				44.0		
9. Velocity, m/sec.	IS 11255 (Pa	rt-3)		5.9		
10. Volumetric Flow Rate ( NM³/hr.)				2507.8	7	
11. Sampling Point				5 m.		
			Concentration ( mg / NM³)	Limit as per Rules Sched		
12. Particulate Matter (P.M.)	IS 11255 (Pa	rt-1)	35.4	100.00 <b>m</b> g/	NM <sup>3</sup>	
13. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Pa	rt-2)	Not Detectable			
14. Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Pa	rt-7)	14.8			



Quality Manager / Dy. Quality Manager

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W.E.

C

### SHIVA TEST HOUSE

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#### TEST REPORT

[a]	Name and address of the Customer		RAMCO INDUSTRIES LTD. RAMCO Plot No. A 1, BIADA Industrial Area Plot No. Bihiya Bhojpur – 802 152			
[b]	Details of Sample			toring of Stack Em		
[c]	Sample Collected by			/A TEST HOUSE		
[d]	Sampling Location			ises of Ramco Bih	·	
[e]	Method of Sampling		1	1255 (Part-1,2,3 &	(7)	
f]	Sampling Environmental Condition	** tos =			Humidity (%)	85
g]	Details of Sample Container (No. & Ty	pe of Container)		ble & Glass Impir	nger	
h]	Sample Quantity		2			
<u>i]</u>	Items required to be tested		As p	er contract		
j] 	Whether any specific Method of Test has aggested by the customer	INO				
k]	Date of receiving the sample in Labora					
1]	Analysis Start Date / Analysis Comple Parameters	Method of To		8.18 / 16.08.18 .	Results	
	Stack Connected to	Wethou of a	621	D	ulveriser Plant	
		* 1 2				
- ,	Stack No.					
<b>.</b>	Height of Stack (as reported)				15.0 m.	
	Dia of Stack at Top (as reported)				0.15 m.	
	Draft	i en d			Natural	
ò.	Material of Construction		8.		M.S.	
	Ambient Temperature, <sup>0</sup> C		150		32.0	9
3.	Flue Gas Temperature, <sup>0</sup> C			10	40.0	+
€.	Velocity, m/sec.	IS 11255 (Par	t-3)		5.1	1
10.	Volumetric Flow Rate ( NM³/hr.)				308.7	7
11.	Sampling Point	5 m.		5 m.	anticological property and anticological property and	
				Concentration (mg/NM³)	Limit as per Rules Sche	E (P) edule I
12.	Particulate Matter (P.M.)	IS 11255 (Par	t-1)	1.21	2.0 mg/	NM <sup>3</sup>
13.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Par	t-2)	Not Detectable		
14.	Oxides of Nitrogen (NOx)	IS 11255 (Par	t-7)	11.6		



<sup>1.</sup> This report applies only to sample tested as above.

<sup>2.</sup> Total Liability of our Laboratory is limited to invoiced amount.

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LABORATORY ADDRESS:-01st floor, Rajhans Niketan. NEAR CANAL, RUKUNPURA, BAILEY ROAD, PATNA - 800 014 (BiHAR)

## SHIVA TEST HOUSE

Tel.: 0612 - 2247522 / 2240752; TeleFax: 0612 - 2590705 E.mail.: sthpatna1@yahoo.co.in

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

#### TEST REPORT

Ref. No. RIL/TR/18-19/416(d) Dt: 18.08.2018 Your Work O		RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152				
[b] Details of Sample			toring of Stack Emi			
[c] Sample Collected by			/A TEST HOUSE			
[d] Sampling Location			ises of Ramco Bihi			
[e] Method of Sampling			1255 (Part-1,2,3 &			
[f] Sampling Environmental Condition			p ( <sup>0</sup> C) 32	Humidity (%) 85		
[g] Details of Sample Container (No. & Ty	pe of Container)	Thim 5	ible & Glass Impir	ger		
[h] Sample Quantity [i] Items required to be tested			er contract			
Whether any specific Method of Test h	as heen		er contract			
suggested by the customer		No	No			
[k] Date of receiving the sample in Labora			2.08.18			
[I] Analysis Start Date / Analysis Complet						
Parameters	Method of Te	est		Results		
Stack Connected to		Ĺ	DG S	Set 1010 KVA		
2. Stack No.			1	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			9	M.S.		
7. Ambient Temperature, <sup>0</sup> C				32.0		
8. Flue Gas Temperature, <sup>0</sup> C				212.0		
9. Velocity, m/sec.	IS 11255 (Part	t-3)		11.2		
10. Volumetric Flow Rate ( NM³/hr.)				437.5		
11. Sampling Point				3.5 m.		
			Concentration ( mg / NM³)	Limit as per — E (P) Rules Schedule I		
12. Particulate Matter (P.M.)	IS 11255 (Part	t-1)	51.4	75.00 mg/NM³		
13. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part	-2)	38.7	Not Specified		
14. Oxides of Nitrogen (NOx)	IS 11255 (Part	1-7)	216.4	710.00 mg/NM³		
15. NMHC (as C) (at 15% O <sub>2</sub> )	CPCB		20.0	100.00 mg/NM <sup>3</sup>		
16. Carbon Monoxide as CO (at 15% O <sub>2</sub> )	IS 13270 – 20	03	52.0	150.00 mg/NM³		

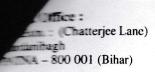


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## SHIVA TEST HOUSE

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### TEST REPORT

	Ref. No. RIL/TR/18-19/416(e) Dt: 18.08.	.2018 Your Work				4.2018
[a]	Name and address of the Customer		Plot Bihi	ICO INDUSTRIES No. A 1, BIADA In ya jpur – 802 152		e geografia
[b]	Details of Sample			itoring of Stack Emis		
[c]	Sample Collected by			/A TEST HOUSE of		
[d]	Sampling Location		Pren	iises of Ramco Bihiy	a	
[e]	Method of Sampling		IS 1	1255 (Part-1,2,3 &	7)	
[f]	Sampling Environmental Condition	0		p. (°C) 32	Humidity (%)	85
[g]	Details of Sample Container (No. & Type	e of Container)	Thim	nble & Glass Imping	ger	
[h]	Sample Quantity		5	,		
_[i]	Items required to be tested	•	As p	er contract		
[j] 	Whether any specific Method of Test ha suggested by the customer		No	*		
[k]	Date of receiving the sample in Laborato					
[1]	Analysis Start Date / Analysis Completic	· · · · · · · · · · · · · · · · · · ·		8.18 / 16.08.18		
	Parameters	Method of 7	est		Results	
1.	Stack Connected to			DG	Set 750 KVA	
2.	Stack No.			h	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	· 8 8			M.S.	
7.	Ambient Temperature, <sup>0</sup> C				32.0	
8.	Flue Gas Temperature, <sup>0</sup> C	, ,	14		188.0	
9.	Velocity, m/sec.	IS 11255 (Par	t-3)	F 2	10.6	
10.	Volumetric Flow Rate ( NM³/hr.)				435.6	
11.	Sampling Point				3.5 m.	
4				Concentration ( mg / NM³)	Limit as per Rules Sched	E (P) lule I
12.	Particulate Matter (P.M.)	IS 11255 (Par	t-1)	48.7	75.00 mg/	NM <sup>3</sup>
13.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Par	t-2)	33.4	Not Specia	fied
14.	Oxides of Nitrogen (NOx)	IS 11255 (Par	t-7)	192.8	710.00 mg	/NM³
15.	NMHC (as C) (at 15% O <sub>2</sub> )	СРСВ		18.0	100.00 mg	/NM³
16.	Carbon Monoxide as CO (at 15% O <sub>2</sub> )	IS 13270 – 20	003	30.0	150.00 mg	/NM³



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#### TEST REPORT

Ref. No. RIL/TR/18-19/374(a) D	n : 02.08.2018 Your Work	Order No. MANUAL/RII	/BIH/18 Dt : 10.04.2018
4	The state of the s	ERAMCO INDUSTRIE	S LTD.
[a] Name and address of the Custo	mer	Plot No. A 1, BIADA Bihiya Bhojpur – 802 152	Industrial Area
[b] Details of Sample		Monitoring of Stack Em	
[c] Sample Collected by		SHIVA TEST HOUSE	on 27 07.18
[d] Sampling Location		Premises of Ramco Bil	iya .
[e] Method of Sampling		IS 11255 (Part-1,2,3 8	§ 7)
[f] Sampling Environmental Conditi	on	Temp. (°C) 34	Humidity (%) 82
	Details of Sample Container (No. & Type of Container )		nger
h] Sample Quantity		1	
Items required to be tested		As per contract	
<ul><li>Whether any specific Method of suggested by the customer</li></ul>		No	
k) Date of receiving the sample in		27.07.18	
Analysis Start Date / Analysis Co		28.07.18 / 31.07.18	
Parameters	Method of To	est	Results
1. Stack Connected to			Fibre Circuit
2. Stack No.			
B. Height of Stack (as reported)			30.0 m.
Dia of Stack at Top (as reported	d)		0 4 m:.
5. Draft			Natural
6. Material of Construction	-		M.S.
7. Ambient Temperature, <sup>0</sup> C			34.0
B. Flue Gas Temperature, <sup>0</sup> C			46.0
9. Velocity, m/sec.	IS 11255 (Par	t-3)	6.6
10. Volumetric Flow Rate ( NM <sup>3</sup> /hr.	)		2787.0
11. Sampling Point			10 m.
		Concentration ( mg / NM³)	Limit as per F (P) Rules Schedule I
12. Particulate Matter (P.M.)	IS 11255 (Par	t-1) <b>1.43</b>	2.0 mg / NM <sup>3</sup>
13. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Par	t-2) Not Detectable	
14. Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Par	t-7) Not Detectable	



Quality Manager / Dy. Quality Manager

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### TEST REPORT

] Name and address of the Customer			RAMGO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152			
b] Details of Sample			nitoring of Stack Emis	ssion		
c] Sample Collected by			VA TËST HOUSE (			
d] Sampling Location		Prei	nises of Ramco Bihiy	va		
e] Method of Sampling		IS 1	1255 (Part-1,2,3 &	7)		
f] Sampling Environmental Condition		Ten	np. (°C) 34	Humidity (%) 82		
g] Details of Sample Container (No. & Ty	ype of Container)		nble & Glass Impin	ger		
h] Sample Quantity		2				
Items required to be tested  Whether any specific Method of Test I	hoo hoon	As p	er contract			
suggested by the customer	nas been	No				
Date of receiving the sample in Labora     Analysis Start Date / Analysis Comple	atory	27.07.18				
Analysis Start Date / Analysis Completion Date		28.07.18 / 31.07.18				
Parameters	Method of T	est		Results		
Stack Connected to			Cemen	t / Fly Ash Circuit		
. Stack No.				11		
Height of Stack (as reported)				15.0 m.		
. Dia of Stack at Top (as reported)				0.4 m.		
. Draft				Natural		
Material of Construction				M.S.		
. Ambient Temperature, <sup>0</sup> C				34.0		
. Flue Gas Temperature, <sup>0</sup> C				48.0		
. Velocity, m/sec.	IS 11255 (Par	t-3)	8	6.2		
0. Volumetric Flow Rate ( NM³/hr.)			11	2602.5		
Sampling Point				5 m.		
			Concentration ( mg / NM³)	Limit as per E (P) Rules Schedule I		
2. Particulate Matter (P.M.)	IS 11255 (Par	t-1)	37.2	100.00 mg/NM <sup>3</sup>		
3. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Par	t-2)	Not Detectable			
4. Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Par	t-7)	18.7			



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# ISO 18001:2007

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

#### TEST REPORT

[a]	[a] Name and address of the Customer		RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur 802 152			
[b]	Details of Sample		+	uitoring of Stack Emi	ssion	***********
	Sample Collected by			VA TEST HOUSE		
	Sampling Location			nises of Ramco Bihi		
[e]	Method of Sampling		IS 1	1255 (Part-1,2,3 &	7)	
	Sampling Environmental Condition				Humidity (%)	82
	Details of Sample Container (No. & Ty	ype of Container)		nble & Glass Impin	ger	
	Sample Quantity		2.			
	Items required to be tested Whether any specific Method of Test	hao haan	Asp	per contract		
	suggested by the customer	nas been	No			
	Date of receiving the sample in Labora	atory	27.07.18			
	Analysis Start Date / Analysis Comple					
	Parameters	Method of T	est		Results	
١.	Stack Connected to			Pu	lveriser Plant	
2.	Stack No.				111	
3.	Height of Stack (as reported)				15.0 m.	
	Dia of Stack at Top (as reported)				0.15 m.	
j.	Draft				Naturai	
).	Material of Construction			# # #	M.S.	
·.	Ambient Temperature, <sup>0</sup> C	· · · · · ·			34.0	
 3.	Flue Gas Temperature, °C				43.0	
}.	Velocity, m/sec.	IS 11255 (Par	t-3)		5.8	
10.	Volumetric Flow Rate ( NM³/hr.)				347.7	
11.					5 m.	
				Concentration (mg/NM³)	Limit as per Rules Sched	E (P)
12.	Particulate Matter (P.M.)	IS 11255 (Par	t-1)	1.38	2.0 mg/N	$M^3$
	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Par	t-2)	Not Detectable		
13.	oulpriul bloxide (302)	10 11200 (1 al	( ~)	. to a Dolootakiic		



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#### TEST REPORT

	a] Name and address of the Customer		RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152					
	Details of Sample			nitoring of Stack Emi	ssion			
	Sample Collected by		SH	IVA TEST HOUSE	on 27.07.18			
[d]	Sampling Location	3	Pre	mises of Ramco Bihi	ya			
[e]	Method of Sampling		IS 1	11255 (Part-1,2,3 &	7)			
[f]	Sampling Environmental Condition		Ter	np. (°C) 34	Humidity (%)	82		
[g]	Details of Sample Container (No. & Typ	oe of Container)	Thi	mble & Glass Impin	ger			
[h]_	Sample Quantity		5					
[i]	Items required to be tested		As	per contract				
[i]	Whether any specific Method of Test has suggested by the customer		No	•				
[k]	Date of receiving the sample in Laborat	tory • 27.07.18						
[1]	Analysis Start Date / Analysis Completion Date  Parameters Method of T			28.07.18 / 31.07.18 est				
1.	Stack Connected to	Wethod of 16	:51	DC 6	Set 1010 KVA			
2.	Stack No.	-		DG 3	IV			
3.	Height of Stack (as reported)	-			9.0 m.			
4.	Dia of Stack at Top (as reported)	-			0.15 m.			
5.	Draft		1.0		Natural			
6.	Material of Construction				M.S.			
7.	Ambient Temperature, <sup>0</sup> C		9 2		34.0			
8.	Flue Gas Temperature, °C				234.0			
9.	Velocity, m/sec.	IS 11255 (Part	-3)		10.9			
10.	Volumetric Flow Rate ( NM³/hr.)				407.3			
11.	Sampling Point				3.5 m.			
				Concentration ( mg / NM³)	Limit as per Rules Sched	E (P)		
12.	Particulate Matter (P.M.)	IS 11255 (Part	-1)	49.1	75.00 mg/			
3.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part	-2)	35.0	Not Specif	ïed		
4.	Oxides of Nitrogen (NOx)	IS 11255 (Part	-7)	194.6	710.00 mg/	NM <sup>3</sup>		
5.	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	СРСВ		15.0	100.00 mg/			
6.	Carbon Monoxide as CO (at 15% O <sub>2</sub> )	IS 13270 - 200	03	40.0	150.00 mg/			



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#### TEST REPORT

	Ref. No. RIL/TR/18-19/374(e) Dt: 02.08.2018 Your Work C			RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area				
b]	Details of Sample		Moni	toring of Stack Emis	sion			
	Sample Collected by		SHIV	/A TEST HOUSE of	on 27.07.18			
	Sampling Location		Prem	ises of Ramco Bihiy	ra			
e]	Method of Sampling		IS 11	1255 (Part-1,2,3 &	7)			
f]	Sampling Environmental Condition		Tem	p. ( <sup>o</sup> C) 34	Humidity (%) 82			
g]	Details of Sample Container (No. & Type	e of Container)		ble & Glass Imping				
	Sample Quantity		5					
<u>i]</u>	Items required to be tested		As pe	er contract				
	Whether any specific Method of Test has suggested by the customer		No					
	Date of receiving the sample in Laborat	ory	27.07.18					
]	Analysis Start Date / Analysis Completic		28.07.18 / 31.07.18					
		Methood of Te	est		Results			
	Stack Connected to			DG	Set 750 KVA			
	Stack No.				V			
3.	Height of Stack (as reported)				9.0 m			
	Dia of Stack at Top (as reported)				0.15 m.			
	Draft			2	Natural			
	Material of Construction				M.S.			
	Ambient Temperature, <sup>0</sup> C				34.0			
	Flue Gas Temperature, <sup>0</sup> C			210.0				
	Velocity, m/sec.	IS 11255 (Part	-31		9.8			
0.	Volumetric Flow Rate ( NM³/hr.)	10 11200 (1 411	0,		384.4			
	Sampling Point		+		3.5 m.			
				Concentration ( mg / NM³)	Limit as per E (P) Rules Schedule I			
				ing / ivivi )	NAMES SCHEWITE I			
2.	Particulate Matter (P.M.)	IS 11255 (Part	-1)	44.6				
_		IS 11255 (Part		44.6 31.8	75.00 mg/NM³			
3.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-	-2)	31.8	75.00 mg / NM <sup>3</sup> Not Specified			
3. 4.		<u> </u>	-2)		75.00 mg/NM³			



Authorized Signatory Quality Manager / Dy. Quality Manager

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#### TEST REPORT

Ref. No. RIL/TR/18-19/317(a) Dt:17.  [a] Name and address of the Customer	07.2018 Tour Wor	RAMCO INDUSTRIE Plot No. A 1, BIADA Bihiya Bhoipur – 802 152		
b] Details of Sample		Monitoring of Stack Em	1551020	
c] Sample Collected by		SHIVA TEST HOUSE		
d] Sampling Location		Premises of Ramco Bili		
e] Method of Sampling		IS 11255 (Part-1,2,3 &	<del></del> ፄ 7)	
f] Sampling Environmental Condition		Temp. (°C)- 31	Humidity (%) 72	
g] Details of Sample Container (No. & Ty	pe of Container)	Thimble & Glass Impi		
h] Sample Quantity		1		
Items required to be tested		As per contract		
<ul> <li>Whether any specific Method of Test h suggested by the customer</li> </ul>		No		
k] Date of receiving the sample in Labora		21.06.18 21.06.18 / 23.06.18		
	Analysis Start Date / Analysis Completion Date			
Parameters	Method of Te		Results	
. Stack Connected to			Fibre Circuit	
. Stack No.				
. Height of Stack (as reported)			30 0 m.	
. Dia of Stack at Top (as reported)			0.4 m.	
. Draft			Natural	
. Material of Construction			M.S.	
. Ambient Temperature, °C			31.0	
Flue Gas Temperature, °C			43.0	
Velocity, m/sec.	IS 11255 (Part-	-3)	5.9	
0. Volumetric Flow Rate ( NM³/hr.)			2515.7	
Sampling Point			10 m.	
		Concentration (mg/NM³)	Limit as per - F (P) Rules Schedule I	
2. Particulate Matter (P.M.)	IS 11255 (Part-		2.0 mg / NM <sup>3</sup>	
3. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-			
4. Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Part-	7) Not Detectable		



Quality Manager / Dy Quality Manager

This report applies only to sample tested as above.

<sup>2.</sup> Total Liability of our Laboratory is limited to invoiced amount

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legd. Office:
DExtn.: (Chatterjee Lane)

Gardanibagh PATNA – 800 001 (Bihar)



LABORATORY ADDRESS:-01™ FLOOR, RAJHANS NIKETAN-NEAR CANAL, RUKUNPURA, BAILEY ROAD, PATNA - 800 014 (BIHAR)



### SHIVA TEST HOUSE

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

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

### TEST REPORT

[a] Name and address of the Customer		Plot	MCO INDUSTRIES t No. A 1, BIADA In iya jipur – 802 152	
[b] Details of Sample			itoring of Stack Emis.	sion
[c] Sample Collected by			VA TEST HOUSE o	
[d] Sampling Location		Pren	nises of Ramco Bihiy	a
[e] Method of Sampling		IS 1	1255 (Part-1,2,3 &	7)
f] Sampling Environmental Condition		Tem	np. (°C) 31	Humidity (%) 72
g] Details of Sample Container (No. & 7	Гуре of Container)		nble & Glass Imping	jer
h] Sample Quantity		2		
i] Items required to be tested	l boo boon	As p	er contract	
<li>Whether any specific Method of Test suggested by the customer</li>		No		
k] Date of receiving the sample in Labo			06.18	
Analysis Start Date / Analysis Compl			06.18 / 23.06.18	
Parameters	Method of T	est		Results
. Stack Connected to			Cemen	t / Fly Ash Circuit
2. Stack No.				
Height of Stack (as reported)				15.0 m.
Dia of Stack at Top (as reported)				0.4 m.
. Draft				Natural
. Material of Construction			* * * * * * * * * * * * * * * * * * * *	M.S.
. Ambient Temperature, <sup>0</sup> C				31.0
B. Flue Gas Temperature, °C			,	45.0
Velocity, m/sec.	IS 11255 (Par	t-3)		7.3
0. Volumetric Flow Rate ( NM³/hr.)				3093.1
11. Sampling Point		-		5 m.
			Concentration (mg/NM³)	Limit as per E (P) Rules Schedule I
2. Particulate Matter (P.M.)	IS 11255 (Par	t-1)	43.4	100.00 mg/NM <sup>3</sup>
3. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Par	t-2)	Not Detectable	
4. Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Par	t-7)	15.1	



Authorized Signatory

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legd. Office:

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### SHIVA TEST HOUSE

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#### TEST REPORT

R	ef. No. RIL/TR/18-19/317(c) Dt: 17.07	7.2018 Your Wor				6.2018	
[a]	Name and address of the Customer		Plot Bihi	ICO INDUSTRIES I No. A 1, BIADA In ya ipur – 802 152		nones wine o	
[b] I	Details of Sample			toring of Stack Emiss			
	Sample Collected by			/A TEST HOUSE of			
[d] :	Sampling Location			ises of Ramco Bihiya			
[e]	Method of Sampling		The same of the same of	1255 (Part-1,2,3 & 7	")	u	
	Sampling Environmental Condition				umidity (%)	72	
	Details of Sample Container (No. & Type	e of Container)		ble & Glass Imping	er		
	Sample Quantity		2				
	tems required to be tested		As p	er contract			
	Whether any specific Method of Test ha suggested by the customer	s been	No				
	Date of receiving the sample in Laborate	21.06.18					
	Analysis Start Date / Analysis Completic	21.06.18 / 23.06.18					
	Parameters	Method of T	est		Results		
1.	Stack Connected to		7 7	Pul	veriser 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	0	
6.	Material of Construction				M.S.		
7.	Ambient Temperature, <sup>0</sup> C				31.0		
8.	Flue Gas Temperature, <sup>0</sup> C			e e e e e e e e e e e e e e e e e e e	40.0		
9.	Velocity, m/sec.	IS 11255 (Par	rt-3)		6.2		
10.	Volumetric Flow Rate ( NM³/hr.)			2	375.3		
11.	Sampling Point				5 m.		
				Concentration ( mg / NM³)	Limit as per Rules Schea	E (P) lule I	
12.	Particulate Matter (P.M.)	IS 11255 (Par	rt-1)	1.46	2.0 mg/l	VM <sup>3</sup>	
13.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Pa	rt-2)	Not Detectable			
14.	Oxides of Nitrogen (NOx)	IS 11255 (Par	rt-7)	10.8			



Authorized Signatory Quality Manager / Dy. Quality Manager

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PATNA - 800 001 (Bihar)



LABORATORY ADDRESS:01<sup>ST</sup> FLOOR, RAJHANS NIKETAN,
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## SHIVA TEST HOUSE

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### TEST REPORT

[a] Name and address of the Customer		RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152			
[c] Sample Collected by		Monitoring of Stack En	E on 20.06 18		
[d] Sampling Location		Premises of Ramco Bi	hiya		
[e] Method of Sampling		IS 11255 (Part-1,2,3			
f] Sampling Environmental Condition		Temp. (°C) 31	Humidity (%) 72		
g] Details of Sample Container (No. & T	ype of Container)	Thimble & Glass Imp	inger		
h] Sample Quantity i] Items required to be tested		5			
j) Whether any specific Method of Test	hoo hoo	As per contract			
suggested by the customer		No	0.000		
<ul> <li>k] Date of receiving the sample in Labor</li> <li>l] Analysis Start Date / Analysis Complete</li> </ul>	atory	21.06.18			
Parameters	Method of Te	21.06.18   23.06.18	Results		
. Stack Connected to			Set 1010 KVA		
. Stack No.		200	IV		
. Height of Stack (as reported)					
. Dia of Stack at Top (as reported)			9.0 m.		
. Draft	1 1	0.15 m.			
. Material of Construction			Natural		
. Ambient Temperature, °C			M.S.		
The trade of	_		31.0		
			216.0		
, , , , , , , , , , , , , , , , , , ,	IS 11255 (Part-	-3)	9.7		
0. Volumetric Flow Rate ( NM³/hr.)			375.8		
Sampling Point			3.5 m.		
		Concentration (mg/NM³)	Limit as per E (P. Rules Schedule I		
2. Particulate Matter (P.M.)	IS 11255 (Part-		75.00 mg / NM <sup>3</sup>		
3. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-	2) 31.0	Not Specified		
Oxides of Nitrogen (NOx)	IS 11255 (Part-		710.00 mg / NM <sup>3</sup>		
5. NMHC (as C) (at 15% O <sub>2</sub> )	СРСВ	18.0	100.00 mg / NM <sup>3</sup>		
Carbon Monoxide as CO (at 15% O2)	J IS 13270 - 200	100.00 1119 / 14			

<sup>.</sup> This report applies only to sample tested as above.

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Gardanibagh

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## SHIVA TEST HOUSE

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#### TEST REPORT

[a] Name and address of the Customer			RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152			
[b] Details of Sample			itoring of Stack Emis	sion		
[c] Sample Collected by		SHI	VA TEST HOUSE of	on 20.06.18		
d] Sampling Location		Pren	nises of Ramco Bihiy	va		
e] Method of Sampling		IS 1	1255 (Part-1,2,3 &	7)		
f] Sampling Environmental Condition			p. (°C) 31	Humidity (%) 72		
g] Details of Sample Container (No. & Ty	pe of Container)		nble & Glass Imping	ger		
h] Sample Quantity		5				
<ul><li>!tems required to be tested</li><li>Whether any specific Method of Test h</li></ul>	as hoen		er contract	-		
suggested by the customer	ias been	No				
k] Date of receiving the sample in Labora	ory 21.06.18					
i] Analysis Start Date / Analysis Complet		21.06.18 / 23.06.18				
Parameters	Method of T	est		Results		
Stack Connected to			DG	Set 750 KVA		
Stack No.				V		
. Height of Stack (as reported)				9.0 m.		
. Dia of Stack at Top (as reported)				0.15 m.		
. Draft				Natural		
. Material of Construction				M.S.		
Ambient Temperature, °C	> g < 7	air a		31.0		
. Flue Gas Temperature, °C		7		195.0		
Velocity, m/sec.	IS 11255 (Par	t-3)	<del></del>			
0. Volumetric Flow Rate ( NM³/hr.)	· · · · · · · · · · · · · · · · · · ·			368.4		
Sampling Point				3.5 m.		
			Concentration ( mg / NM³ )	Limit as per E (P) Rules Schedule I		
2. Particulate Matter (P.M.)	IS 11255 (Par	t-1)	40.2	75.00 mg/NM³		
3. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Par	t-2)	27.7	Not Specified		
4. Oxides of Nitrogen (NOx)	IS 11255 (Par		152.1	710.00 mg / NM <sup>3</sup>		
5. NMHC (as C) (at 15% O <sub>2</sub> )	СРСВ		12.0	100.00 mg/NM <sup>3</sup>		
6. Carbon Monoxide as CO (at 15% O <sub>2</sub> )	IS 13270 - 20	003	25.0	150.00 mg/NM <sup>3</sup>		

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LABORATORY ADDRESS :-🌃 FLOOR, RAJHANS NIKETAN, NEAR CANAL, RUKUNPURA, BAILEY ROAD, PATNA - 800 014 (BIHAR)

## SHIVA TEST HOUSE

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### TEST REPORT

	Name and address of the Custo		Plot Bihi	ICO I No. / ya	MANUAL/RIL/I INDUSTRIES LT! A 1, BIADA Indu: - 802 152	D. stria	I Area
[b]	Details of Sample		Bore	well	Water		M
[0]	Sample Collected by				ST HOUSE on 2	0.06.	18
[e]	Sampling Location  Method of Sampling		(Nea	r God	down)		·
[f]	Sampling Environmental Condit	ion			APHÁ		
[g]	Details of Sample Container (No	& Type of Contain	Temp			lumi	dity (%) 72
[n]	Sample Quantity	o. a Type of Contain	2 Litr	IC RO	ttle (02)		
[i]	tems required to be tested				ntract.		
	Whether any specific Method of suggested by the customer		No	JI 001	ili dot.		
[k] [	Date of receiving the sample in I	_aboratory	21.06	5.18			
[1] /	Analysis Start Date / Analysis Co	ompletion Date	21.06	5.18/	23.06.18		
S.N.	Parameters	Limit as per IS  Limit (mg/l.)  Desirable	Permissible Limit in the absence of alternative		Method of Test		Results in ing/l. except colour. Odour, Taste, Turbidity, & pH
1	Colour	5.0 Hazen Limit	source 25		IS 3025 (Part-4)		<5.00
2	Odour	Agreeable			IS 3025 (Part-5)	Serge terrology	
3	Taste	Agreeable			IS 3025 (Part-7)		Agreeable
4	pH	6.5 to 8.5			IS 3025 (Part-11		Agreeable
5	Turbidity on NTU	1.00	5.00		IS 3025 (Part-10		7.35
6	Total Dissolved Solids (TDS)	500.00	2000.00		IS 3025 (Part-15		<1.0
7	Total Hardness as CaCO <sub>3</sub>	200.00	600.00				368.0
8	Calcium as Ca	75.00	200.00		IS 3025 (Part-21		204.0
9	Magnesium as Mg	30.00			IS 3025 (Part-40		60.0
10	Iron as Fe	0.30	100.00		IS 3025 (Part-40		13.1
11	Residual Free Chlorine		No relaxati	on	IS 3025 (Part-53		0.21
12	Total Alkalinity as CaCO <sub>3</sub>	0.20	1.00		IS 3025 (Part-26		<0.1
3	Chloride as Cl	200.00	600.00		IS 3025 (Part-23		218.0
4		250.00	1000.00		IS 3025 (Part-32)	)	40.0
5	Sulphate as SO <sub>4</sub>	200.00	400.00		IS 3025 (Part-24)	)	9.2
	Nitrate as NO <sub>3</sub>	45.00	No relaxation	on	IS 3025 (Part-34)	)	5.3
6	Fluoride as F	1.00	1.50		APHA (4500 F D		0.51

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Quality Manager / Dy Quality Manager

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#### TEST REPORT

Ref. N	o. <i>RIL/TR/18-19/317</i>	7(g) Dt: 17.07.2018	8 Your Work C	Order No. MAN	UAL/RIL	/BIH Dt: 10.06.20	018	
[a] Name and address of the Customer				RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152				
	s of Sample			Borewell Wa				
	le Collected by			SHIVA TEST	HOUSE	on 20.06.18		
	ling Location			(Near Godov	vn)	A .		
	od of Sampling			IS 3025, API	HA.			
	ling Environmental (			Temp. (°C)	31	Humidity (%)	72	
	s of Sample Contain	er (No. & Type of (	Container)	Glass Bottle (01)				
	le Quantity			300 ml				
	required to be tested			As per contract.				
[j] Wheth	ner any specific Meth he customer	nod of Test has bee	en suggested	No				
[k] Date	of receiving the same	ole in Laboratory		21.06.18				
[l] Analy	sis Start Date / Analy	sis Completion Da	ite .	21.06.18 / 23.06.18				
		BACTERIOLOGICAL EXA	MINATION OF WATE	R AS PER IS 1622	- 1981			
Coliform ( of 10 ml. a	Most Probable Numbe nd 5 tubes of 1 ml. )	r of Organisms per 1	00 ml. of sample	and confidence	limit using	1 tube of 50 ml., 5 to	ubes	
Comple	Madia Chanath	NICT. I	Observa	tion for Acid / 0	Gas forma	ation at 37 °C after		
Sample	Sample Media Strength No. of Tubes		24			48 Hr.		
50 ml.	50 ml. Double Strength 1		<u>-</u>					
10 ml.	do	5		_	A 100			
1 ml.	Single Strength	5		•		-		



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

Authorized Signatory Quality Manager / Dy. Quality Manager

This report applies only to sample tested as above.

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agd. Office:

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## SHIVA TEST HOUSE

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### TEST REPORT

[a]	Ref. No. RIL/TR/18-19/317(h)  Name and address of the Cust			Plot No	O INDUSTRIES LTD.  o. A 1, BIADA Industr	
[p]	Details of Sample			Drinking	ir - 802 152	
ICI	Sample Collected by	SHIVA	TEST HOUSE on 20.0			
[0]	Sampling Location			from Ca	nteen Aquaguard	J6.18
[6]	Method of Sampling			IS 3025	. APHA	
	Sampling Environmental Condi	tion		Temp. (	000	nidity (%)   72
[h]	Details of Sample Container (N Sample Quantity	<ul><li>o. &amp; Type of Conta</li></ul>	iner)	Plastic E	Bottle (02)	ildity (%)   72
[i]	Items required to be tested			2 Litres		
[j]	Whether any specific Method of	Toot has he		As per c	ontract.	
	Suggested by the clietomer			No		
	Date of receiving the sample in Analysis Start Date / Analysis C	Laboratory		21.06.18		
-	Jose Start Date / Arraiysis C	ompletion Date		21.06.18	1 / 23.06.18	
		Limit as per I				
S.N.	Parameters	timit (mg/l.)  Limit (mg/l.)  Desirable  Permissible  Limit in the absence of alternative		in the nce of	Method of Test	Results in mg/ except colour, Odour, Taste,
	Colour	F O LL	sourc			Turbidity & pf
	Odour	5.0 Hazen Limit	25		IS 3025 (Part-4)	<5.0
	Taste	Agreeable			IS 3025 (Part-5)	Agreeable
	pH	Agreeable			IS 3025 (Part-7))	Agreeable
	The state of the s	6.5 to 8.5			IS 3025 (Part-11)	
	Turbidity on NTU	1.00	5.00		IS 3025 (Part-10)	6.68
	Total Dissolved Solids (TDS)	500.00	2000	.00	IS 3025 (Part-15)	<1.00
	Total Hardness as CaCO <sub>3</sub>	200.00	600.0			274.0
	Calcium as Ca	75.00	200.0		IS 3025 (Part-21)	186.0
	Magnesium as Mg	30.00	100.0		IS 3025 (Part-40)	52.0
)	Iron as Fe	0.30			IS 3025 (Part-40)	13.6
	Residual Free Chlorine	0.20		laxation	IS 3025 (Part-53)	0.15
	Total Alkalinity as CaCO <sub>3</sub>		1.00		IS 3025 (Part-26)	<0.1
	Chloride as CI	200.00	600.0		IS 3025 (Part-23)	210.0
	Sulphate as SO <sub>4</sub>	250.00	1000.	00	IS 3025 (Part-32)	28.0
+	Nitrate as NO <sub>3</sub>	200.00	400.00	0	IS 3025 (Part-24)	5.4
-		45.00	No rel	axation .	IS 3025 (Part-34)	
	Fluoride as F	1.00	1.50		APHA (4500 F D)	0.45

Quality Manager / Dy. Quality Manager

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#### TEST REPORT

Ref.	No. <i>RIL/TR/18-19/3</i> 1	17(i) Dt: 17.07.201	8 Your Wor	rk Order No. MANUA	L/RIL/BIH Dt: 10.06.	 2018		
	ne and address of the	e Customer		RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152				
	ils of Sample			Drinking Water				
	[c] Sample Collected by			SHIVA TEST HOUS	SE on 20.06.18			
[d] Sampling Location			from Canteen Aqua	aguard				
[e] Meth	nod of Sampling			IS 3025, APHA	gaara			
[f] Sam			Temp. (°C) 31	Humidity (%)	72			
[g] Deta	The state of the s		Glass Bottle (01)					
[i] Sample Quantity [i] Items required to be tested		300 ml						
		As per contract.						
sugg	ested by the custom	er	en	No				
[k] Date	of receiving the sam	ple in Laboratory		21.06.18 21.06.18 / 23.06.18				
[I] Analy	sis Start Date / Anal							
		BACTERIOLOGICAL EXA	MINATION OF W	ATER AS PER IS 1622 - 198	R1			
Coliform ( of 10 ml. c	Most Probable Number and 5 tubes of 1 ml. )	er of Organisms per 1	00 ml. of sam	ple and confidence limit	using 1 tube of 50 ml., 5	tubes		
Sample	Media Strength	No. of Tubes	Obser	vation for Acid / Gas	formation at 37 °C afte			
		Tio. or rubes		24 Hr.	48 Hr.			
50 mil.	Double Strength	1		-	-			
10 ml.	0 ml do 5		-	-				
1 ml.	Single Strength	5						
Result - N	MPN Organisms Valu	· NIDI						



Authorized Signatory Quality Manager / Dy. Quality Manager

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LABORATORY ADDRESS:-01" FLOOR, RAJHANS NIKETA NEAR CANA! RUKUNPURA, BAILEY ROAD, PATNA - 800 014 (BIHAR)

### SHIVA TEST HOUSE

Tel.: 0612 - 2247 ..... 2240752 ; TeleFax: 0612 - 2590705 E.mail.: sthpatna1@yahoo.co.in

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

#### TEST REPORT

R	lef. No. RIL/TR/18-19/317(j) Dt:	17.07.2018 Your Work	RAMCO INDUSTRIES		
[a]	Name and address of the Custome	Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152			
[b]	Details of Sample		Effluent Sample		
	Sample Collected by	6.4	SHIVA TEST HOUSE	on 20.06.18	
	Sampling Location		from Final Discharge P	oint	
	Method of Sampling		IS 3025, APHA		
	Sampling Environmental Condition		Temp. (°C) 31	Humidity (%) 72	
	Details of Sample Container (No. 8	& Type of Container)	Plastic Bottle (02)		
	Sample Quantity		2 Litres		
		As per contract.			
	Whether any specific Method of Te suggested by the customer		No		
[k] Date of receiving the sample in Laboratory			21.06.18		
	Analysis Start Date / Analysis Con		21.06.18 / 23 06.18		
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	PΗ	IS 3025 (Part-11)	5.5 to 9.0	6.98	
3	Suspended Solids	IS 3025(Part-17)	100.00	44.0	
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	18.0	
6	C.O.D.	APHA 5220 B	250.00	60.0	
7	Dissolved Phosphate as P	APHA ( 4500-P-D )	5.00	1.3	
8	Fluoride as F	APHA 4500 (F D)	5.00	0.42	
9	Ammonical Nitrogen as N	IS 3025 (Part-34)	50.00	15.0	
10	Total Kjeldahl Nitrogen as N	ÅPHA (4500 N org)	100.00	27.0	



Authorized Signatory Quality Manager / Dy: Quality Manager

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### TEST REPORT

[a]	Name and address of the Customer	RAMCO INDUSTRIES LTD. Piot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152				
[b]	Sampling Environmental Condition	Temp. (°C)	31	Humidity (%)	72	
[c]	Details of Sample	Monitoring of Ambient Noise Level at Ramco Bihiya				
[d]	Monitored by	SHIVA TEST HOUSE on 20.06.18				
[e] 	Whether any specific Method of Test has been suggested by the party	No				
	Sampling Location	Time Weighted Average (TWA) of Noise Level in dB(A)				
l. Nea	r Main Gate		69.			
2. Nea	r Office		54.6			
. Nea	r Stripping Area	A	65.4			
. Near	r Fibre Mill		67.2		-	
	DG Room		71.9			
I.B.:   R€   pe	the Ambient Air Quality Standards in respontrol) Rules 2000 for Industrial area esidential area is 55.0 dB(A) & for Silence are Rule 7(1&2) the authority shall take action andards by 10 dB(A) or more against any are	Zone is 50.0 dB(A)	er Noise Pollo Commercial	ution (Regulation a area is 65.0 dB(A	1). for	



Authorized Signatory

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Quality Manager / Dy. Quality Manager

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### TEST REPORT

[a	Name and address of the Customer     Details of Sample		RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152			
[b			Monitoring of	2 152 Respirable Dust in Work Zone		
[C	Sample Collected by		Alea			
[ď	Sampling Location		Shiva Test Ho	use on 20.06.18		
[e]			Premises of Rai	nco Bihiya		
[f]	Sampling Environmental Condition		IS 5182 (Part -	14)		
gl	Details of Sample Container (No. & Type		Temp. (°C)	31 Humidity (%) 72		
h]	Sample Quantity	of Container)	Filter Paper; Glass Impinger			
]	Items required to be tested		04			
]	Whether any specific Method of Test has been suggested by the customer		As per contract			
			No			
(]	Date of receiving the sample in Laborator	7/				
].	Analysis Start Date / Analysis Completion	Dotas	21.06.18			
	2 - Compicuo		21.06.18 / 23.0	6.18		
		Concentration	of Respirable			
	Sampling Point	Dust (	$(PM_{10})$	Limit as NAAQS Nov '2009		
		[ 08 hrs.	] (μg/M³)	(μg/M³)		
	Fibre Mill Area	33.	.1			
	Hatscheck Machine Area	21.	6			
	Stripping Machine Area 32.4		4	100.0		
	Pulverizer Area	48.2	2			



Quality Manager / Dy. Quality Manager

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### TEST REPORT

Ref. No. RIL/TR/18-19/317(1				···· minvunt	KIL/BIH Dt	: 10.06.201
[a] Name and address of the Custom	1 - 1 - No.	20 100 100 100 100 100 100 100 100 100 1	Sr. RA	General Manage MCO INDUSTRIE t No. A 1, BIADA	r (Works)	
[b] Details of Sample				jpur 802 152		
[c] Sample Collected by			Moi	nitoring of Ambie	ont Air Quality	
d Sampling Location			Shiv	a Test House on	20.06.18	
e Method of Sampling		-	Pren	nises of Ramco Bih	iya	
Sampling Environmental Condition			IS 5	182 (Part - 14)		
19) Details of Sample Container (No. 8)	Type of Container )			p. (°C) 31	Humidit	y (%) 72
- Guinple Quantity			12	r Paper ; Glass Im	pinger	
				er contract		
Whether any specific Method of Te  k] Date of receiving the sample in Lat	st has been suggested	by the custon	ner No	ei contract		
Analysis Start Date / Analysis Com	poratory		21.0	6.18		
Jan Bate / Arialysis Com	pietion Date			5.18 / 23.06.18		
Parameters	Method of			Sampling Statio	n	
	Test	Near Office	Near Rear Gate	Near Stripping	Near Laboratory	Limit as NAAQS
. Particulate Matter (PM <sub>10</sub> ), μg / m <sup>3</sup>		• 55.7	58.2	54.4		Nov. '200
- a sourate reatter (PM <sub>10</sub> ), μg/m <sup>3</sup>	IS 5182 (Pan-23)	50.4	68.4	51.4	47.2	
		48.8	51.6	46.7	50.4	100 μg / m
Particulate Matter (PM <sub>2.5</sub> ), µg / m <sup>3</sup>	USEPA 26.1	30.5	33.8	29.7	47.2	
modifice (Matter (P)M2.5), μg / m <sup>3</sup>		26.1	40.2	27.6	25.6	
		23.8	31.1	24.4	27.1	60 μg / m
· ·		<5.0	11.4	<5.0	25.1 5.1	
	" Late 6	7.6	9.9	5.4		
Sulphur Dioxide as SO <sub>2</sub> , μg / m <sup>3</sup>	IS 5182 (Part-2)	6.7	13.7	7.3	6.6	
	(1 dit-2)	6.2	9.4	6.2	8.3	80 μg / m <sup>3</sup>
		<5.0	8.4	5.1	5.9	pg / 111
		<5.0	5.1	<5.0	6.6	
		15.0	22.9	14.3	<5.0 17.2	
No.		16.4	21.9	20.2	23.1	
Nitrogen Dioxide as NO <sub>2</sub> , μg / m <sup>3</sup>	IS 5182 (Part-6)	13.7	19.7	21.5	18.3	
	(1 (31( 0)	11.4	27.9	15.6		80 μg / m <sup>3</sup>
		9.6	16.3	12.0	21.8	ra. III
erage Value		7.9	12.4	9.6	11.3 10.4	
PM <sub>10</sub>				2 - 28		
PM <sub>2.5</sub>		48.3	49.7	47.5	45.1	
SO <sub>2</sub>		25.1	28.6	25.5	24.2	
NO <sub>2</sub>		6.4	9.9	8.3	7.5	
	JA J	11.5	18.9	14.5	15.9	

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### SHIVA TEST HOUSE

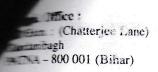
Tel.: 0612 – 2247538 / 2240752 ; TeleFax: 0612 - 2590705 E.mail.: <u>sthpatna1@yahoo.co.in</u> ISO 18001:2007 OHSAS Certified

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### TEST REPORT

b] Details of Sample c] Sample Collected by d] Sampling Location e] Method of Sampling				iya	Industrial Area	3
d] Sampling Location				ojpur – 802 152 nitoring of Ambie	and Air Overlite	
			Shi	a Test House on	20 06 19	
el Method of Sampling			Pres	nises of Ramco Bil	20.00.10	
				182 (Part - 14)	<u> </u>	
f] Sampling Environmental Condition				p. (°C) 31	Humid	ity (%) 72
g] Details of Sample Container (No. & T)	ype of Container)			r Paper ; Glass In	npinger	13 (70)   12
h] Sample Quantity			5			
Items required to be tested			Asp	er contract		
<ul> <li>Whether any specific Method of Test I</li> <li>Date of receiving the sample in Labora</li> </ul>	has been suggested by	the custon				
Date of receiving the sample in Labora Analysis Start Date / Analysis Comple	atory		21.0			
7 Wallysis Gtart Date / Allarysis Comple	tion Date	7	21.0	6.18 / 23.06.18		
	A BEALTY S			Sampling Stati	ation	
Parameters	Method of Test	Near Office	Near Rear Gate	Near Stripping Area	Near Laboratory	Limit as per EPA Notificatio ( µg / m³ )
. Carbon Monoxide (CO), mg / m³	IS 5182 (Part-10)	0.45	1.24	0.24	BDL	4 mg / m <sup>3</sup>
. Lead (Pb) , μg / m³	IS 5182 (Part-22)	BDL	BDL	BDL	BDL	1 μg / m³
Ammonia as NH <sub>3</sub> , μg / m <sup>3</sup>	IS 5182 (Part-5)	NIL	NIL.	NIL	MIL	400 ug/m³
. Ozone (O <sub>3</sub> ) , μg / m <sup>3</sup>	IS 5182 (Part-9)	6.2	24.3	9.4	11.6	180 µg / m³
Benzene (C <sub>6</sub> H <sub>6</sub> ) , μg / m <sup>3</sup>	IS 5182 (Part-22)	• BDL	BDL	BDL	BDL	5 μg / m <sup>3</sup>
Arsenic (As), ng / m³	AAS Method	BDL	BDL	BDL	BDL	6 ng / m <sup>2</sup>
Nickel as Ni, ng / m³	AAS Method	BDL	BDI.	BDL	BDL.	20 ng / m <sup>3</sup>







## SHIVA TEST HOUSE

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#### TEST REPORT

[a]	Name and address of the Customer			Plot N Bihiy		r (Works) S LTD. Industrial Are	1	
[b] Details of Sample					ent Air Quality			
[c]	Sample Collected by				Test House on			
[d] Sampling Location				ses of Ramco Bil				
[e] Method of Sampling				IS 5182 (Part - 14)				
[f]					Temp. (°C) 31 Humidity (%) 72			
[g] Details of Sample Container (No. & Type of Container)				Filter Paper ; Glass Impinger				
[h]	Sample Quantity			1	1			
[i]	items required to be tested		The world	As per	As per contract			
	Whether any specific Method of Test h	as been suggested by	the custome	r No				
[k]	Date of receiving the sample in Labora	tory			21.06.18			
[1]	Analysis Start Date / Analysis Completi	on Date		21.06.	21.06.18 / 22.06.18			
		Mathedal			Sampling Stati	on	Limit as per	
	Parameters	Method of Test	T. T		Near Stripping Area	Near Laboratory	EPA Notification (μg/m³)	
1.	Benzo (a) Pyrene (Particulate Phase only) ng / m²	IS 5182 (Part-10)	<0.1	<0.1	< 0.1	< 0.1	1.0 ng / m <sup>3</sup>	



Quality Manager / Dy. Quality Manager

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#### TEST REPORT

[a] Name and address of the Custo	a] Name and address of the Customer		RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152			
[b] Details of Sample			Monitoring of Stack Emission			
[c] Sample Collected by			IVA TEST HOUSE			
[d] Sampling Location		Pre	mises of Ramco Bihi	iya		
[e] Method of Sampling		IS	11255 (Part-1,2,3 &	7)		
f] Sampling Environmental Condit		Ter	mp. ( <sup>0</sup> C) 36	Humidity (%) 62		
Details of Sample Container (No. & Type of Container )			mble & Glass Impir	iger		
Sample Quantity		1		,		
Items required to be tested  Whether any specific Method of Test has been		As	per contract	40		
<ul> <li>Whether any specific Method of Test has been suggested by the customer</li> </ul>		No				
Date of receiving the sample in Laboratory		20.	20.05.18			
Analysis Start Date / Analysis Completion Date			05.18 / 24.05.18			
Parameters	Method of 7	est		Results		
Stack Connected to			F	ibre Circuit		
2. Stack No.				1		
B. Height of Stack (as reported)				30.0 m.		
Dia of Stack at Top (as reported	(h			0.4 m.		
5. Draft				Natural		
Material of Construction				M.S.		
Ambient Temperature, <sup>0</sup> C				36.0		
B. Flue Gas Temperature, <sup>0</sup> C				44.0		
Velocity, m/sec.	IS 11255 (Pa	rt-3)		7.1		
<ol> <li>Volumetric Flow Rate ( NM³/hr.)</li> </ol>			*	3017		
Sampling Point				10 m.		
			Concentration ( mg / NM³)	Limit as per E (P) Rules Schedule I		
2. Particulate Matter (P.M.)	IS 11255 (Pa	rt-1)	1.76	2.0 mg / NM <sup>3</sup>		
<ol> <li>Sulphur Dioxide (SO<sub>2</sub>)</li> </ol>	IS 11255 (Pa	rt-2)	Not Detectable			
4. Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Pa	rt_7)	Not Detectable			



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#### TEST REPORT

] Name and address of the Customer		RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA industrial Area Bihiya Bhojpur – 802 152		
b] Details of Sample			nitoring of Stack Emis	csion
c] Sample Collected by			IVA TEST HOUSE of	
d] Sampling Location		Pre	mises of Ramco Bihiy	va
e] Method of Sampling	* 2	IS 1	11255 (Part-1,2,3 &	7)
Sampling Environmental Condition			np. (°C) 36	Humidity (%) 62
g] Details of Sample Container (No. & T			mble & Glass Imping	ger
	Sample Quantity			
	Items required to be tested Whether any specific Method of Test has been		oer contract	
suggested by the customer		No		
Date of receiving the sample in Laboratory		20.05.18		
Analysis Start Date / Analysis Comple			05.18 / 24.05.18	
Parameters	Method of To	est		Results
Stack Connected to	1.0		Cemen	t / Fly Ash Circuit
Stack No.				
Height of Stack (as reported)				15.0 m.
Dia of Stack at Top (as reported)	A .			0.4 m.
Draft	n e v			Natural
Material of Construction	*		1	M.S.
Ambient Temperature, <sup>0</sup> C				36.0
Flue Gas Temperature, <sup>0</sup> C	, , , ,,,			48.0
Velocity, m/sec.	IS 11255 (Par	t-3)		6.6
. Volumetric Flow Rate ( NM³/hr.)				2770
. Sampling Point				5 m.
			Concentration ( mg/NM³)	Limit as per E (P. Rules Schedule I
Particulate Matter (P.M.)	IS 11255 (Part	:-1)	38.4	100.00 mg/NM <sup>3</sup>
S. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part	:-2)	Not Detectable	
4. Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Part	7)	13.6	



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#### TEST REPORT

a] Name and address of the Custo	omer	Plot Bih	RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152			
b] Details of Sample			nitoring of Stack Emi			
c] Sample Collected by			VA TEST HOUSE			
d] Sampling Location			nises of Ramco Bihi			
e] Method of Sampling			1255 (Part-1,2,3 &	7)		
f] Sampling Environmental Condi g] Details of Sample Container (N				Humidity (%)	62	
Details of Sample Container (No. & Type of Container )			nble & Glass Impir	ger		
Sample Quantity		2				
Items required to be tested Whether any specific Method of Test has been		Asp	per contract			
<ul> <li>Whether any specific Method or suggested by the customer</li> </ul>			No			
k] Date of receiving the sample in	Laboratory	20.0	05.18			
	lysis Start Date / Analysis Completion Date		05.18 / 24.05.18			
Parameters	Method of	Test		Results		
. Stack Connected to			Pu	ilveriser Plant		
2. Stack No.			111			
B. Height of Stack (as reported)	9 9		15.0 m.			
Dia of Stack at Top (as reporte	ed)			0.15 m.		
Draft				Natural	- !	
6. Material of Construction			124,	M.S.		
7. Ambient Temperature, <sup>0</sup> C	*			36.0		
B. Flue Gas Temperature, <sup>0</sup> C				42.0		
9. Velocity, m/sec.	IS 11255 (F	art-3)		5.9		
0. Volumetric Flow Rate (NM³/hr	.)			354.9		
1. Sampling Point				5 m.		
			Concentration (mg/NM³)	Limit as per Rules Sche	E (P) lule I	
2. Particulate Matter (P.M.)	IS 11255 (F	art-1)	1.28	2.0 mg/l	VM <sup>3</sup>	
3. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (F	art-2)	Not Detectable		27. 1	
4. Oxides of Nitrogen (NOx)	2	(IS 11255 (Part-7)				

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kegd. Office:

6D Extn.: (Chatterjee Lane) Gardanibagh PATNA - 800 001 (Bihar)



EABORATORY ADDRESS:65° FLOOR, RAJHANS NIKETAN,
NEAR CANAL, RUKUNPURA,
BAILEY ROAL,
PATNA - 800 014 (BIHAR)

### SHIVA TEST HOUSE

Tel.: 0612 – 2247<sup>f^^</sup> ' 2240752; TeleFax: 0612 - 2590705 E.mail.: sthpatna1@yahoo.co.in



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

#### TEST REPORT

	Ref. No. RIL/TR/18-19/160(d) Dt: 26:03	5.2018 Your Work (	Order N	No MANIIAL/RII	/RIH/18 Dt · 10 04 2018	
	a] Name and address of the Customer		RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152			
	Details of Sample			nitoring of Stack Emi	ission	
	Sample Collected by		SHI	VA TEST HOUSE	on 20.05.18	
	Sampling Location		Pren	nises of Ramco Bih	iya	
	Method of Sampling		IS 1	1255 (Part-1,2,3 &	(7)	
	Sampling Environmental Condition		Tem	np. (°C) 36	Humidity (%) 62	
[g]	Details of Sample Container (No. & Typ	e of Container)		nble & Glass Impir	nger	
			5			
	Items required to be tested Whether any specific Method of Test ha	4 h = 2 h = 2 n		er contract		
וח	suggested by the customer	is been	No		*	
	Date of receiving the sample in Laborate			20.05.18		
	Analysis Start Date / Analysis Completion			1.05.18 / 24.05.18		
	Parameters	Method of Te			Results	
1.	Stack Connected to	- 6	2	DG Set 1010 KVA		
2.	Stack No.	* * * * * * * * * * * * * * * * * * * *	9.0 m.			
3.	Height of Stack (as reported)					
4.	Dia of Stack at Top (as reported)				0.15 m.	
5.	Draft			8 8	Natural	
<b>3</b> .	Material of Construction				M.S.	
7.	Ambient Temperature, <sup>0</sup> C				36.0	
3.	Flue Gas Temperature, <sup>0</sup> C			t and a second	194.0	
).	Velocity, m/sec.	IS 11255 (Part	-3)		11.6	
10.	Volumetric Flow Rate ( NM³/hr.)				470.6	
11.	Sampling Point				3.5 m.	
				Concentration ( mg/NM³)	Limit as per E (P) Rules Schedule I	
2.	Particulate Matter (P.M.)	IS 11255 (Part-	-1)	51.3	75.00 mg/NM <sup>3</sup>	
3.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-	-2)	34.6	Not Specified	
4.	Oxides of Nitrogen (NOx)	IS 11255 (Part-	-7)	172.3	710.00 mg/NM³	
	NMHC (as C) (at 15% O <sub>2</sub> )	CPCB		24.0	100.00 mg/NM³	
6.	Carbon Monoxide as CO (at 15% O <sub>2</sub> )	IS 13270 - 200	03	36.0	150.00 mg/NM <sup>3</sup>	

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Ruikunpura PATNA 800014.

and, Office:

D Extn.: (Chatterjee Lane)

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LABORATORY ADDRESS:-01st floor, Rajhans Niketan, NEAR CANAL, RUKUNPURA, BAILEY ROAD, PATNA - 800 014 (BIHAR)

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### TEST REPORT

[a]	] Name and address of the Customer		RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152			
[b]	Details of Sample		Monitoring of Stack Emission			
[c]	Sample Collected by			/A TEST HOUSE or		
[d]	Sampling Location			ises of Ramco Bihiyo		
[e]	Method of Sampling			1255 (Part-1,2,3 & 7		
[f]	Sampling Environmental Condition			p. ( <sup>0</sup> C) 36	Humidity (%) 62	
[g]	Details of Sample Container (No. & Type	e of Container)	-	ble & Glass Imping	er	
[h]	Sample Quantity		5			
[i]_	Items required to be tested		As p	er contract		
[j]	Whether any specific Method of Test ha suggested by the customer		No			
	Date of receiving the sample in Laborate			20.05.18 21.05.18 / 24.05.18		
[1]	Analysis Start Date / Analysis Completic				Results	
	Parameters	Method of T	est			
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)	a , a			0.15 m.	
5.	Draft				Natural	
6.	Material of Construction				M.S.	
7.	Ambient Temperature, <sup>0</sup> C				36.0	
8.	Flue Gas Temperature, <sup>0</sup> C			22.	185.0	
9.	Velocity, m/sec.	IS 11255 (Par	t-3)		10.2	
10.	Volumetric Flow Rate (NM³/hr.)			2 ,	421.9	
11.					3.5 m.	
				Concentration ( mg/NM³)	Limit as per E (P Rules Schedule I	
12.	Particulate Matter (P.M.)	IS 11255 (Pa	rt-1)	44.8	75.00 mg/NM³	
	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Pa	rt-2)	33.1	Not Specified	
	Oxides of Nitrogen (NOx)	IS 11255 (Pa	rt-7)	158.4	710.00 mg/NM³	
	NMHC (as C) (at 15% O <sub>2</sub> )	СРСВ		16.0	100.00 mg/NM³	
	Carbon Monoxide as CO (at 15% O <sub>2</sub> )	IS 13270 – 2	UU3 .	30.0	150.00 mg / NM <sup>3</sup>	



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6D Extn.: (Chatterjee Lane)

Gardanibagh

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LABORATORY ADDRESS:01<sup>ST</sup> FLOOR, RAJHANS NIKETAN,
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# SHIVA TEST HOUSE

el.: 0612 - 2247538 / 2240752 ; TeleFax : 0612 - 2590705 E.mail.: <u>sthpatha1@yahoo.co.in</u>



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#### TEST REPORT

[a]	Ref. No. RIL/TR/18-19/57(a) Dt: 20.04.2018 Your Work On Name and address of the Customer		RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152			
[b]	Details of Sample		Monitoring of Stack Emission			
[c]	Sample Collected by		SH	IVA TEST HOUSE	on 12.04.18	
[d]	Sampling Location		Pre	mises of Ramco Bihi	iya	
[e]	Method of Sampling		IS .	11255 (Part-1,2,3 &	. 7)	
f]	Sampling Environmental Condition		Ter	np. (°C) 28	Humidity (%) 70	
g]	Details of Sample Container (No. & Ty	pe of Container )	Thi	mble & Glass Impir	iger	
h]	Sample Quantity		1			
<u>i]</u>	Items required to be tested			per contract		
j]	Whether any specific Method of Test h	est has been		No		
k]	suggested by the customer  Date of receiving the sample in Labora	toni	12	04.10	*	
	Analysis Start Date / Analysis Complet			12.04.18 13.04.18 i 16.04.18		
	Parameters	Method of Te		1	Results	
	Stack Connected to			F	ibre Circuit	
	Stack No.					
<b>3</b> .	Height of Stack (as reported)				30.0 m.	
	Dia of Stack at Top (as reported)				0.4 m.	
	Draft				Natural	
<b>3</b> .	Material of Construction			e. 82	M.S.	
	Ambient Temperature, <sup>0</sup> C				28.0	
	Flue Gas Temperature, <sup>0</sup> C				40.0	
١.	Velocity, m/sec.	IS 11255 (Part-	-3)	6.3		
0.	Volumetric Flow Rate ( NM³/hr.)		-	2712		
1.	Sampling Point		10 m.		10 m.	
				Concentration ( mg/NM³)	Limit as per E (P) Rules Schedule I	
2.	Particulate Matter (P.M.)	IS 11255 (Part-	-1)	1.62	2.0 mg / NM <sup>3</sup>	
3.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-	2)	Not Detectable		
4.	Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Part-	7)	Not Detectable		



Authorized Signatory
Quality Manager / Dy. Quality Manager

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Regd. Office:

6D Extn.: (Chatterjee Lane)

Gardanibagh

PATNA - 800 001 (Bihar)



LABORATORY ADDRESS:01<sup>ST</sup> FLOOR, RAJEANS NIKETAN,
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PATNA - 800 014 BIHAR)



# SHIVA TEST HOUSE

Tol: 0612 - 2247538 / 2240752 ; TeleFax : 0612 - 2590705 E.mail.: <u>sthpatna1@yahoo.co.in</u>

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#### TEST REPORT

Ref. No. RIL/TR/18-19/57(b) Dt: 20.04.  a] Name and address of the Customer	3,25% 2,25%	Plot N Bihiy Bhoj	CO INDUSTRIES L' No. A 1, BIADA Ind a our – 802 152	fD. ustrial Area	
b] Details of Sample		Monit	oring of Stack Emissic	on	
c] Sample Collected by		SHIV	A TEST HOUSE on	12.04.18	
d] Sampling Location	a - 0	Premi	ises of Ramco Bihiya		
e] Method of Sampling			255 (Part-1,2,3 & 7)		
f Sampling Environmental Condition		Temp		Humidity (%)	70
g] Details of Sample Container (No. & Typ	e of Container)		ble & Glass Impinge	er	
h] Sample Quantity		2			
I Items required to be tested		As pe	er contract		
<ul> <li>Whether any specific Method of Test has suggested by the customer</li> </ul>	as been	No			-
k1 Date of receiving the sample in Labora	tory •	12.04			
Analysis Start Date / Analysis Completi	ion Date	1	1.18 / 16.04.18	Results	-
Parameters	Method of T	est			
Stack Connected to			Cement	/ Fly Ash Circuit	
2. Stack No.					
B. Height of Stack (as reported)			15.0 m.		
Dia of Stack at Top (as reported)				0.4 m.	
5. Draft				Natural	
		*		M.S.	
				28.0	e, .
7. Ambient Temperature, <sup>0</sup> C	_			43.0	
B. Flue Gas Temperature, <sup>0</sup> C	IS 11255 (Pa	rt_3)		5.8	
9. Velocity, m/sec.	15 11255 (18	111-0)		2473	
10. Volumetric Flow Rate ( NM³/hr.)				5 m.	
11. Sampling Point	4 A		Ctient	Limit as per	E (P)
			Concentration ( mg/NM³)	Rules Sched	lule I
12. Particulate Matter (P.M.)	IS 11255 (Pa	art-1)	36.2	100.00 mg	/ NM~
13. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Pa	art-2)	Not Detectable		
14. Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Pa	art-7)	11.7		



Authorized Signatory

Quality Manager / Dy. Quality Manager

This report applies only to sample tested as above.

6D Extn.: (Chatterjee Lane)

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PATNA - 800 001 (Bihar)



LABORATORY ADDRESS:-01<sup>st</sup> floor, Rajhans Niketan, NEAR CANAL, PUKUNPURA, BAILEY ROAD, PATHA - 800 014 (BIHAR)

# SHIVA TEST HOUSE

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#### TEST REPORT

a] Name and address of the Customer		COrder No. MANUAL/RIL/BIH/18 Dt : 10.04.2018  RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya			
[b] Details of Sample		Bhojpur – 802 152			
[c] Sample Collected by		Mo	nitoring of Stack Emi	ssion	
] Sampling Location		SF	IVA TEST HOUSE	on 12.04.18	
[e] Method of Sampling			emises of Ramco Bihi		
[f] Sampling Environmental Condition			11255 (Part-1,2,3 &	7)	
Details of Sample Container (No. & Type of Container )			mp. ( <sup>0</sup> C) 28	Humidity (%) 70	
Sample Quantity		Thi	mble & Glass Impin	ger	
Items required to be tested		2			
Whether any specific Method of Test has been		As	per contract		
suggested by the customer		No			
<ul><li>[k] Date of receiving the sample in Labo</li></ul>	oratory	12	04.18		
[I] Analysis Start Date / Analysis Comp			13.04.18 / 16.04.18		
Parameters	Method of Te	est	1.707 70.04.70	Results	
1. Stack Connected to			Pu	Iveriser Plant	
2. Stack No.			T U		
B. Height of Stack (as reported)			-		
Dia of Stack at Top (as reported)				15.0 m.	
Draft				0.15 m.	
. Material of Construction				Natural	
. Ambient Temperature, °C	-			M.S.	
. Flue Gas Temperature, °C	9			28.0	
. Velocity, m/sec.	10000			40.0	
0. Volumetric Flow Rate ( NM³/hr.)	IS 11255 (Part	-3)		5.1	
Sampling Point				308.7	
Camping Folit	,		4	5 m.	
Particulate Metter (D.M.)			Concentration (mg/NM³)	Limit as per E (P) Rules Schedule I	
2. Particulate Matter (P.M.)	IS 11255 (Part-	1)	1.35	2.0 mg/NM <sup>3</sup>	
3. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-	2)	Not Detectable		
4. Oxides of Nitrogen (NOx)	IS 11255 (Part-		10.4		



Authorized Signatory Quality Manager / Dy. Quality Manager

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LABORATORY ADDRESS :-01st floor, Rajhans Niketan, NEAK CANAL, RUKUNPURA. BAILEY ROAD, PATNA - 80°C 014 (BIHAR)

# SHIVA TEST HOUSE

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#### TEST REPORT

[a] Nan	ne and address of the Customer		Plo Bih	MCO INDUSTRIES t No. A 1, BIADA I iya pipur – 802 152		
[b] Deta	ails of Sample	8	Monitoring of Stack Emission			
	Sample Collected by			VA TEST HOUSE		
[d] San	npling Location		Prei	mises of Ramco Bihi	iya	
[e] Met	hod of Sampling		IS 1	1255 (Part-1,2,3 &	7)	
f] San	npling Environmental Condition		Ten	np. (°C) 28	Humidity (%) 70	
g] Deta	ails of Sample Container (No. & Typ	e of Container)	Thir	nble & Glass Impin		
	nple Quantity		5			
	Items required to be tested Whether any specific Method of Test has been		As p	er contract		
	ether any specific Method of Test ha gested by the customer	as been	No			
	Date of receiving the sample in Laboratory		12.04.18			
l] Ana	lysis Start Date / Analysis Completion	on Date		04.18 / 16.04.18		
	Parameters	Method of Te	st		Results	
. Sta	ck Connected to			DG S	Set 1010 KVA	
. Sta	ck No.			Man Control of the Co	IV	
B. Hei	ght of Stack (as reported)				9.0 m.	
. Dia	of Stack at Top (as reported)				0.15 m.	
. Dra	ft	5			Natural	
. Mat	terial of Construction				M.S.	
. Am	bient Temperature, <sup>0</sup> C		100	44.4	28.0	
. Flue	e Gas Temperature, <sup>0</sup> C				186.0	
. Veld	ocity, m/sec.	IS 11255 (Part	-3)	10.8		
0. Volu	umetric Flow Rate ( NM³/hr.)				445.8	
1. San	npling Point				3.5 m.	
				Concentration ( mg / NM³)	Limit as per E (P. Rules Schedule I	
2. Part	ticulate Matter (P.M.)	IS 11255 (Part	-1)	47.9	75.00 mg/NM <sup>3</sup>	
3. Sulp	phur Dioxide (SO <sub>2</sub> )	IS 11255 (Part	-2)	36.0	Not Specified	
4. Oxio	des of Nitrogen (NOx)	IS 11255 (Part		154.6	710.00 mg/NM <sup>3</sup>	
5. NMI	HC (as C) (at 15% O <sub>2</sub> )	СРСВ		15.0	100.00 mg / NM <sup>3</sup>	
	bon Monoxide as CO (at 15% O <sub>2</sub> )	IS 13270 - 200	13	22.0	150.00 mg / NM <sup>3</sup>	

Authorized Signatory Quality Manager / Dy. Quality Manager

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# ST HOUSE

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#### TEST REPORT

	a] Name and address of the Customer			RAMCO INDUSTRIES LTD. Plot No. A 1, BIADA Industrial Area Bihiya Bhojpur – 802 152		
[b]			Moi	nitoring of Stack Emis	ssion	
[c]	Sample Collected by		SH	IVA TEST HOUSE	on 12.04.18	
	Sampling Location			mises of Ramco Bihiy		
	Method of Sampling		IS 1	11255 (Part-1,2,3 &	7)	
[f]	Sampling Environmental Condition			np. ( <sup>0</sup> C) 28	Humidity (%) 70	
[g] [h]	Details of Sample Container (No. & Ty Sample Quantity	pe of Container)		mble & Glass Imping	ger	
[i]	Items required to be tested		.5			
[]	Whether any specific Method of Test h	as been	As	per contract		
	suggested by the customer	as been	No			
[k]	Date of receiving the sample in Labora	atory 12.04.18		04.18	18	
[1]	Analysis Start Date / Analysis Completi	ion Date		04.18 / 16.04.18		
1	Parameters	Methôd of T	est		Results	
1.	Stack Connected to			DG	Set 750 KVA	
2.	Stack No.	x			V	
3.	Height of Stack (as reported)				9.0 m.	
4.	Dia of Stack at Top (as reported)				0.15 m.	
5.	Draft				Natural	
3.	Material of Construction		, ,		M.S.	
7	Ambient Temperature, <sup>0</sup> C		v		28.0	
3.	Flue Gas Temperature, <sup>0</sup> C				174.0	
).	Velocity, m/sec.	IS 11255 (Part	t-3)	9.3		
10.	Volumetric Flow Rate ( NM³/hr.)		<del></del>	394.2		
11.	Sampling Point				3.5 m.	
				Concentration ( mg/NM³)	Limit as per E (P. Rules Schedule I	
2.	Particulate Matter (P.M.)	IS 11255 (Part-		41.6	75.00 mg/NM <sup>3</sup>	
3.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part	-2)	32.4	Not Specified	
4.	Oxides of Nitrogen (NOx)	IS 11255 (Part	-7)	164.6	710.00 mg / NM <sup>3</sup>	
5.	NMHC (as C) (at 15% O <sub>2</sub> )  Carbon Monoxide as CO (at 15% O <sub>2</sub> )	СРСВ		12.0	100 00 mg / NM <sup>3</sup>	
6.						

PATNA

Quality Manager / Dy. Quality Manager

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**KonimpeX** 

Mickiewicza Str, 62-500 Konin www.konimpex.com

2018-08-29

COPY

## QUALITY CERTIFICATL

REF Invoice No: F/TR/1102018080043

Consignee:

RAMCO INDUSTRIES LTD AURAS CORPORATE CENTRE, 6TH FLR, 98 A DR RADHAKRISHNAN SALAI

MYLAPORE, CHENNAI 600004

Description of goods: CHRYSOTILE FIBRE OF RUSSIAN ORIGIN GRADES 5-65

Order No: 002/KON/IND/May-Dec 2018 dtd 2018-04-16

	Ic	0 44 4 1	N. 11. VO	0 '7. "0
Packing	Containers Numbers			Gross weight KG
P.P. bags 50 kg each one	ZIMU 1008197	450	22 500	
Stretch Wrapped / Thermo Shrink Film onto	ZIMU 1085594	450	22 500	23 340
pallets of 1.25 MT (25 bags) - 10 pallets	ZIMU 1115868	450	22 500	23 339
Stretch Wrapped / Thermo Shrink Film onto	ZIMU 1129310	450	22 500	23 340
pallets of 1.00 MT (20 bags) - 10 pallets	ZIMU 1165853	450	22 500	23 340
	ZIMU 1260233	450	22 500	23 339
ON TO PALLETS AS PER PROFORMA INV NO.	ZIMU 1425668	450	22 500	23 340
081/ZSP/2018 DATED 06.07.2018	ZIMU 2917024	450	22 500	23 340
TERMS: CIF CALCUTTA AS PER INCOTERMS 2010.	ZIMU 2985749	450	. 22 500	23 339
LETTER OF CREDIT NUMBER 004LC01182000008	ZIMU 3020870	450	22 500	23 339
DATE 180721	ZIMU 3035714	450	22 500	23 340
y 9.4	ZIMU 3052650	450	22 500	23 339
IMPORT AND EXPORT CODE 0488004489		20		
EMAIL IDS: GSU@RIL.CO.IN, VUM@RIL.CO.IN,			AL SECTION AND SEC	
NBA@RIL.CO.IN			Age.	A STATE OF THE PARTY OF THE PAR
HS CODE 25.24.90.21	, in the second			(8)
ISSUING BANK: HDFC BANK LTD IV FLOOR NO			A State of the sta	7-1
115 RADHAKRISHNAN SALAI MYLAPORE	= -		and the same of th	95'
CHENNAI 600004 INDIA	2	J. R. Talley and M. C. S.	8 1 3	*
GOODS ARE FREELY IMPORTABLE AND NOT	1 2		0,1	1
COVERED UNDER THE NEGATIVE LIST AS PER			- Selection of the Sele	
FOREIGN TRADE POLICY 2015-2020	Total	5 400	270 000	280 075

IT IS HEREBY CERTIFIED THAT THE QUALITY OF THE GOODS MENTIONED IN THIS CERTIFICATE IS IN CONFORMITY WITH THE STANDARD GOST 12871-2013 AND THE GOODS MAY BE EXPORTED. QUALITY CHARACTERISTICS OF THE GOODS: REMAINDER ON THE MAIN SIEVE OF THE CONTROL APPARATUS: NOT LESS THAN MENTIONED BELOW IN %

Characteristic	Value
DUST(NOT MORE THAN IN %)	9
2 SIEVE	0
3 SIEVE	65
KONIMPEX LTa.	

24, Mickiewicza Str. 62-500 Konin, POLAND

Signature

Konimpex Ltd Tel.: +48 63 249 77 92, fax: +48 63 249 77 94,

e-mail: konimpex@konimpex.com.pl

the 9th Economic Department of the National Court Register KRS No 0000043189 VATID No.: PL6650001148,



PLOT NO.A1, BIADA INDL AREA, BIHIYA-802152, DIST BHOJPUR (BIHAR)

## RIA DIAGNOSTICS - DOC NO: F - 8. 2. 4 - 01/R1 MEDICAL SURVEILLANCE PROFORMA

SL. NO : 58

DATE: 23/04/2018

NAME

: RAMSAIS

DEPARTMENT

: MAINTENANCE ELECTRICA

AGE / SEX

: 29 MALE

**DURATION OF SERVICE**: 7.6-Years

E. NO

: 10305

**REG NO** 

: 1,010,323

EMERGENCY 1.: 8271870491

**EMERGENCY 2.** 

DIET

: Vegetarian

**PERSONAL HISTORY** BLOOD GROUP :

'O' POSITIVE

ALLERGY

: Nil

	SMOKING	ALCOHOL	TOBACCO CHEWING	SNUFF
QUANTITY	Nil	Nil	Nil	Nil
DURATION	Nil	Nil	Nil	Nil
ТҮРЕ	Nil	Nil	Nil	Nil

OBSTETRIC / MENSTRUAL HISTORY	Not Applicable
PRESENTING COMPLAINTS	No Complaints •
PAST HISTORY	Not Significant
FAMILY HISTORY (Father,Mother,Siblings)	Not Present

#### **GENERAL PHYSICAL EXAMINATION**

DEFECTS / DISABILITY

No Epilepsy, No Knock Knee, No Flat Foot, No Disc Prolapse, No Club Foot, No Hernia and No Vericose Veins

: 182 Cms

WEIGHT:

94

Kg BODY MASS INDEX: 28.378

**IDEAL WEIGHT**: 77.00 - 82.00 Kg

PULSE RATE: 70

b/mt

**BP**: 138/90 mm Hg

HEIGHT

INSPIRATION / EXPIRATION: Cms - Cms

RANGE

Your BMR: 2,066.60 kcal / day

The Basal Metabolic Rate (BMR) is the rate your body burns energy (approx. 1600 kcal/day) di state. The BMR is based on your lean weight, the greater your lean weight, more the calories you burn

#### Interpreting Your BODY MASS INDEX

Adult	Women	Men
Underweight	< 19.1	< 20.7
In normal range	19.1-25.8	20.7-26.4
Marginally overweight	25.8-27.3	26.4-27.8
Overweight	27.3-32.3	27.8-31.1
Very overweight or obese	> 32.3	> 31.1

#### Interpreting Your BODY FAT PERCENTAGE



**73.68 FAT FREE MASS %** 

26.32 FAT %



Classification	Women (% fat)	Men (% fat)	
Athletes	14-20%	6-13%	- 8
Fitness	21-24%	14-17%	
Acceptable	25-31%	18-25%	
Obese	32% plus	25% plus	

TUNING FORK TEST

Normal

LYMPH NODES

NotPalpable

**ORAL CAVITY** 

Good Hygiene

**PALLOR** 

No



# Ria Diagnostics

An ISO - 9001 : 2008 Certified Organisation



CMC VELLORE ACBI/CMC EXTERNAL QUALITY ASSESSMENT SCHEME LAB No. 1863 GROUP No. 1

NAME :Mr. RAMSAIS

AGE REF BY : 29

Years

RAMCO INDUSTRIES LIMITED BIHAR(STAFF)

COMPANY : RAMCO INDUSTRIES LIMITED BIHAR(STAFF)

DATE : 23-04-2018

SEX : MALE REG. # : 101032

REG. # : 1010323 E.NO/SL No : 10305 / 58

TEST	RESULT	NORMAL VALUE
	HEAMOGRAM	
Hemoglobin	: 14.8 gms %	13.5 - 18.0 gms %
Total W B C count	: 9,100 Cells / Cumm	4,400 - 11,000 Cells / cumm
Differential Count	• •	
Neutrophils	: 57 %	54 - 75 %
Lymphocytes	: 38 %	20 - 40 %
Eosinophils	: 02 %	01 - 06 %
Monocytes	: 03 %	02 - 10 %
Basophils	: 00 %	00 - 01 %
ESR	: 09 mm / hr	05 - 15 mm / hr
	URINE ROUTINE	
Albumin	: Nil	
Sugar	: Nil •	
LAB INVESTIGATION		
Sputum for AFB	: Negative	

TECHNICIAN

- Chi

**PATHOLOGIST** 

**Dr. (Mrs.) K. Thungabhadra Rao,** MBBS., PGD. Clin. Path (MAHE) Consultant Pathologist

SL NO: E. NO: 10305 58 REG NO: 1,010,323

#### **VISUAL ACUITY**

-85	DISTANT VISIO	NEAR VISION	COLOUR VISION	CORRECTIONS	
RIGHT	6/6	N/6	Normal	Normal	
LEFT	6/6	N/6	Normal	Normal	

#### SYSTEMIC EXAMINATION

RESPIRATORY SYSTEM	Normal Vesicular Breath Sounds Heard, No Ronchi,No Crepitations
CARDIO - VASCULAR SYSTEM	Apical Beat Normal, S1+S2 Heard Normal In Apical,Pulmonary,Aortic & Tricuspid Areas No Thrills/Murmers
CENTRAL NERVOUS SYSTEM	Cranial Nerves are Normal, No Abnormality Detected
ABDOMEN	Soft,No Hepatosplenomegaly
SKIN	Normal
LUNG FUNCTION TEST	Normal Spirometry
AUDIOMETRY S	Bilateral Hearing Within Normal Limits
ELECTRO CARDIOGRAM (ECG)	Not Applicable
CHEST X-RAY IMPRESSION	Not Applicable

#### LAB INVESTIGATION

ZAD III ZOTIOATIOII					
BLOOD	URINE				
HB % : Report Enclosed	SUGAR / ALBUMIN: Report Enclosed				

#### **DIETARY ADVICE**

Туре	Activity	Total Calories Needed Per Day		
SEDENTARY WORK	little or no exercise	2479.92 kcal/day		
MODERATE WORK	moderate exercise/sports 3-5 days/week	3203.23 kcal/day		
HEAVY WORK	very hard exercise/sports & physical job	4112.53 kcal/day		

#### ADVICE / REMARKS

- 1. Sputum for AFB & Asbestos Fibre Negative
- Advised Weight Reduction -Brisk Walk Regularly for 40 Minutes Every day.
   Life Style Modifications Desired- Fat Free Diet/ Regular Exercises
   Salt Restricted Diet

- 5. Clinically Healthy

Dr. K ROHITH, MBBS, MD (KMC No 41280) CONSULTANT IN OCCUPATIONAL HEALTH

# RAMCO INDUSTRIES LIMITED (BIHAR)

PLOT NO.A1, BIADA INDL AREA, BIHIYA-802152, DIST BHOJPUR (BIHAR)

ient: RAMSAI S

kerd. By:

Pred.Eqns: RECORDERS

Date : 23-Apr-2018 12:25 PM

Age : 29 Years

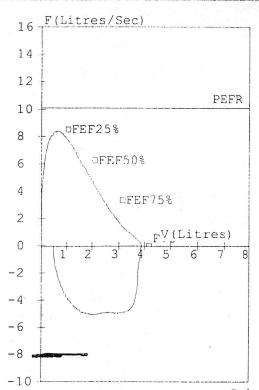
Height: 182 Cms

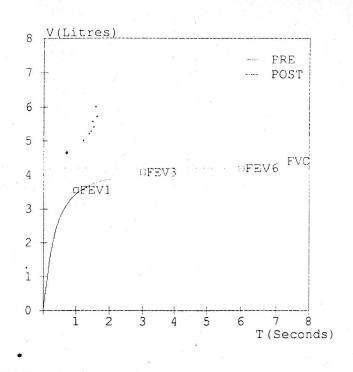
Weight: 94 Kgs ID: RAMC58 Gender : Male

Smoker : No Eth. Corr: 100

Temp :







	Sı	pirometr	cy (FVC	Results)		
Parameter	Pred	M.Pre	%Pred	M. Post %	Pred	%Imp
FVC (L)	04.20	03.89	093			F 5
FEV1 (L)	03.54	03.46	098			1010
FEV1/FVC (%)	84.29	88.95	106			
FEF25-75 (L/s)	04.66	04.16	089			44.5
PEFR (L/s)	10.09	08.31	082			A 1800 - 11
FIVC (L)	)	03.41				181 N (MA)
FEV.5 (L)	)	02.74				7 NOT SEE 261
FEV3 (L)	04.08	03.89	095			Aber cen in
PIFR (L/s)	)	05.03				
FEF75-85 (L/s)	)	01.41				
FEF.2-1.2(L/s)	08.25	07.82	095			Francisco (m.)
FEF 25% (L/s)	08.52	07.83	092			(A) (A) (A)
FEF 50% (L/s)	06.26	04.94	079			51 14 14 14 14 14 14 14 14 14 14 14 14 14
FEF 75% (L/s)	03.34	01.93	058			WW (80 YW)
FEV.5/FVC (%)	) ,	70.44				are say ten
FEV3/FVC (%)	97.14	100.00	103			10 9 90
FET (Sec)	)	02.14				
ExplTime (Sec)	)	00.07				100,000 P
Lung Age (Yrs)	029	030	103		:	
FEV6 (L)	04.20					
FIF25% (L/s)		04.40				bo cos
FIF50% (L/s)		04.90				124
FIF75% (L/s)		04.94				

NORMAL SPIROWETRY

Dr. SFEASHTEAPLE FALO FRES., DTCD PULMONOLOSIST KMC Reg. No. 11009

## AUDIO GRAM



RIA DIAGNOSTICS DOC NO: F - 8. 2. 4. - 02

Name Of The Company RAMCO INDUSTRIES LIMITED BIHAR(STAFF)

PLOT NO.A1, BIADA INDL AREA, BIHIYA-802152, DIST BHOJPUR (BIHAR)

Name Of The Employee

Mr. RAMSAIS

Date 23-Apr-2018

Age :

29

Sex :

Male

**Employee No** 

10305

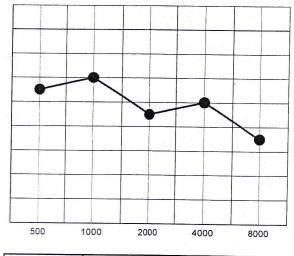
SI No :

58

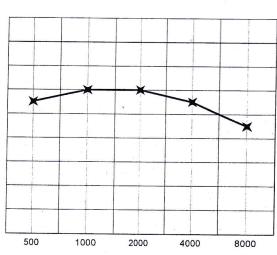
Department :

MAINTENANCE ELECTRICAL

#### RIGHT (HERTZ)



### LEFT (HERTZ)



EAR	PURE TONE AVERAGE	<u>(dB)</u>	
RIGHT	Low Frequency: 27		,
Taloni	High Frequency: 38		
LEFT	Low Frequency: 22		
	High Frequency: 30	30 Table 1 Tab	

#### **AUDIOLOGICAL INTERPRETATION:**

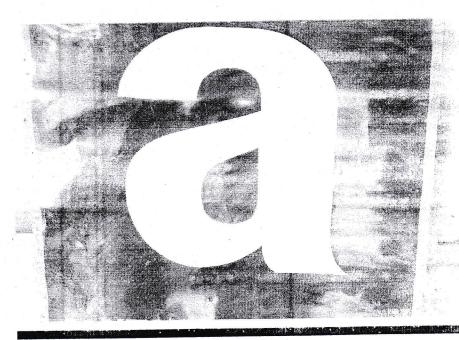
Bilateral Hearing Within Normal Limits

#### **RECOMMEDATION:**

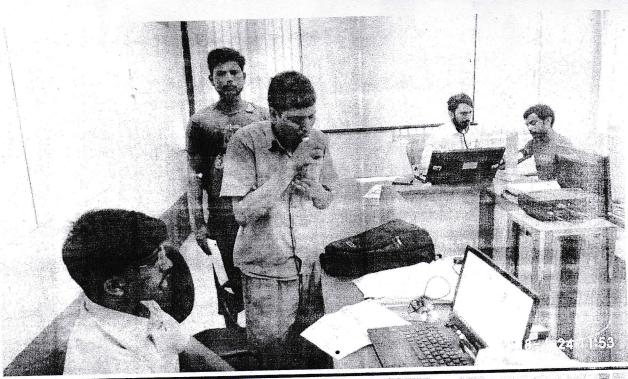
Audiologist / Doctor

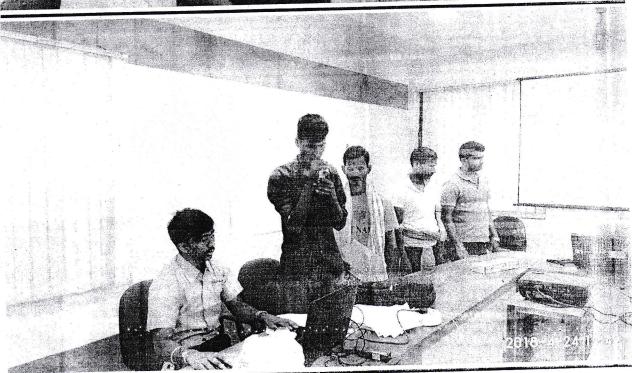
# Annexure-5





# Medical Checkup







# **RAMCO INDUSTRIES LIMITED**

# **Test Report**

Details Of Sample

- Monitoring of Ambient Air Quality

Sample Collected by

- Mr.Ganesh

Sample Location

:- Premises of Ramco Bihiya

Method of Sampling

:- IS5182(Part-14)

Details Of Sample Container

Filter paper:Glass Impinger

			Sampling Station					
S.No.	Parameters	Near Office	Main Gate	Strippin g Area		NAAQS Nov 2009		
	Sample taken Date	01.04.18	02 04 18	03.04.18	0F 04 19	(μg/m³)		
1	Particulate Matter (PM <sub>10</sub> ) μg/m <sup>3</sup>	62.8	62.2	52.3	48.6	100		
2	Particulate Matter (PM <sub>2.5</sub> ) μg/m <sup>3</sup>	13.6	22.4	19.6	14.2	60		
3 .	Sulphur Dioxide as SO <sub>2</sub> ,µg/m³	10.2	7.6	19.1	10.2	80		
4	Nitrogen Dioxide as NO <sub>2</sub> , μg/m³	18.6	9.2	11.1	13.2	80		

FOR RAMCO INDUSTRIES LTD.

(AUVerified BYNATORY)

checked by



# RAMCO INDUSTRIES LIMITED Test Report

Details Of Sample

- Monitoring of Ambient Air Quality

Sample Collected by

:- Mr.T.Mayappan

Sample Location

:- Premises of Ramco Bihiya

Method of Sampling

:- IS5182(Part-14)

Details Of Sample Container

:- Filter paper:Glass Impinger

7			Sampling Station				
S.No.	Parameters	Near Office	Main Gate	Strippin g Area	Near Laborat ory	Nov 2009	
	Sample taken Date	01.05.18	02.05.18	03.05.18			
1	Particulate Matter $(PM_{10}) \mu g/m^3$	62.5	61.2	50.1	51.2	100	
2	Particulate Matter (PM <sub>2.5</sub> ) µg/m³	14.1	23.8				
	Sulphur Dioxide as SO <sub>2</sub> ,µg/m³		23.0	18.2	16.4	60	
		13.3	7.9	18.2	11.4	80	
4	Nitrogen Dioxide as NO <sub>2</sub> , μg/m³	16.7	9.9	15.1	13.4	80	

Checked by -

FOR RANCOTNEUSTRIES !TO

/erified by (AUTHORISED SIGNATOR)

# **RAMICO INDUSTRIES LIMITED**

# **Test Report**

Details Of Sample

Monitoring of Ambient Air Quality

Sample Collected by

Mr.Ganesh :-

Sample Location

Premises of Ramco Bihiya

Method of Sampling

IS5182(Part-14)

**Details Of Sample Container** 

Filter paper:Glass Impinger

			NAAQS			
S.No.	Parameters	Near Office	Main Gate	Strippin g Area	Near Laborat ory	Nov 2009
	Sample taken Date	01.06.18	02.06.18	03.06.18	04.06.18	
1	Particulate Matter (PM <sub>10</sub> ) μg/m <sup>3</sup>	52.8	50.3	50.7	63.4	100
2	Particulate Matter (PM <sub>2.5</sub> ) μg/m <sup>3</sup>	17.8	23.7	19.5	45.1	60
3	Sulphur Dioxide as SO <sub>2</sub> ,µg/m³	32.8	17.2	25.89	36.4	80
4	Nitrogen Dioxide as NO <sub>2</sub> , μg/m <sup>3</sup>	28.6	31.7	8.24	42.9	80

FOR RANCO INDUSTRIES LTD.



# **Test Report**

Details Of Sample :- Monitoring of Ambient Air Quality

Sample Collected by :- Mr.T.Mayappan

Sample Location :- Premises of Ramco Bihiya

Method of Sampling :- IS5182(Part-14)

Details Of Sample Container :- Filter paper:Glass Impinger

S.No.	Parameters	pling Station,			al al	2009
		Near Office	Main Gate	Strippin g Area	Near Laborat ory	
	Sample taken Date	01.07.18	02.07.18	03.07.18	04.07.18	
1 .	Particulate Matter (PM <sub>10</sub> ) μg/m <sup>3</sup>	62.55	60.2	50.9	51.4	100
2	Particulate Matter (PM <sub>2.5</sub> ) μg/m <sup>3</sup>	14.5	20.5	17.3	15.8	60
3	Sulphur Dioxide as SO <sub>2</sub> ,µg/m³	12.85	7.54	18.42	11.69	80
4	Nitrogen Dioxide as NO <sub>2</sub> , μg/m <sup>3</sup>	14.95	11.42	14.53	13.54	80

Checked by -

FOR RANCO INDUSTRIES LTD.

Verified by D SIGNATORY

# RAMCO INDUSTRIES LIMITED

# **Test Report**

Details Of Sample :- Monitoring of Ambient Air Quality

Sample Collected by :- Mr.Ganesh

Sample Location :- Premises of Ramco Bihiya

Method of Sampling :- IS5182(Part-14)

Details Of Sample Container :- Filter paper:Glass Impinger

			NAAQS			
S.No.	Parameters	Near Office	Main Gate	Strippin g Area	Near Laborat ory	Nov 2009
	Sample taken Date	01.08.18	02.08.18	03.08.18	04.08.18	
1	Particulate Matter (PM <sub>10</sub> ) µg/m <sup>3</sup>	52.4	51.4	50.8	60.5	100
2	Particulate Matter (PM <sub>2.5</sub> ) μg/m <sup>3</sup>	19.4	23.4	19.8	56.25	60
3	Sulphur Dioxide as SO <sub>2</sub> ,µg/m <sup>3</sup>	32.7	17.6	20.8	36.4	80
4	Nitrogen Dioxide as NO <sub>2</sub> , μg/m <sup>3</sup>	26.7	32.5	10.5	42.7	80

FOR RAMCO INDUSTRIES LTD.

Checked by -

Verified by

# RAMCO INDUSTRIES LIMITED

## Test Report

Details Of Sample

Monitoring of Ambient Afr Quality

Sample Collected by

Mr.Maiyappan

Sample Location

Premises of Ramco Bihiya

Method of Sampling

IS5182(Part-14)

Details Of Sample Container

Filter paper: Glass Impinger

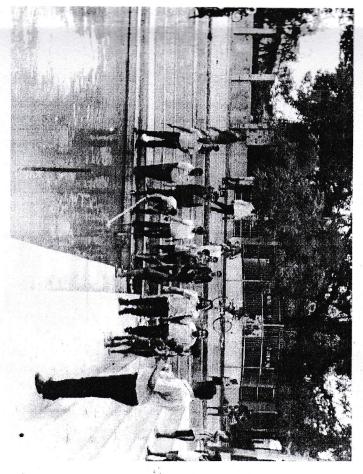
			Limit as			
S.No.	Parameters	Near Office	Main Gate	Strippin g Area	Near Laborat ory	NAAQS Nov 2009
	Sample taken Date	01.09.18	02.09.18	03.09.18	04.09.18	
1	Particulate Matter (PM <sub>TC</sub> ) μg/m <sup>3</sup>	52.4	50.4	51.7	60.2	100
	Particulate Matter (PM <sub>2.5</sub> ) ug/m <sup>3</sup>	16.9	23.7	19.5	45.2	60
3	Sulphur Dioxide as SO <sub>2</sub> , ug/m <sup>2</sup>	32.5	17.2	25.2	36.14	80
4	Nitrogen Dioxide as NO <sub>2</sub> , μg/m <sup>3</sup>	28.7	31.7	8 .	42.5	80

FOR RAWCO INDUSTRIES LID.

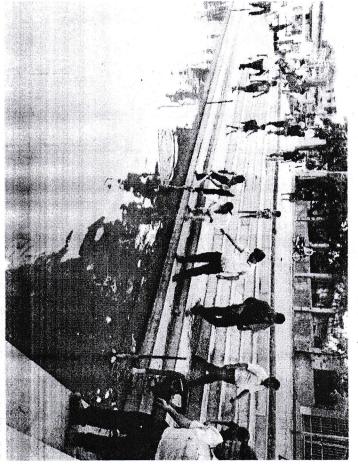
# WORLD ENVIRONMENT DAY **5TH JUNE 2018**

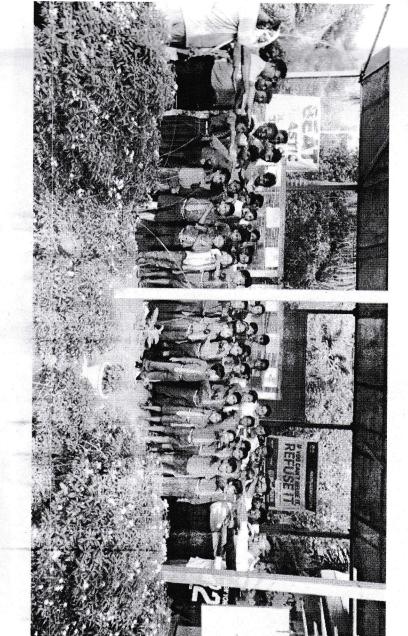
THEME BEAT PLASTIC POLLUTION

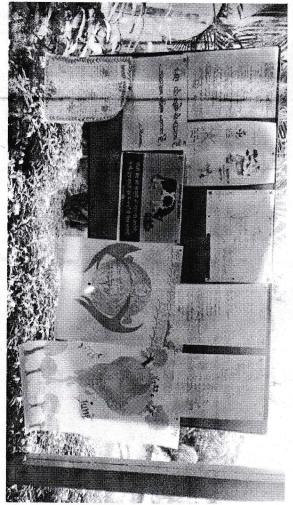
BIHIYA, BHOJPUR, BIHAR RAMCO INDUSTRIES LTD



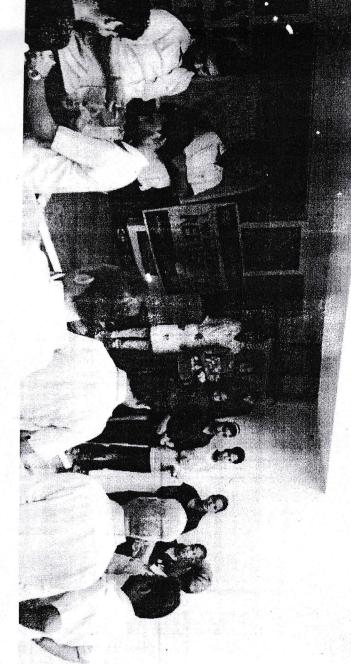
Cleaning of plastic waste in a nearby pond in Bihiya Village by employees of Ramco along with School children







School children
participating in slogan,
drawing & painting
competition at Ramco
premises



Prize distribution - For The contribution done in pond cleaning work On World on Environment day

