Ramco Industries Limited

To,
Director (S),
Government of India,
Ministry of Environment & Forests,
Eastern Region,
A/3, Chandrasekharpur,
Bhubaneswar-751023.

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Dewanmaro Ayma P.O.-Hariatara, P.S.-Kharagpur (L) Dt. Paschim Medinipur West Bengal, Pin-721304 Ph.: 03222 - 201700 201772, 201773

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Counter Mp:1.0P-Code:MALAY
To:EADIR.ENGINEER.RO.WEPCB
haldia.PIN:721602

From:RAMDO INDU. LTD . HARIATARAL KGP-q Wt:150grams. .12/05/2018 .12:04

Amt:41.00

.DGST @9% 3 .SBST @9%: 3.00

Sub: Six Month Compliance Report

Dear Sir,

We are submitting our six-month compliance report from October-17 to March-2018 duly complied with.

Kindly acknowledge the same.

Thanking you,

Yours faithfully,

For Ramco Industries Ltd.

For, Ramço Industry Ltd.

Abriifi Balkuro (hyar) Deputy General Manager (Works) (Dy. General Manager-W) KTrack on www.indiapost.oguzinizaco

SP DEKIA (721301) GSTN NO: 19AAAGXOLIMZZL EWO3464730.EM

Counter No:1.CP-Code:MALAY
To:DIRECTOR(S).BOVT. OF INDIA-E8F.E

bhubaneswar, PIN:751023 From:RAMCO INDU. LTD . HARIATARA. MEP-4 Wt:160grams. .12/05/2018 .12:06

Ant:47.00

Encl:

1) Compliance Report

2) Fibre Concentration report

3) Ambient Air & Fugitive emission monitoring report

4) Stack Analysis Reports

Note: For Publishing in website

For any suggestion/clarification/information sought by any public, should be contact Mr. Abhijit Bandyopadhyay, DGM at mobile No-08945525257 during office hours on any working day.

Cc: Environmental Engineer, WBPCB, Haldia Regional Office, Haldia, Purba Medinipur.

COMPLIANCE STATUS OF Ministry of Environment and Forests

Letter No J-11011/22/2011-IA II (I), Dated 10^{th} May, 2013

	CONDITIONS	COMPLIANCE STATUS
A Sr	pecific conditions:	COMPLIANCE STATES
i.	The project proponent shall adhere to the prescribed BIS standards and laws regarding use of asbestos, safely of employees etc. Raw Materials like asbestos fibre and cement should be transported in closed containers. Asbestos fibre should be brought in palletized form, in impermeable bags and under compressed condition	We strictly adhere to the prescribed BIS standards and law regarding use and handling of asbestos safety of employee etc. Raw materials like asbestos fiber and cement are always transported in closed containers. Asbestos fiber always brought in palletized form in impermeable bags and under compress condition.
ii.	Only Chrysotile white asbestos fibre shall be used. Blue asbestos should not be utilized as a raw material in the manufacturing process.	We use only WHITE CHRYSOTILE Fibre as raw material in the manufacturing process and we do not use blue asbestos.
iii.	There should be no manual handling/opening of asbestos fibre bags. The company should install fully automatic asbestos fibre debagging system	There is no manual handling/opening of asbestos fibre bags. Fibre is stored in polythene woven bags and unloaded in the automatic bag-opening device (BOD) wherein the bags are automatically shredded. Thus, no manual handling comes into picture due to installation of fully automatic asbestos fibre debagging system.
iv.	Fugitive emission shall be controlled by bringing cement in closed tankers, flyash in covered trucks and asbestos in impervious bags inside a closed mixer. Dust collectors shall be provided to fibre mill, Bag opening device (BOD), cement and flyash silos to control emissions. Bag filters followed by wet washer shall be provided at automatic bag opening machine, bag shredder, fibre mill and to cement silo to collect the dust and recycle it into the process. Fugitive emissions generated from hopper of Jaw crusher and pulverizer shall be channelized through hood with proper suction arrangement, bag filter and stack.	Fly ash received in bulk tankers are conveyed pneumatically to the respective silos and there are no fugitive emissions. Bag filters followed by wet washer are provided at automatic bag opening machine bag shredder and fiber mill, Cement, Fly ash silos and rejected sheets pulverizer to collect the dust and recycle into the process. Asbestos fibre count is being monitored at pulverizer area found within the permissible limit. Fugitive emission results at: 1. Pulverizer area- 0.088 f/cc 2. BOD- 0.040 f/cc
V.	The company shall comply with total dust emission limit of 2mg/Nm³ as notified under the Environment (protection) Act, 1986. Adequate measure should be adopted to control the	We are complying with total dust emission limit of 2mg/Nm3 as notification under the Environment (Protection) Act, 1986. Adequate

process emission and ensure that the stack emission of asbestos fibre should not exceed the emission limit 0.2f/cc. asbestos fibre in work zone environment shall be maintained within 0.1 fibre/cc.

measures have been adopted to control the process emission. We ensure that the stack emission of asbestos fiber will not exceed the emission limit of 0.2 fiber/cc. Asbestos fiber in work zone environment is maintained with in 0.1 fiber/cc.

Reports are enclosed herewith.

- vi. Bag containing asbestos fibre shall be stored in enclosed area to avoid fugitive emissions of asbestos fibre from damaged bags, if any.
- vii. Proper housekeeping shall be maintained within the plant premises. Process machinery, exhaust and ventilation shall e laid in accordance with Factories Act. Better housekeeping practices shall be adopted for improvement of the environment within the work environment also. These includes:
 - a) All monitoring transfer points shall be connected to dust extraction system.
 - b) Leakage 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.

Bags containing asbestos fiber are stored in enclosed place to avoid fugitive emissions of asbestos fiber from damaged bags.

Proper housekeeping maintained within the plant premises, process and machinery. Exhaust ventilation system is installed in accordance with factories Act.

For better housekeeping, following practices are adopted for improvement of the environment within the work environment.

- i) Wet mopping being done in shop floor.
- ii) Vacuum cleaning done at BOD & ER mill are.
- iii) Wet waste is collected in clarifier and recycled in the process.
- iv) Process water is collected in two Cone tank and recycled in the process.
- v) Broken sheets are collected and pulverized & reused in the process.
- a) 1) BOD & ER Mill-dust collector with bag filters & wet scrubber attached and also fibre count is being monitored. Asbestos fibre count-0.040 f/cc
- 2) Slurry mixer to storage tank-Connected to dust collector and also fibre count is being monitored. Asbestos count- 0.060 f/cc
 - **b)** During monitoring of fugitive dust on 30.12.17 in BOD &

Slurry mixer area there was no leakage observed and found all ducts are in good condition.

- c) We are cleaning the shop floor with the help of Vacuum Cleaner (Capacity-1800 LPM).
- d) Asbestos fibre is being transported from fibre godown through Forklift & through roller conveyor fibre bag are fed into the BOD.

viii. Quarterly monitoring of pollutant (PM₁₀, asbestos fibre count) in the work zone area and stack(s) shall be undertaken by the project proponents. In addition, asbestos fibre count including the fugitive dust in the work zone area shall be monitored by an independent monitoring agency like NIOH/ITRC/NCB or any other approved agency on six monthly basis and reports shall be submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB.

Monitoring of Asbestos fibre count at work place is being done monthly at 9 locations by us & found well within the norms.

Half yearly monitoring of asbestos fibre count in work zone (including Fugitive dust) is being monitored by external agency, M/s J. R. Lab, Hyderabad. Results are:

J	
Workplace	F/cc
Fibre godown	0.024
BOD & ER mill	0.040
Slurry mixer	0.060
SF Drum-Cutter off	0.036
Stripping	0.032
Moulding	0.076
Salvaging Section	0.064
Pulverizer	0.088
QC Lab	0.040

Fugitavie dust results at Cement godown & Cement & Flyash mixing area are attached herewith.

Also fibre dust & fibre count are being monitored in our fibre stack by M/s Indicative Consultant & by JR Lab. Results are:

		Fibre consentration-0.019 f/cc Total Dust- 1.60 mg/Nm³. The reports are being submitted to State Pollution Control Board & Ministry once in 6 months.
ix.	As reflected in the Environmental Management Plan, all the treated effluent shall be recycle 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. The Company shall ensure that the entire solid waste generated including process rejects, cement, flyash, dust from bag filters and empty asbestos bag shall be recycled back in the manufacturing process. There will be no solid waste disposal outside the plant premises. Asbestos fibres which cannot be further recycled due to contamination of iron dust shall be stored in HDPE lined secured landfill. The disposal facilities for asbestos waste shall be in accordance with the Bureau of Indian Standard Code.	The entire process water is recycled and reused in the manufacturing process. There are no process water discharged outside the premises and we are maintaining ZERO discharge. The domestic waste water is treated in septic tank followed by soak pit and used for green belt development. We ensure that the entire solid waste generated including process rejects, dust from bag filters and empty asbestos bags are recycled the manufacturing process. Waste type Qty. Remarks Broken AC 42 Reused Sheets MT/m in the onth process Dust From 0.71 Reused dust MT/m in the collectors onth process
xi.	The cut and damaged fibre bags shall be repaired immediately. Empty fibre bags will be shredded into fine particles in a bag shredder and recycled into the process. Piling of AC sheets shall be done in wet condition only.	The cut and damaged fibre bags if any found are being repaired immediately by fixing the adhesive tape. Empty fiber bags are shredded into fine particles in a bag shredder and recycled into the process.
xii.	The Company shall obtain a certificate from the supplier of Chrysotile fibre that it does not any toxic or trace metals. A copy of certificate shall be submitted to the Ministry of Environment and Forest.	There is no toxic or trace elements found in the fibre supply. Also we have attached reports from the Fibre suppliers for your reference.

xiii.	Regular medical examination of the workers and health monitoring of all the employees shall be carried out and if cases of asbestosis are detected, necessary compensation shall be arranged under the existing laws. A competent occupational health physician shall be appointed to carry out medical surveillance. Occupational health of all the workers shall be monitored for lung function test, chest X- ray, sputum for acid-fast-bacilli (AFC) and asbestos body (AB), urine for sugar and albumen, bloat tests for TLC, DLC, ESR, Hb and records maintained for at least 40 years from the beginning of the employment or 15 years after the retirement or cessation of employment whichever is later. Occupational Health Surveillance shall be carried out as per directives of the Hon'ble Supreme Court including the including the recent Kalyaneswari case.	Regular medical examination of the workers and health monitoring of all the employees are carried out. We will maintain record upto minimum 15 years after retirement or cessation of employment whichever is lower. A competent occupational health physician will be appointed to carry out surveillance. The occupational health monitoring is being done as stipulated. We have provided medical and health care facilities at the work place and carry out health surveillance as per the directives of the supreme court.
xiv.	To educate the workers, all the work places where asbestos dust may cause a hazard shall be clearly indicated as a dust exposure area through the use of display signs which identifies the hazard and the associated health effects.	We educate the workers, all the work places where asbestos dust may cause a hazard is clearly indicated as a dust exposure area through the use of display signs which identifies the hazard and the associated health effects.
xv.	The company shall also undertake rain water harvesting measures and plan of action shall be submitted to the Ministry's Regional Office at Bhubaneswar within three months.	We have a rain water harvesting pond to store the rain water and reuse.
xvi.	All the commitments made to the public during Public Hearing/Public Consultation meeting held on 5th October, 2012 shall be satisfactorily implemented and a separate budget for implementing the same should be allocated & information submitted to the Ministry's Regional Office at Bhubaneswar.	Recommendations made during public hearing are being done from time to time.
xvii.	Green belt shall be developed in at least 33% of plant area as per the CPCB guidelines in consultant with the DFO. More focus shall be given towards the South East side of the plant layout.	An effective green belt is being developed with local species in consultation with DFO as per CPCB guidelines, Efforts are further made to develop green belt in south eastern side.
cviii.	At least 5% of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan should be prepared & submitted to Ministry's Regional Office at Bhubaneswar. Implementation of such program should be ensured accordingly in a time bound manner.	We have done C.S.R activities in the past and as per budget we will continue to do more C.S.R activities. CSR budget- 1 lakh. This amount will be spent on various activities like 1) Fund towards Blood donation camp.

		2) Fund towards Ambulance purchase.3) Construction for School building, etc.
xix.	The company shall provide housing for construction labour within the site with all necessary infrastructure & facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project.	We have provided all necessary infrastructure and facilities to our labour working in the site.
B. Ge	eneral Conditions:	
i.	The project authorities must strictly adhere to the stipulations made by the West Bengal Pollution Control Board & the State Government.	We strictly adhere to the stipulations made by the West Bengal Pollution Control Board and the State Government.
ii.	No further expansion/modification in the plant should be carried out without prior approval of the Ministry Of Environment and Forest.	No further expansion/ modifications in the plant will be carried out without prior approval of the Ministry of Environment and Forests.
iii.	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentrations of PM10, SO2 & NOx are anticipated in consultation with the CPCB. Data on ambient air quality & stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar & the SPCB/CPCB in six months.	We are monitoring ambient air quality in three locations of the plant by external agency. Next time we have to monitor in four locations. We are also sending those monitored results to MOEF, Bhubaneswar and State pollution control board. We have attached herewith the Ambient Air Quality Record done by M/s Indicative Consultant India.
iv.	Industrial waste water shall be properly collected, treated so as to conform to the standard prescribed under GSR 422 (E) dated 19 th May, 1993 & 31 st December, 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.
v.	The overall noise levels in and around the plant area shall be kept well within the standard (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) & 70 dBA (night time).	Noise levels in and around the Plant area are monitored regularly and is well under the limit.

vi.	Occupational health surveillance of the workers shall be done on a regular basis & records maintained as per the Factories Act.	Regular medical examination of the workers and health monitoring of all the employees are carried out by a competent occupational health physician. The occupational health monitoring is being done as per factories act.
vii.	The company shall develop rain water harvesting structure to harvest the rain water for utilization in the lean season besides recharging the ground water.	Rain water harvesting pond has been developed to augment ground water during rainy season.
viii.	The project proponent shall also comply with all the environmental protection measures & 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 & health care etc.	We are complying with safe guards recommended in the EIA/EMP report. Also we are regularly doing C.S.R activities.
ix.	Requisite funds shall be earmarked towards capital cost & recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment & Forests as well as the State Government. An implementation schedule for implementing all the conditions 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 purpose.	Environmental Expenses details are Recurring Expenses: - October, 2017 to March, 2018- Rs-435035/ 1) Garden Maintenance & Plantation- Rs-37546/- 2) Personal Protective equipment, like Nose mask, hand gloves, Gum boot, etc- Rs-251913/ 3) Environmental Monitoring jobs-145576/
X.	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body & the local NGO, if any, from whom suggestions/representations, if any, where received while processing the proposal. The clearance letter shall also put on the web site of the company by the proponent.	Copy of EC accorded has been sent to local panchayat & Zila parishad. We have uploaded our EC in our company website.
xi.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website & shall update the same periodically. It shall simultaneously be	We have uploaded the six monthly compliance reports in our company website.

	sent to the Regional Office of the MoEF at Bhubaneswar. The respective Zonal office of CPCB & the SPCB. The criteria pollutant levels namely; PM ₁₀ , SO ₂ , NOx (ambient levels as well as stack emissions) or critical sectorial parameters, indicated for the projects shall be monitored & displayed at a convenient location near the main gate of the company in the public domain.	We are regularly sending six monthly compliance reports to MOEF regional office every 6 months. We have also made available relevant critical parameters in display board near the main gate.
xii.	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including 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 & the SPCB. The Regional Office of this Ministry at Bhubaneswar/CPCB/SPCB shall monitor the stipulated conditions.	The monitoring data has already been sent to the office along with the compliance report for the period April-17 to September-17 in the month of October, 2017.
xiii.	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent t 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 conditions & shall also be sent to the respective Regional Office of the MoEF at Bhubaneswar by e-mail.	We are regularly sending the Environmental statement (Form-V, year ending Mar'31st) to state pollution control board. Also uploaded this in our website.
xiv.	The project proponent shall inform the public that the project has been accorded environmental clearance by the ministry & copies of the clearance letter are available with the SPCB & may also be seen at website of the Ministry of Environment & Forests at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language to the Regional Office at Bhubaneswar.	We have informed the public through the local newspaper announcement that the project has been accorded environmental clearance by the ministry and copies of the clearance are available with state pollution control board/committee and may also see at website of the MoEF at http://envfor.nic.in.
XV.	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure & final approval of the project by the concerned authorities & the date of commencing the land development work.	Information with date of financial closure and final approval given are informed to Ministry of Environment and Forest. Date of Financial closure-07.11.2012. Date of Final approval-03.08.2013.



JR LABS

ENVIRONMENT & OCCUPATIONAL HEALTH SERVICES

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

30.12.2017

REPORT ON RESPIRABLE ASBESTOS FIBRE DUST CONCENTRATION

Project

: M/s. RAMCO INDUSTRIES Ltd.,

DEWANMARA AYMA, HARIATARA, KHARAGPUR

PASCHIM MEDINIPUR, WEST BENGAL

Sampler used

: Samples collected by J R Labs

Analyzed under:

Olympus make, Japan,

using Envirotech – II,

B X 40 Phase Contrast

SKC 224-PCXR8:II & Casella AFC 123

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.

	1		of hore per te	or an.	
Sl. No.	Date of Sampling	Location	Condition	Dust Concentration fibre /cc of air	Remarks
1	19.12.2017	Static Fibre Godown	Fibre bags are stored properly. Torn bags are sealed. Fork Lift used for shifting Fibre bags from Godown to ER Mill.	< 0.1 (0.024)	
2	19.12.2017	Personal BOD-ER Mill	The worker carrying the Sampler was feeding Fibre bags through the Roller Conveyor. E R Mill and Dust Collector in operation.	< 0.1 (0.040)	
3	19.12.2017	Static E R Mill – Wet Opener	The Static sample is collected from near E R Mill – Wet Opener during the production of F C C sheets. E R Mill in operation.	< 0.1 (0.060)	

For JR LABS

Environmental Hygienist

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 jr.labs@yahoo.in



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ENVIRONMENT & OCCUPATIONAL HEALTH SERVICES

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30.12.2017

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Project

: M/s. RAMCO INDUSTRIES Ltd.,

DEWANMARA AYMA, HARIATARA, KHARAGPUR

PASCHIM MEDINIPUR, WEST BENGAL

Sampler used

: Samples collected by J R Labs

using Casella T13180 - II,

Casella T13180 - I &

Envirotech – II

Flow rate

: 1.0 L P M

Sampling Duration: 60 minutes each

Analyzed under:

Olympus make, Japan,

B X 40 Phase Contrast

Microscope

Specifications

As per 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.

		T	1		
Sl. No.	Date of Sampling	Location	Condition	Dust Concentration fibre /cc of air	Remarks
4	19.12.2017	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 (0.036)	
5	19.12.2017	Static Stripping	The Static sample is collected during the stripping of F C C sheets. Plant was in production of F C C sheets.	< 0.1 (0.032)	
6	19.12.2017	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 (0.076)	

For JR LABS

Environmental Hygienist

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Project

: M/s. RAMCO INDUSTRIES Ltd.,

DEWANMARA AYMA, HARIATARA, KHARAGPUR

PASCHIM MEDINIPUR, WEST BENGAL

Sampler used

: Samples collected by J R Labs

using Envirotech - I,

Casella T13180 - II &

Analyzed under :

Olympus make, Japan,

B X 40 Phase Contrast

Microscope

Flow rate

<u>SKC 224-PCXR8:II</u> : 1.0 L P M

Sampling Duration: 60 minutes each

Specifications

As per A I A - R T M 1

(IS: 11450) Membrane

Filter Method

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

Sl. No.	Date of Sampling	Location	Condition	Dust Concentration fibre/cc of air	Remarks
7	19.12.2017	Personal Salvaging Section	The worker carrying the Sampler was reclaiming the sheets. F C C rejected sheets were getting reclaimed. Wet process.	< 0.1 (0.064)	
8	19.12.2017	Personal Ball Mill	The worker carrying the Sampler was engaged in operation of Ball Mill including feeding of broken F C C sheets. Wet process.	< 0.1 (0.020)	
9	19.12.2017	<u>Personal</u> Pulverizer	The worker carrying the Sampler was feeding broken F C C sheets through the chute of Pulverizer.	< 0.1 (0.088)	

For JR LABS

Environmental Hygienist

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



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IR LABS

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30.12.2017

REPORT ON RESPIRABLE ASBESTOS FIBRE DUST CONCENTRATION

Project

: M/s. RAMCO INDUSTRIES Ltd.,

DEWANMARA AYMA, HARIATARA, KHARAGPUR

PASCHIM MEDINIPUR, WEST BENGAL

Sampler used

Samples collected by JR 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

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	19.12.2017	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 (0.048)	
11	19.12.2017	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 (0.040)	

For JR LABS

Environmental Hygienist

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30.12.2017

REPORT ON RESPIRABLE ASBESTOS FIBRE DUST CONCENTRATION

Project

: M/s. RAMCO INDUSTRIES Ltd.,

DEWANMARA AYMA, HARIATARA, KHARAGPUR

PASCHIM MEDINIPUR, WEST BENGAL

Sampler used

Samples collected by JR Labs

using SKC Side Kick 51 Ex &

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

(IS: 11450) Membrane Filter Method

Sampling Duration: 60 minutes each

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

Sl. No.	Date of Sampling	Location	Condition	Dust Concentration fibre /cc of air	Remarks
12	19.12.2017	Static Pulp Slurry preparation Area	The Static sample is collected during Pulp Slurry preparation. Plant was in production of F C C sheets.	< 0.1 (0.072)	
13	19.12.2017	Static Work Zone Area of the Plant	The Static sample is collected during the production of F C C sheets.	< 0.1 (0.044)	

For JR LABS

Environmental Hygienist

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30.12.2017

REPORT ON RESPIRABLE ASBESTOS FIBRE DUST CONCENTRATION

Project

: M/s. RAMCO INDUSTRIES Ltd.,

DEWANMARA AYMA, HARIATARA, KHARAGPUR

PASCHIM MEDINIPUR, WEST BENGAL

Sampler used

: Samples collected by J R Labs

using Spectro: SLE-PS-154:III,

Spectro: SLE-PS-154:I &

SKC 224-PCXR8:I

Analyzed under:

Olympus make, Japan,

B X 40 Phase Contrast

Microscope

Flow rate

1.0 L P M

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.

Sl. No.	Date of Sampling	Location	Condition	Dust Concentration fibre /cc of air	Remarks
14	19.12.2017	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 (0.020)	
15	19.12.2017	Static Ambient Air: Near Main Gate – Security office	The Static sample is collected from near the Main Gate – Security Office. Plant was in operation.	< 0.1 (0.048)	
16	19.12.2017	Static Ambient Air:- Near Canteen	The Static sample is collected from near Canteen. Plant was in operation.	< 0.1 (0.092)	

For JR LABS

Environmental Hygienist

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



R 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.

T C: Dec.'17 - Stack - E R M - A F C

30.12.2017

REPORT ON RESPIRABLE ASBESTOS FIBRE DUST CONCENTRATION

FIBRE DE STACK

Project

: M/s. RAMCO INDUSTRIES Ltd.,

DEWANMARA AYMA, HARIATARA, KHARAGPUR

PASCHIM MEDINIPUR, WEST BENGAL

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	Location Condition		Remarks
19.12.2017	Fibre D E Stack connected to B O D & Edge Runner Mill		0.019	

For JR LABS

Environmental Hygienist



NABL ACCREDITED LABORATORY

INDICATIVE CONSULTANT IN

Time of Sampling

Tel: 03224-275765 Tel Fax: 03224-276511 Mob.: 9434017584, 9232395890

FORMAT NO.: ICI/FM

E-mail: jayantasarkar67@gmail.com indicativeconsultantindia@gmail.com Website: www.indicativeconsultantindia.com

01:20 PM

S.S.I. Reg. No. 190192100010

(CONSULTANT, SURVEYOR & REGD. TEST HOUSE)

HPL Link Road, Basudevpur, P.O.-Khanjanchak, Haldia, Dist.-Purba Medinipur, PIN-721602

ISO/IEC 17025:2005, ACCREDITED BY NABL, CONSTITUENT BOARD OF QUALITY COUNCIL OF INDIA IN THE FIELD OF CHEMICAL, MECHANICAL AND BUILDING MATERIALS TESTING.

TEST REPORT

Sample is drawn by M/s. Indicative Consultant India

Report No. : ICI/A/H/17-18/1173 Sample Ref. No. A/H/1173 **Issued To** M/s. Ramco Industries Ltd. Report Date 06.01.18 Address Dewanmaro, Ayma, P.O.-Hariatara, Date of Sampling 03.01.18 P.S.-Kharagpur, Paschim Medinipur. Analysis Started on 05.01.18 Analysis completed on 05.01.18

Sample Description Stack Air

Location **Pulverizer Section**

Sample Condition In Glass Microfibre Thimble

Sampling Method CPCB, Emission Regulation (Part III)

Test Method CPCB, Emission Regulation (Part III), IS: 11255 (Part -1), 1985, Reaffirmed 2003, IS: 11255 (Part

3) 2008, ORSAT Method

A.] GENERAL INFORMATION ABOUT STACK:

Particulars of the Plant		AND THE RESERVE OF THE PERSON	Shape of Stack	•	Circular
Stack attached to	:	Pulverizer Section	Material of Construction	ı	M.S.
Emission due to	:	Process Activity	Stack ID at sampling point (M)	•	0.2541
Fuel Used	:	1	At Bottom (M)	:	*
Rated Fuel Consumption	:	ABST -	At Top (M)	:	-
Working Fuel Consumption	:	ALTERNATION AND ADDRESS.	Height Details :		
Calorific Value(Kcal/kg)	:	- // /-	a) Total Ht. Of stack from GL(M)		15.0
			b) Total Ht. Of stack from RL(M)		=
Sulpher Content (% by Wt)			c) Ht. of sampling port from GL(M)	:	6.7
Ash Content (% by Wt.)			d) Ht. of port from disturbance zone (M)		
Pollution Control Device		Bag Filter			
Whether Stack is provided with	h p	ermanent Platform/Ladder: Yes			

B.] PHYSICAL DATA:

Flue Gas Temperature (°C)		30	Steam Generation Capacity:		
Barometric Pressure,(mm Hg)	7:	756	a) Rated	:	<u> </u>
Velocity of Gas flow (m/s)		8.51	b) Running	:	-
Quantity of Gas flow (Nm ³ /hr)		1521.66	Load: a) Rated		<u>-</u>
Pressure			b) Running		2 MT/Hr.

C.1 RESULT OF SAMPLING:

Note: 1.

Sl. No.	Parameters	HANDEL BOOK	Result Obtained
01.	Particulate Matter (mg/Nm³)		8.0
02.	Particulate Matter Normalised to 12% CO ₂ (V/V) - (mg/Nm ³)	:	-
03.	Sulphur di-oxide (mg/ Nm ³)	:	=
04.	NOx (mg/m³)	:	-
05.	CO % (V/V)		<0.2
06.	CO ₂ % (V/V)	:	<0.2

End of Report -

For, Indicative Consultant India

Parbati (Manager Laboratory) Signatory Authority

Parbati Golui

Manager-lab, Env. Div. Test results shown in this test report relate only to the item tested. This test report shall not be reproduce anywhere except in full and in same format without the approval of the laborator indicative Consultant India

Retention period of tested samples (Thimble) is 6 months from the date of issue of test report unless otherwise specified.

All general informations of stack are provided by the party.









Tel: 03224-275765 Tel Fax: 03224-276511

Analysis completed on

Time of Sampling

Mob.: 9434017584, 9232395890 E-mail: jayantasarkar67@gmail.com indicativeconsultantindia@gmail.com

05.01.18

12:20 PM

Website: www.indicativeconsultantindia.com

FORMAT NO.: ICI/FM/52

S.S.I. Reg. No. 190192100010

(CONSULTANT, SURVEYOR & REGD. TEST HOUSE)

HPL Link Road, Basudevpur, P.O.-Khanjanchak, Haldia, Dist.-Purba Medinipur, PIN-721602

ISO/IEC 17025:2005, ACCREDITED BY NABL, CONSTITUENT BOARD OF QUALITY COUNCIL OF INDIA IN THE FIELD OF CHEMICAL, MECHANICAL AND BUILDING MATERIALS TESTING.

Sample is drawn by M/s. Indicative Consultant India

Report No. ICI/A/H/17-18/1174 Sample Ref. No. A/H/1174 Issued To M/s. Ramco Industries Ltd. Report Date 06.01.18 Address Dewanmaro, Ayma, P.O.-Hariatara, Date of Sampling 03.01.18 P.S.-Kharagpur, Paschim Medinipur. Analysis Started on 05.01.18

Sample Description Stack Air

D.G. Set (725 KVA) Location

Sample Condition In Glass Microfibre Thimble & Plastic Bottle

Sampling Method CPCB, Emission Regulation (Part III)

CPCB, Emission Regulation (Part III), IS: 11255 (Part -1), 1985, Reaffirmed 2003, IS: 11255 (Part -Test Method

3), 2008, IS: 11255 (Part -2), 1985, Reaffirmed 2003, ORSAT Method, EPA Method No. -7.

A. GENERAL INFORMATION ABOUT STACK:

Particulars of the Plant		A CONTRACTOR OF THE PARTY OF TH	Shape of Stack	:	Circular
Stack attached to		D.G. Set (725 KVA)	Material of Construction	:	M.S.
Emission due to		Combustion of H.S.D	Stack ID at sampling point (M)	:	0.20
Fuel Used	1	H.S.D	At Bottom (M)	:	-
Rated Fuel Consumption		145 Lit/Hr.	At Top (M)	:	0.20
Working Fuel Consumption		145 Lit/Hr.	Height Details:		
Calorific Value(Kcal/kg)			a) Total Ht. Of stack from GL(M)	:	12.5
		Aller II I.	b) Total Ht. Of stack from RL(M)	:	(*)
Sulpher Content (% by Wt)		AND - M I	c) Ht. of sampling port from GL(M)	:	(** .);
Ash Content (% by Wt.)	:/		d) Ht. of port from disturbance zone (M)	:	-
Pollution Control Device	:	Nil			
Whether Stack is provided with	h perr	nanent Platform/Ladder: \	Yes		

B.] PHYSICAL DATA:

Flue Gas Temperature (°C)		178	Steam Generation Capacity:	THE STATE OF THE S		
Barometric Pressure,(mm Hg)	<i>167</i> :	756	a) Rated		-	
Velocity of Gas flow (m/s)	England.	13.86	b) Running		-	
Quantity of Gas flow (Nm ³ /hr)	Die u	1031.57	Load : a) Rated		725 KVA	
Pressure	-		b) Running		725 KVA	

C.] RESULT OF SAMPLING:

Sl. No.	Parameters	The state of the state of	Result Obtained
01.	Particulate Matter (mg/Nm³)		60.0
02.	Particulate Matter Normalised to 12% CO ₂ (V/V) - (mg/Nm ³)		
03.	Sulphur di-oxide (mg/ Nm ³)	:	262.33
04.	NOx (mg/m³)	:	131.52
05.	CO % (V/V)	:	<0.2
06.	CO ₂ % (V/V)	:	6.8

For, Indicative Consultant India

Parbati Golui (Manager Laboratory) Signatory\Authority

Parbati Golui

Manager-lab, Env. Div.

Note: 1. Test results shown in this test report relate only to the item tested.

This test report shall not be reproduce anywhere except in full and in same format without the approval of the laboratory.

Retention period of tested samples (Thimble) is 6 months from the date of issue of test report unless otherwise specified.

All general informations of stack are provided by the party.

Page 1 of 1



Certificate No. TC-6159 NABL ACCREDITED LABORATORY

INDICATIVE CONSULTA

S.S.I. Reg. No. 190192100010

(CONSULTANT, SURVEYOR & REGD. TEST HOUSE)

Tel: 03224-275765 Tel Fax: 03224-276511 Mob.: 9434017584, 9232395890

FORMAT NO.: ICI/FM/

E-mail: jayantasarkar67@gmail.com indicativeconsultantindia@gmail.com Website: www.indicativeconsultantindia.com

A/H/1175

06.01.18

03.01.18

05.01.18

05.01.18

11:15 AM ()

HPL Link Road, Basudevpur, P.O.-Khanjanchak, Haldia, Dist.-Purba Medinipur, PIN-721602

ISO/IEC 17025:2005, ACCREDITED BY NABL, CONSTITUENT BOARD OF QUALITY COUNCIL OF INDIA IN THE FIELD OF CHEMICAL, MECHANICAL AND BUILDING MATERIALS TESTING.

TEST REPORT

Sample is drawn by M/s. Indicative Consultant India

Report No. : ICI/A/H/17-18/1175 Issued To M/s. Ramco Industries Ltd. Address Dewanmaro, Ayma, P.O.-Hariatara,

P.S.-Kharagpur, Paschim Medinipur.

Sample Description Stack Air

Location Cement & Fly Ash Feeding Section

Sample Condition In Glass Microfibre Thimble

Sampling Method CPCB, Emission Regulation (Part III)

Test Method CPCB, Emission Regulation (Part III), IS: 11255 (Part -1), 1985, Reaffirmed 2003, IS: 11255 (Part

3) 2008, ORSAT Method

A.I GENERAL INFORMATION ABOUT STACK:

Particulars of the Plant			Shape of Stack		Circular
Stack attached to	:	Cement & Fly ash feeding	Material of Construction	:	M.S.
		Section			ASSAN 1
Emission due to	:	Feeding of Raw Material	Stack ID at sampling point (M)	:	0.40
Fuel Used		A .	At Bottom (M)	:	*
Rated Fuel Consumption		ARREST AREA (MANUAL)	At Top (M)	:	0.40
Working Fuel Consumption	:	- 11	Height Details:		
Calorific Value(Kcal/kg)	•	Aller - II I	a) Total Ht. Of stack from GL(M)	:	15.0
			b) Total Ht. Of stack from RL(M)	•	-
Sulpher Content (% by Wt)	8	AST B	c) Ht. of sampling port from GL(M)	:	8.40
Ash Content (% by Wt.)	:/	49 8	d) Ht. of port from disturbance zone (M)		
Pollution Control Device	1	Bag Filter			
Whether Stack is provided with	th pe	ermanent Platform/Ladder: Yes			****************

B.| PHYSICAL DATA:

Flue Gas Temperature (°C)	197 :	28	Steam Generation Capacity:	18/	
Barometric Pressure,(mm Hg)	en andread	756	a) Rated	:	_
Velocity of Gas flow (m/s)		7.99	b) Running	:	_
Quantity of Gas flow (Nm ³ /hr)	- PARTIES	3561.89	Load: a) Rated	:	<u>-</u>
Pressure	:		b) Running	:	10 Ton/Hr.

CIRESHIT OF SAMPLING

Checked By

SI. No.	Parameters	Result Obtained			
01.	Particulate Matter (mg/Nm³)	•	1.5		
02.	Particulate Matter Normalised to 12% CO ₂ (V/V) - (mg/Nm ³)	:			
03.	Sulphur di-oxide (mg/ Nm ³)	:	-		
04.	NOx (mg/m ³)	:	_		
05.	CO % (V/V)	:	<0.2		
06.	CO ₂ % (V/V)	:	, <0.2		

End of Report

For, Indicative Consultant India

Sample Ref. No.

Date of Sampling

Time of Sampling

Analysis Started on

Analysis completed on

Report Date

Parbafi ((Manager Laboratory) Signatory Authority Parbati Golui

Test results shown in this test report relate only to the item tested. Note: 1

Manager-lab, Env. Div. This test report shall not be reproduce anywhere except in full and in same format without the approval of the laboratory consultant India

Retention period of tested samples (Thimble) is 6 months from the date of issue of test report unless otherwise specified.

All general informations of stack are provided by the party.



Certificate No. TC-6159 NABL ACCREDITED LABORATORY



S.S.I. Reg. No. 190192100010

(CONSULTANT, SURVEYOR & REGD. TEST HOUSE)

Sample Ref. No.

Date of Sampling

Time of Sampling

Analysis Started on

Analysis completed on

Report Date

Tel: 03224-275765 Tel Fax: 03224-276511 Mob.: 9434017584, 9232395890

FORMAT NO.: ICI/FM

E-mail: jayantasarkar67@gmail.com indicativeconsultantindia@gmail.com Website: www.indicativeconsultantindia.com

A/H/1176

06.01.18

03.01.18

05.01.18

05.01.18

10:15 AM

HPL Link Road, Basudevpur, P.O.-Khanjanchak, Haldia, Dist.-Purba Medinipur, PIN-721602

ISO/IEC 17025:2005, ACCREDITED BY NABL, CONSTITUENT BOARD OF QUALITY COUNCIL OF INDIA IN THE FIELD OF CHEMICAL, MECHANICAL AND BUILDING MATERIALS TESTING.

TEST REPORT

Sample is drawn by M/s. Indicative Consultant India

Report No. ICI/A/H/17-18/1176 Issued To M/s. Ramco Industries Ltd. Address Dewanmaro, Ayma, P.O.-Hariatara,

P.S.-Kharagpur, Paschim Medinipur.

Sample Description Stack Air Location

Edge Runner Mill BOD & Slurry Mixing Sample Condition In Glass Microfibre Thimble

Sampling Method CPCB, Emission Regulation (Part III)

Test Method CPCB, Emission Regulation (Part III), IS: 11255 (Part -1), 1985, Reaffirmed 2003, IS: 11255 (Part

3) 2008, ORSAT Method

A.] GENERAL INFORMATION ABOUT STACK:

Particulars of the Plant		AL P	Shape of Stack	:	Circular
Stack attached to	:	Edge runner Mill BOD & Slurry	Material of Construction	:	M.S. 💆
製 Controls		Mixing			D
Emission due to	:	Process Activities	Stack ID at sampling point (M)	:	0.30 🧟
Fuel Used	:	A	At Bottom (M)	:	-
Rated Fuel Consumption	:		At Top (M)	:	0.30
Working Fuel Consumption	:	499 - 11 1 16	Height Details:		
Calorific Value(Kcal/kg)	:	ANG 1 1 V	a) Total Ht. Of stack from GL(M)	1	15.0
			b) Total Ht. Of stack from RL(M)	1	4
Sulpher Content (% by Wt)	:	-9'	c) Ht. of sampling port from GL(M)	:	8.4
Ash Content (% by Wt.)	:		d) Ht. of port from disturbance zone (M)		Access
Pollution Control Device	:	Bag Filter & Wet Scrubber	TA TREESA		
Whether Stack is provided wi	th p	permanent Platform/Ladder: Yes			

B.] PHYSICAL DATA:

Checked By

Flue Gas Temperature (°C)	W:	28	Steam Generation Capacity:	5 5 2 PA	
Barometric Pressure,(mm Hg)		756	a) Rated		_
Velocity of Gas flow (m/s)		7.74	b) Running		<u>-</u>
Quantity of Gas flow (Nm ³ /hr)		1941.10	Load: a) Rated		<u>-</u>
Pressure	:		b) Running		3 Ton/Hr.

C I RESULT OF SAMPLING.

Sl. No.	Parameters		Result Obtained
01.	Particulate Matter (mg/Nm³)	2000.000	1.6
02.	Particulate Matter Normalised to 12% CO ₂ (V/V) - (mg/Nm ³)	:	-
03.	Sulphur di-oxide (mg/ Nm³)	:	•
04.	NOx (mg/m ³)	:	-
05.	CO % (V/V)	:	<0.2
06.	CO ₂ % (V/V)	:	<0.2

For, Indicative Consultant India

Parbati (Manager Laboratory) Signatory Authority

Parbati Golui

Note: 1. Test results shown in this test report relate only to the item tested.

Manager-lab, Env. Div. This test report shall not be reproduce anywhere except in full and in same format without the approval of the laboratory tive Consultant India 2.

Retention period of tested samples (Thimble) is 6 months from the date of issue of test report unless otherwise specified.

All general informations of stack are provided by the party.

Page 1 of 1









(CONSULTANT, SURVEYOR & REGD. TEST HOUSE)

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN-721602

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E-mail: jayantasarkar67@gmail.com, indicativeconsultantindia@gmail.com, Website: www.indicativeconsultantindia.com

TEST REPORT

Sample is drawn by M/s. Indicative Consultant India

Report No. Issued To

ICI/A/17-18/RIL/267

Sample Ref. No.

RIL/267 12.01.18

Address

M/s. Ramco Industries Ltd.

Report Date Date of Sampling

03.01.18

Dewanmaro, Ayma, P.O.-Hariatara, P.S.-Kharagpur, Paschim Medinipur.

to 04.01.18

Sample Description

Ambient Air

08.01.18

Location

Analysis Started on

Near Main Gate

Analysis Completed on

11.01.18

Sample Condition

: Glass Microfibre Filter Paper & Plastic Bottle

Sampling Method

: CPCB, Emission Regulation (Part III)

Test Method

CPCB, Emission Regulation (Part III), IS: 5182 (Part - 23) 2006 (RA 2012), USEPA CFR 40(Part- 50): Appendix L, IS: 5182 (Part - 2):2001 (RA 2012), IS: 5182 (Part -6):2006 (RA 2012), Non-Dispersive Infrared Spectrometry Method, Soxlet Extraction and

GC analysis, Atomic Absorption Spectrophotometric Method, Indophenol Blue Method

Ambient Temperature :

in °C (Average)

Time of			Con	centra	tion	$(\mu g/m^3)$		Concentration (ng/m ³)			
Sampling	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	Pb	Benzene	NH ₃	CO	Benzo(a) Pyrene	As	Ni
10:00 AM to 06:00 PM	78.17	24.48	17.72	42.26	BDL	BDL	BDL	0.0572	BDL	BDL	BDL
06:15 PM to 02:15 AM	86.37	28.61	20.85	45.64	BDL	BDL	BDL	0.1172	BDL	BDL	BDL
02:30 AM to 10:30 AM	92.27	29.96	19.81	43.95	BDL	BDL	BDL	0.3425	BDL	BDL	BDL

----- End of Report -

Ambient Air Quality standard (National)

 $PM_{10} = 100 \ \mu g/m^3$, $PM_{2.5} = 60 \ \mu g/m^3$, $SO_2 = 80 \ \mu g/m^3$, $NO_2 = 80 \ \mu g/m^3$, Lead=1.0 $\mu g/m^3$, Ammonia=400 $\mu g/m^3$, 24 hours basis, Carbon mono oxide=2 mg/m^3 , 8hours basis, Benzene=5 µg/m³, Benzopyrene=1 ng/m³, Arsenic =6 ng/m³, Nickel=20ng/m³, Annual basis

For, Industrial, Residential, Rural & Other Area and Ecologically Sensitive Area

Ref: National Ambient Air Quality Standards vide Central Pollution Control Board, New Delhi Notification dated 18th November'2009

For, Indicative Consultant India

Parbati Golui (Manager-Laboratory) Signatory Authority

Parbati Golui Manager-lab, Env. Div. Indicative Consultant India

Note: 1. Test results shown in this test report relate only to the item tested.

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HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN-721602

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E-mail: jayantasarkar67@gmail.com, indicativeconsultantindia@gmail.com, Website: www.indicativeconsultantindia.com

Sample is drawn by M/s. Indicative Consultant India

Report No.

ICI/A/17-18/RIL/267A

Sample Ref. No. RIL/267A

Issued To

M/s. Ramco Industries Ltd.

Report Date

12.01.18

Address

Dewanmaro, Ayma, P.O.-Hariatara, P.S.-Kharagpur, Paschim Medinipur.

Date of Sampling

03.01.18

Sample Description

Ambient Air

Analysis Started on

08.01.18

Location

Analysis Completed on

08.01.18

Sample Condition

Near Main Gate

Sampling Method

Suction of ambient air direct into analyser through Teflon tube and in Plastic Bottle UV Photometric Method / Air Sampling & Analysis 3rd Edition, CPCB Guideline (Vol. - 1)

Test Method

Using imported O3 Analyser

Time	Concentration (µg/m³)
Time	Ozone as O3
0:00 AM to 6:00 PM	30.92

----- End of Report -----

Limit: (µg/m³) Ambient Air Quality standard (National)

O3-100µg/m³, 8 hours basis (Industrial, Residential, Rural & Other Area and Ecologically Sensitive Area)

Ref: National Ambient Air Quality Standards vide Central Pollution Control Board, New Delhi Notification dated 18th November 2009

For, Indicative Consultant India

Parbati Golui (Manager-Laboratory) Signatory Authority

> Parbati Golui Manager-lab, Env. Div. Indicative Consultant India

Test results shown in this test report relate only to the item tested. Note:

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(CONSULTANT, SURVEYOR & REGD. TEST HOUSE)

HPL Link Road, Basudevpur, Khanjanchak, Haldia, Purba Medinipur, PIN-721602

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E-mail: jayantasarkar67@gmail.com, indicativeconsultantindia@gmail.com, Website: www.indicativeconsultantindia.com

TEST REPORT

Sample is drawn by M/s. Indicative Consultant India

Report No.

ICI/A/17-18/RIL/268

Issued To Address

M/s. Ramco Industries Ltd.

Dewanmaro, Ayma, P.O.-Hariatara,

P.S.-Kharagpur, Paschim Medinipur.

Sample Ref. No. RIL/268 Report Date 12.01.18 Date of Sampling 03.01.18

Analysis Started on

Analysis Completed on

to 04.01.18 08.01.18

11.01.18

Sample Description Location

Ambient Air

Sample Condition

Near Stock Yard

Sampling Method

Glass Microfibre Filter Paper & Plastic Bottle

Test Method

CPCB, Emission Regulation (Part III)

CPCB, Emission Regulation (Part III), IS: 5182 (Part - 23) 2006 (RA 2012), USEPA CFR 40(Part- 50): Appendix L, IS: 5182 (Part - 2):2001 (RA 2012), IS: 5182 (Part -6):2006 (RA 2012), Non-Dispersive Infrared Spectrometry Method, Soxlet Extraction and

GC analysis, Atomic Absorption Spectrophotometric Method, Indophenol Blue Method

BDL

0.1173

BDL

Ambient Temperature

in °C (Average)

Time of Sampling

10:15 AM

06:15 PM 06:30 PM

to

02:30 AM 02:45 AM to

84.57

89.44

26.45

31.61

17.72

16.68

	Concentration (μg/m³) Concentr (ng/m						ion			
PM ₁₀	PM _{2.5}	SO ₂	NO ₂	Pb	Benzene	NH ₃	СО	Benzo(a) Pyrene	As	Ni
73.18	20.86	14.60	40.57	BDL	BDL	BDL	0.0592	BDL	BDL	BDL

BDL

41.42 BDL BDL BDL 0.4170 BDL 10:45 AM ----- End of Report --Limit: $(\mu g / m^3)$ Ambient Air Quality standard (National)

BDL

43.11

 $PM_{10} = 100 \ \mu g/m^3$, $PM_{2.5} = 60 \ \mu g/m^3$, $SO_2 = 80 \ \mu g/m^3$, $NO_2 = 80 \ \mu g/m^3$, Lead=1.0 $\mu g/m^3$, Ammonia=400 $\mu g/m^3$, 24 hours basis, Carbon mono oxide=2 mg/m^3 , 8hours basis, Benzene=5 µg/m³, Benzopyrene=1 ng/m³, Arsenic =6 ng/m³, Nickel=20ng/m³, Annual basis For, Industrial, Residential, Rural & Other Area and Ecologically Sensitive Area

Ref: National Ambient Air Quality Standards vide Central Pollution Control Board, New Delhi Notification dated 18th November 2009

Checked By

For, Indicative Consultant India

(Manager-Laboratory) Signatory Authority

Parbati Golui Manager-lab, Env. Div. Indicative Consultant India

BDL

BDL

BDL

BDL

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TEST REPORT

Sample is drawn by M/s. Indicative Consultant India

Report No.

ICI/A/17-18/RIL/268A

RIL/268A

Issued To

M/s. Ramco Industries Ltd.

Sample Ref. No.

Address

Dewanmaro, Ayma, P.O.-Hariatara,

Report Date 12.01.18

Sample Description

P.S.-Kharagpur, Paschim Medinipur.

Date of Sampling 03.01.18 Analysis Started on

Location

Ambient Air

08.01.18

Sample Condition

Near Stock Yard

Analysis Completed on 08.01.18

Sampling Method

Fest Method

Suction of ambient air direct into analyser through Teflon tube and in Plastic Bottle UV Photometric Method / Air Sampling & Analysis 3rd Edition, CPCB Guideline (Vol. – 1)

Using imported O3 Analyser

Time	Concentration (µg/m³)
	Ozone as O3
10:15 AM to 06:15 PM	31.75

-- End of Report -----

Limit: (µg/m³) Ambient Air Quality standard (National)

O3-100μg/m³, 8 hours basis (Industrial, Residential, Rural & Other Area and Ecologically Sensitive Area)

Ref: National Ambient Air Quality Standards vide Central Pollution Control Board, New Delhi Notification dated 18th November 2009

For, Indicative Consultant India

(Manager-Labdratory) Signatory Authority

Parbati Golui Manager-lab, Env. Div. Indicative Consultant India

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Sample is drawn by M/s. Indicative Consultant India

Report No.

ICI/A/17-18/RIL/269

Issued To Address

M/s. Ramco Industries Ltd.

Dewanmaro, Ayma, P.O.-Hariatara, P.S.-Kharagpur, Paschim Medinipur. Sample Ref. No. Report Date

Analysis Started on

Analysis Completed on

RIL/269 12.01.18

Date of Sampling 03.01.18

to 04.01.18

08.01.18

11.01.18

Sample Description

Ambient Air

Location Sample Condition

Back Side of the Plant

Sampling Method

Glass Microfibre Filter Paper & Plastic Bottle

Test Method

CPCB, Emission Regulation (Part III)

CPCB, Emission Regulation (Part III), IS: 5182 (Part - 23) 2006 (RA 2012), USEPA CFR 40(Part- 50): Appendix L, IS: 5182 (Part - 2):2001 (RA 2012), IS: 5182 (Part -

6):2006 (RA 2012), Non-Dispersive Infrared Spectrometry Method, Soxlet Extraction and GC analysis, Atomic Absorption Spectrophotometric Method, Indophenol Blue Method

Ambient Temperature

in °C (Average)

Time of Sampling			Con	centr	ation	(µg/m³)	18		Conce (ng	ntrat (/m³)	ion
10:30 AM	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	Pb	Benzene	NH ₃	СО	Benzo(a) Pyrene	As	Ni
to 06:30 PM	67.60	21.12	14.60	39.73	BDL	BDL	BDL	0.0442	BDL	BDL	BDL
06:45 PM to 02:45 AM	76.42	26.02	17.72	43.11	BDL	BDL	BDL	0.0737	BDL	BDL	BDL
03:00 AM to 11:00 AM	81.55	31.10	15.64	41.42	BDL	BDL	BDL	0.4513	BDL	BDL	BDL

----- End of Report -----

Limit: $(\mu g/m^3)$ Ambient Air Quality standard (National)

 $PM_{10}=100~\mu g/m^3,~PM_{2,5}=60~\mu g/m^3,~SO_2=80~\mu g/m^3,~NO_2=80~\mu g/m^3,~Lead=1.0~\mu g/m^3,~Ammonia=400~\mu g/m^3,~24~hours~basis,~Carbon~mono~oxide=2~m g/m^3,~Shours~basis,~Benzene=5~\mu g/m^3,~Benzopyrene=1~n g/m^3,~Arsenic=6~n g/m^3,~Nickel=20 n g/m^3,~Annual~basis$ For, Industrial, Residential, Rural & Other Area and Ecologically Sensitive Area

Ref : National Ambient Air Quality Standards vide Central Pollution Control Board, New Delhi Notification dated 18th November 2009

Checke

For, Indicative Consultant India

(Manager-Laboratory) Signatory Authority

Parbati Golui Manager-lab, Env. Div. Indicative Consultant India

- Note: 1. Test results shown in this test report relate only to the item tested.
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 - Retention period of tested samples (Filter Paper) is 6 months from the date of issue of test report unless otherwise specified.

RIL/269A

12.01.18

03.01.18

08.01.18

08.01.18







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TEST REPORT

Sample is drawn by M/s. Indicative Consultant India

Report No.

ICI/A/17-18/RIL/269A

Issued To Address

M/s. Ramco Industries Ltd.

Dewanmaro, Ayma, P.O.-Hariatara,

P.S.-Kharagpur, Paschim Medinipur.

Ambient Air

Location Sample Condition

Sample Description

Back Side of the Plant

Sampling Method **Fest Method**

Suction of ambient air direct into analyser through Teflon tube and in Plastic Bottle UV Photometric Method / Air Sampling & Analysis 3rd Edition, CPCB Guideline (Vol. – 1)

Using imported O3 Analyser

Time	Concentration (µg/m³)
, mic	Ozone as O3
10:30 AM to 06:30 PM	31.17

---- End of Report --

Limit: (µg / m³) Ambient Air Quality standard (National)

O3-100µg/m³, 8 hours basis (Industrial, Residential, Rural & Other Area and Ecologically Sensitive Area)

Ref: National Ambient Air Quality Standards vide Central Pollution Control Board, New Delhi Notification dated 18th November 2009

Checkell By

For, Indicative Consultant India

Sample Ref. No.

Date of Sampling

Analysis Started on

Analysis Completed on

Report Date

Parbati Golai (Manager-Laboratory) Signatory Authority

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TEST REPORT

Sample is drawn by M/s. Indicative Consultant India

Report No. Issued To

: ICI/A/17-18/RIL/270

M/s. Ramco Industries Ltd.

Sample Ref. No. Report Date

RIL/270 12.01.18

Address

Dewanmaro, Ayma, P.O.-Hariatara,

Date of Sampling

03.01.18

P.S.-Kharagpur, Paschim Medinipur.

Sample Description

Ambient Air

04.01.18 08.01.18

Analysis Started on Analysis Completed on

11.01.18

Location

Near Scrap Yard

Glass Microfibre Filter Paper & Plastic Bottle

Sample Condition Sampling Method

CPCB, Emission Regulation (Part III)

Test Method

CPCB, Emission Regulation (Part III), IS: 5182 (Part - 23) 2006 (RA 2012), USEPA CFR 40(Part- 50): Appendix L, IS: 5182 (Part - 2):2001 (RA 2012), IS: 5182 (Part -6):2006 (RA 2012), Non-Dispersive Infrared Spectrometry Method, Soxlet Extraction and GC analysis, Atomic Absorption Spectrophotometric Method, Indophenol Blue Method

Ambient Temperature

in °C (Average)

11:15 AM

Time of Sampling			centr	ation	$(\mu g/m^3)$	Concentration (ng/m³)					
10:45 AM	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	Pb	Benzene	NH ₃	CO	Benzo(a) Pyrene	As	Ni
to 06:45 PM	72.60	20.00	16.68	38.04	BDL	BDL	BDL	0.0611	BDL	BDL	BDL
07:00 PM to 03:00 AM	81.38	25.64	19.81	40.57	BDL	BDL	BDL	0.1275	BDL	BDL	BDL
03:15 AM to	87.45	28.93	17.72	39.73	BDL	BDL	BDL.	0.3871	RDI	DDI	DDI

----- End of Report --

Limit: $(\mu g/m^3)$ Ambient Air Quality standard (National)

 $PM_{10}=100~\mu g/m^3,~PM_{2.5}=60~\mu g/m^3,~SO_2=80~\mu g/m^3,~NO_2=80~\mu g/m^3,~Lead=1.0~\mu g/m^3,~Ammonia=400~\mu g/m^3,~24~hours~basis,~Carbon~mono~oxide=2~m g/m^3,~Benzene=5~\mu g/m^3,~Benzene=1~n g/m^3,~Arsenic=6~n g/m^3,~Nickel=20 n g/m^3,~Annual~basis$ For, Industrial, Residential, Rural & Other Area and Ecologically Sensitive Area

Ref: National Ambient Air Quality Standards vide Central Pollution Control Board, New Delhi Notification dated 18th November'2009

Checked B

For, Indicative Consultant India

BDL

0.3871

BDL

(Manager-Laboratory) Signatory Authority

Parbati Golui Manager-lab, Env. Div. Indicative Consultant India

BDL

BDL.

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RIL/270A

12.01.18

03.01.18

08.01.18

08.01.18



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TEST REPORT

Sample is drawn by M/s. Indicative Consultant India

Report No.

ICI/A/17-18/RIL/270A

Issued To Address

Location

M/s. Ramco Industries Ltd.

Dewanmaro, Ayma, P.O.-Hariatara,

P.S.-Kharagpur, Paschim Medinipur.

Ambient Air

Sample Condition

Sample Description

Near Scrap Yard

Sampling Method Test Method

Suction of ambient air direct into analyser through Teflon tube and in Plastic Bottle UV Photometric Method / Air Sampling & Analysis 3rd Edition, CPCB Guideline (Vol. – 1)

Sample Ref. No.

Date of Sampling

Analysis Started on

Analysis Completed on

Report Date

Using imported O3 Analyser

Time	Concentration (µg/m³)
1 mile	Ozone as O3
10:45 AM to 06:45 PM	30.75

-- End of Report -----

Limit: (µg / m³) Ambient Air Quality standard (National) O3-100µg/m³, 8 hours basis (Industrial, Residential, Rural & Other Area and Ecologically Sensitive Area)

Ref: National Ambient Air Quality Standards vide Central Pollution Control Board, New Delhi Notification dated 18th November 2009

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