Ramco Industries Limited

Ramco Industries Limited (RIL), Bihiya

Proposed Expansion of Asbestos Cement Roofing Sheets Plant in Existing Facility from 1,20,000 Tonnes per Annum to 1,60,000 Tonnes per Annum by Process Optimisation (Change in Raw Mix) & by increasing Plant operational days from 300 days to 320 days

Plot No. A-1, BIADA Industrial Area, Village & Taluk-Bihiya, District-Bhojpur, Bihar

Awarded EC by MoEF&CC vide F. No. J-11011/17/2010-IA.II(I) dated 17.01.2011 & its Amendment on 26.11.2019

For NIPL Certification from BSPCB (without prior EC) under the Provisions of MoEF&CC Notification SO 980(E) dated 21.03.2021

Schedule Sl. No. 4(c) (Asbestos Milling & Asbestos based Products)

Sl. No.	List of products/ by - products Permitted under EC/CTO	EC/Consented Quantity	List of products/ by-products Proposed under Clause 7 (ii)(b)	Proposed Quantity
1	Asbestos Cement Roofing Sheets	1,20,000 Tonnes Per Annum @ 400 TPD	Asbestos Cement Roofing Sheets	1,60,000 Tonnes Per Annum @ 500 TPD

Report on 'No Increase in Pollution Load'

December 2025

QCI/NABET Accreditated Consultant/ Environmental Auditor

Gaurang Environmental Solutions Pvt. Ltd.

Accreditated ACO by QCI/NABET for various Sectors including Sector 12 (Asbestos) vide Certificate No. NABET/EIA/23-26/RA 0338 with validity till 07.12.2026

102, SNG Shree Ratna Apartment,
Near Peetal Factory, Jhotwara Road, Banipark,
Jaipur, Rajasthan-302016

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GAURANG ENVIRONMENTAL SOLUTIONS PVT. LTD.

SIMPLIFYING SUSTAINABILITY

ISO 9001: 2015 certified | NABET accredited EIA Consultants | NABET Approved GW/CO Consultants

TO WHOMSOEVER IT MAY CONCERN

M/s Ramco Industries Limited (RIL), Bihiya - Regarding No Increase in Pollution Load Approval for "Proposed Expansion of Asbestos Cement Roofing Sheet Plant in existing facility from 1, 20,000 Ton per Annum to 1, 60,000 Ton per Annum by Process Optimization (change in raw mix) and by increasing plant operational days from 300 days to 320 days at Plot No. A-1, BIADA Industrial Area, Village & Taluk: Bihiya, District: Bhojpur, Bihar.

Considering the detailed report, it is certified that there is "No Increase in Pollution Load" due to proposed expansion in production of Asbestos Cement Roofing Sheet.

Based on the report, following conclusions can be drawn:-

- No additional land is required.
- No additional Plant and Machinery to be installed.
- No additional manpower is required
- No additional water requirement beyond consented quantity
- No additional fuel requirement
- No increase in solid & hazardous generation from that of sanctioned capacity.

Furthermore, the industry has provided advanced pollution control system to ensure minimal air emissions and is maintaining ZLD status.

In conclusion, there will be No Increase in Pollution Load due to proposed expansion in production of Asbestos Cement Roofing Sheet.

Your's faithfully

For Gaurang Environmental Solutions Pvt. Ltd.

(Anil Agrawal)

Date: - 18.12.2025
Place: - Jaipur

JAIPUR
Office: 102, SNG Shree Ratna Apartments, Peetal Factory, Jhotwara Road, Banipark, Jaipur-302016 (Raj)
CIN NO.: U93090RJ2017PTC058312;

GURUGRAM
T:+91-141-4029115
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CHENNAI

NABET Certificate

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QUALITY COUNCIL OF INDIA
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National Accreditation Board for Education and Training

Certificate of Accreditation

Gaurang Environmental Solutions Pvt. Ltd., Jaipur

102, SNG Shree Ratna Apartment, Peetal Factory, Jhotwara Road, Bani Park, Jaipur - 302016

*The organization is accredited as **Category-A** under the QCI-NABET **Scheme for Accreditation of EIA Consultant Organization, Version 3**: for preparing EIA/EMP reports in the following Sectors*

S. No	Sector Description	Sector (as per)		Cat.
		NABET	MoEFCC	
1.	Mining of minerals including Opencast/ underground mining	1	1 (a)(i)	A
2.	Onshore and Offshore oil and gas exploration, development & productions	2	1 (b)	A
3.	Thermal power plants	4	1 (d)	A
4.	Mineral beneficiation	7	2 (b)	A
5.	Metallurgical industries	8	3 (a)	A
6.	Cement plants	9	3 (b)	A
7.	Asbestos milling and asbestos based products	12	4 (c)	A
8.	Leather/skin/hide processing industry	15	4 (f)	B
9.	Chemical Fertilizers	16	5 (a)	A
10.	Synthetic organic chemicals industry	21	5 (f)	A
11.	Distilleries	22	5 (g)	A
12.	Isolated storage & handling of hazardous chemicals	28	-	B
13.	Airports	29	7 (a)	A
14.	Industrial estates/ parks/ complexes/areas, export processing Zones (EPZs), Special Economic Zones (SEZs), Biotech Parks, Leather Complexes	31	7 (c)	A
15.	Common hazardous waste treatment, storage and disposal facilities	32	7 (d)	A
16.	Bio-medical waste treatment facilities	32A	7 (d a)	B
17.	Ports, harbours, break waters and dredging	33	7 (e)	A
18.	Common Effluent Treatment Plants (CETPs)	36	7 (h)	B
19.	Common municipal solid waste management facility (CMSWMF)	37	7 (i)	B
20.	Building and construction projects	38	8 (a)	B
21.	Townships and Area development projects	39	8 (b)	B

Note: Names of approved EIA Coordinators and Functional Area Experts are mentioned in RAAC minutes dated June 21, 2024 posted on QCI-NABET website.

The Accreditation shall remain in force subject to continued compliance to the terms and conditions mentioned in QCI-NABET's letter of accreditation bearing no QCI/NABET/ENV/ACO/24/3314 dated July 16, 2024. The accreditation needs to be renewed before the expiry date by Gaurang Environmental Solutions Pvt. Ltd. following due process of assessment.

Issue Date
July 16, 2024

Valid up to
December 07, 2026

Mr. Ajay Kumar Jha
Sr. Director, NABET

Certificate No.
NABET/EIA/23-26/RA 0338

Prof (Dr) Varinder S Kanwar
CEO-NABET

For the updated List of Accredited EIA Consultant Organizations with approved Sectors please refer to QCI-NABET website.

Third Party Lab Recognition

F.No.15018/22/2018-CPW
Government of India
Ministry of Environment, Forest and Climate Change
(CP Division)

Agni-233, Indira Paryavaran Bhavan,
Jor Bagh Road,
New Delhi – 110 003.
Dated, the 15th February ,2019

To

M/s Shiva Test House
1st Floor, Rajhans Niketan
Near Canal , Rukunpura, Bailey Road
Patan-800014, Bihar

Subject: - Renewal of Recognition of M/s Shiva Test House, 1st Floor, Rajhans Niketan, Near Canal, Rukunpura, Bailey Road, Patna-8000014, Bihar as Environmental Laboratory under the Environment (Protection)Act. 1986.

Sir,

I am directed to refer to your application dated :24.01.2018 for recognition of your laboratory under Environment (Protection) Act. 1986. Based on the recommendations of the Expert Committee for Recognition of Environmental Laboratories in its 56th meeting held on 23rd January, 2019 and your acceptance of the revised terms and conditions at Annexure-III & IV of the Guidelines for recognition of Environmental Laboratories, this Ministry approves the recognition of M/s Shiva Test House, 1st Floor, Rajhans Niketan, Near Canal, Rukunpura, Bailey Road, Patna-8000014, Bihar for five year, as shall be notified in the Gazette of India.

2. As sought in your aforementioned application M/s Shiva Test House, Patna may undertake the following tests:

I. **Physical Tests:** Conductivity, Colour, pH, Fixed & volatile solids, Total solids, Total dissolved solids, Total suspended solids, Turbidity, Temperature, Velocity & discharge measurement of industrial effluent stream, Odour, Settleable solids and Sludge volume index (SVI).

II. **Inorganic (General & Non-metallic):** Acidity, Alkalinity, Ammonical nitrogen, Chloride, Chlorine residual, Dissolved oxygen, Fluoride, Total hardness, Total kjehldal nitrogen (TKN), Nitrite nitrogen, Nitrate nitrogen, Phosphate, Sulphate, Carbon dioxide, Sulphite and Silica.

III. **Inorganic (Trace metals):** Boron, Cadmium, Calcium, Chromium Total, Chromium Hexavalent, Copper, Iron, Lead, Magnesium, Mercury, Nickel, Potassium, Sodium, Sodium absorption ratio, Zinc, Arsenic, Aluminium, Lithium, Tin, and Cobalt.

IV. **Organics (General) and Trace Organics:** Bio-chemical oxygen demand (BOD), Chemical oxygen demand (COD), Oil & grease, Phenol, Pesticide ((Organo-chlorine, Organo nitrogen-phosphorous), Tannin & lignin, Poly-chlorinated biphenyl (PCB's) Each and Polynuclear aromatic hydrocarbon (PAH) each.

V. **Microbiological:** Total coliform, Faecal Coliform, Faecal streptococci, E. coli and Total Plate Count.

VI. **Toxicological Tests:** Bioassay method for evaluation of toxicity using fish and Measurement of toxicity using Daphnia or other organism.

VII. **Ambient Air/ Fugitive Emissions:** Nitrogen dioxide (NO_2), Sulphur dioxide (SO_2), Total suspended particulate matter, Respirable suspended particulate matter (PM_{10}), Ammonia, Carbon monoxide, Lead, Ozone, Benzene Toluene Xylene(BTX), Polcyclic aromatic hydrocarbon (PAH) Benzopyrine & Others, $PM_{2.5}$ and Volatile Organics Carbon.

VIII. **Stack Gases/ Source Emission:** Particulate matter, Sulphur dioxide, Velocity & flow, Carbon dioxide, Carbon monoxide, Temperature, Oxygen, Oxides of nitrogen, Ammonia, Fluoride (Particulate), Fluoride (Gaseous), Hydrogen Sulphide and Carbon disulphide.

IX. **Noise Level:** Noise level measurement (20 to 140 dba) and Ambient noise & source specific noise.

X. **Meteorological:** Ambient temperature, Wind direction, Wind speed, Relative Humidity and Rain fall.

3. Further, the following analysts have been approved for recognition as Government Analysts.
   (i) Dr. Shibeswar Prasad
   (ii) Dr. (Mrs.) Shreyasee Prasad

4. The laboratory shall compulsorily participate in the Analytical Quality Control (AQC) exercise conducted by the Central Pollution Control Board (CPCB) at least once a year to ascertain the capability of the laboratory and analyses carried out and shall submit quarterly progress reports to this Ministry.

5. Periodic surveillance of the recognized environmental laboratory will be undertaken by this Ministry/ CPCB to assess its proper functioning, systematic operation and reliability of data generated at the laboratory.

6. It is also mandatory for the laboratory to have requisite accreditations of the NABL/ ISO 9001 and OHSAS and its renewal as per accreditation rules. Permission in para 2 above is subject to such accreditations and renewal, as applicable.

7. The laboratory should compulsorily follow the accepted Terms & Conditions. In case of serious non-compliance of any of the Terms and Conditions, the laboratory may be black-listed for a minimum period of two years and civil/ criminal proceedings, as applicable, may be initiated for performing functions on behalf of the Government in an unauthorized manner.

& hrs

Yours faithfully,

(Dr. Susan George K.)
Scientist 'D'
Tel. No. 011-24695327
Email: susan.george@nic.in

Copy to:

1. Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, New Delhi – 110032.
2. Member Secretary, Bihar Pollution Control Board, Mall Road, Patliputra Industrial Area, Digha Ghat, Patna, Bihar-800010
3. Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (EZ), A/3, Chandersekharpur, Bhubaneswar-751023.
4. Director, IT Division, MoEF&CC, New Delhi-110003: for uploading on MoEF&CC website

1.0 Introduction

1.1 Project Proponent

M/s. Ramco Industries Limited (RIL) is part of the **Ramco Group** which is one of the leading, highly reputed and Second Largest Industrial Group in South India. Ramco is having business in Cement, Dry Wall & Ceiling products, Roofing Products, Cotton yarn, Surgical cotton and Computer Software.

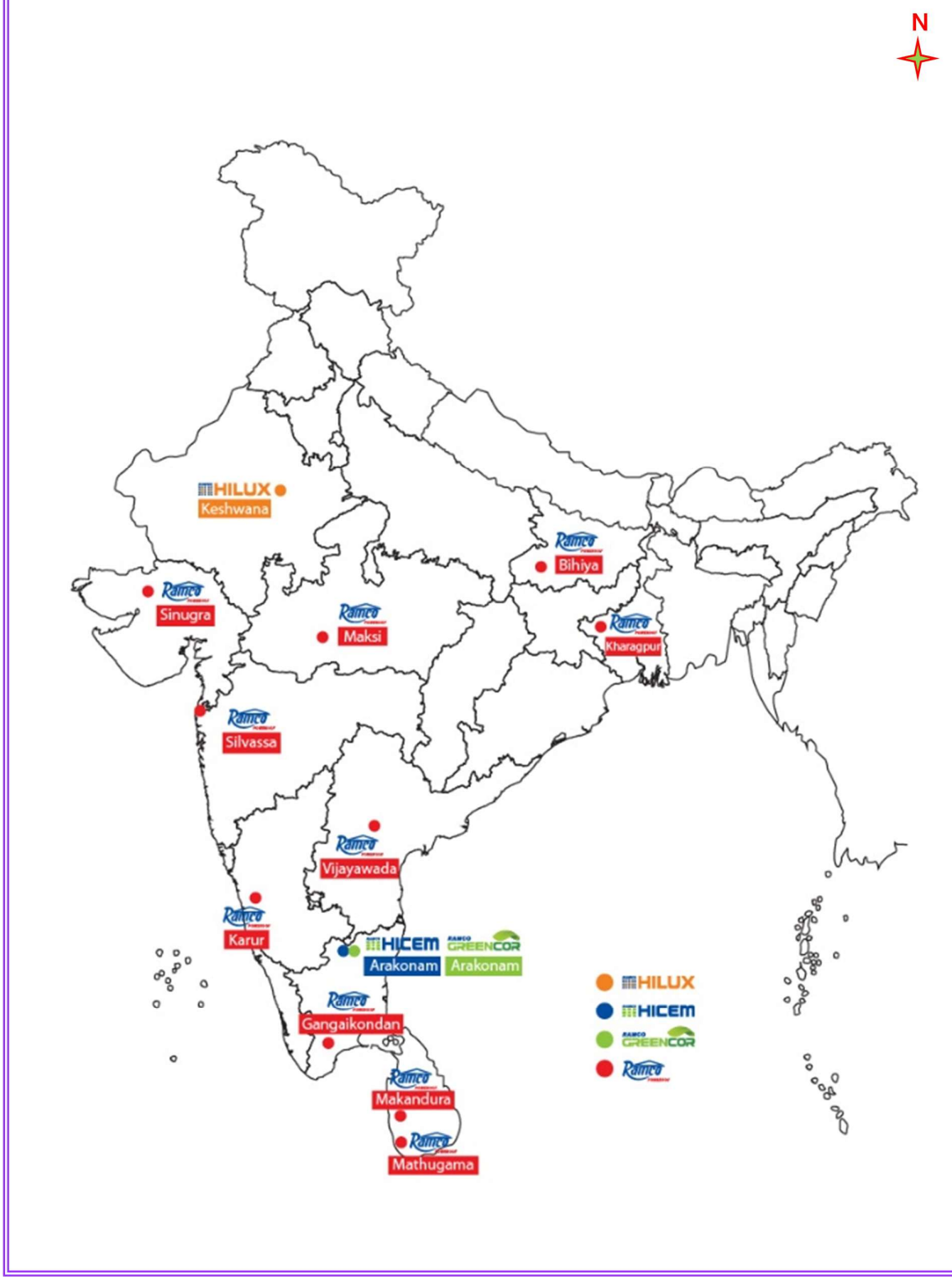
Under the dynamic leadership of (Late) **Shri.P.R.Ramasubrahmaneya Rajha**, RIL was founded in 1965 and set up its first plant at Arakkonam-Tamil Nadu in 1967 for the manufacture of fibre cement roofing sheets. From a modest beginning of the plant with a production capacity of 36,000 Tonnes per Annum (TPA), today RIL is one of the leading building materials manufacturers in South Asia. With 12 Plants across South Asia and a 8,000 strong partner network, the combined production capacity of RIL is 10,00,000 TPA.

'**Ramco Poweroof**' is made with the superior quality Portland Cement and high quality imported Chrysotile fibres. Chrysotile has a tensile strength of 12,000 kg/sq.cm which is over 8 times greater than that of Steel. Ramco Poweroof have given millions of homes, schools, and industries safe shelter, a healthy atmosphere and permanent protection from the elements. Today, RIL operates 8 modern plants manufacturing **high quality fibre cement roofing sheets** in India Viz. Gangaikondan-Tamil Nadu, Karur-Karnataka, Maksi-Madhya Pradesh, Silvassa-UT of Dadra & Nagar Haveli, Kharagpur-West Bengal, Vijayawada-Andhra Pradesh, Anjar-Gujarat and Bihiya-Bihar. The present aggregate capacity for Fibre Cement Sheets manufacturing of these Plants is about **7.0 Lakh Tonnes per Annum (LTPA)**.

Apart from fibre cement roofing sheets, the company has also forayed into manufacturing of calcium silicate boards, **fibre cement boards**, tiles, planks and **non-asbestos roofing sheets**. RIL has also introduced Ramco Hilux Calcium Silicate Board, a versatile building material, using technology from the A&A Corporation, Japan. These boards are rapidly replacing conventional building materials such as Gypsum Boards, Plywood & Plaster of Paris, across the international markets by virtue of their sheer versatility. Several landmark and iconic structures that have stood the test of time bear the Hilux stamp of excellence, signifying stronger, safer and aesthetically appealing buildings. Ramco Hilux boards and tiles are manufactured at the world class plant at Keshwana, Rajasthan.

As part of its Golden Jubilee Celebrations the company has repositioned itself and scripted a new vision of 'Pioneering Green Dry Construction' to protect nature and promote eco-friendly Green construction practices across the globe.
RIL Plant locations, Pan India & Sri Lanka, are shown in **Plate-I**.

Plate : I RIL Plant Locations



With Registered Office at Rajapalayam-Tamil Nadu, the Contact information of RIL **Corporate Office** is as below:

The Chief Executive Officer,
Ramco Industries Limited,
6th Floor, Auras Corporate Centre,
No. 98A, Dr.Radhakrishnan Road,
Mylapore, Chennai-600 004.
Tel. No. : 044-2847 8585 & Fax No. : 044-2847 8597
Contact Mobile No. : 88381 18563
Contact e-Mail : cpd@ramcoind.com

1.2 RIL Bihiya Plant

Bihar Industrial Area Development Authority (BIADA), Patna has developed **Bihiya Industrial Area** (total area of 86.40 Acres), **Bihiya Block in Bihta Cluster** of Bihar (Category B Area/Location). RIL was allotted the **Industrial Plot A-1** with an extent of (20 Acres) **8.09 Ha** in Bihiya Industrial Area, Bhojpur District of Bihar on **90 Years Lease** for establishing an Asbestos Fibre Cement Sheet Plant (**Plate I**). The Index Map is given as - **Fig. 1.1**.

Plate : I BIADA Bihiya Block Industrial Area

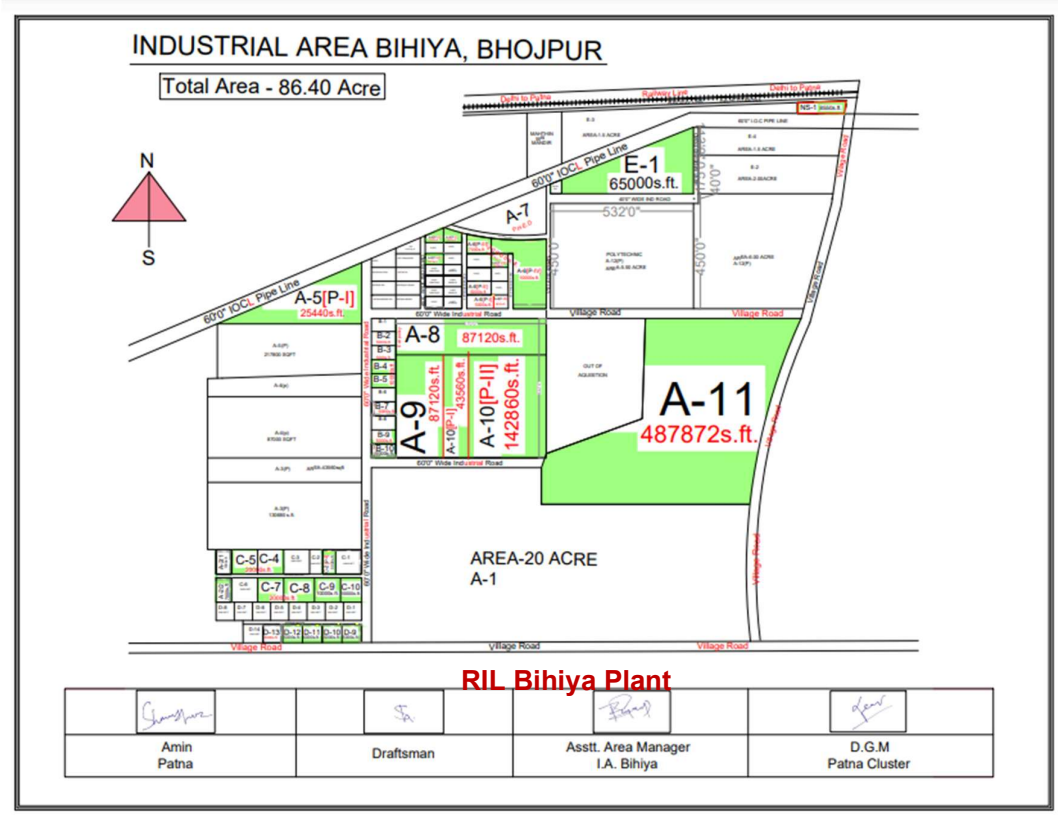
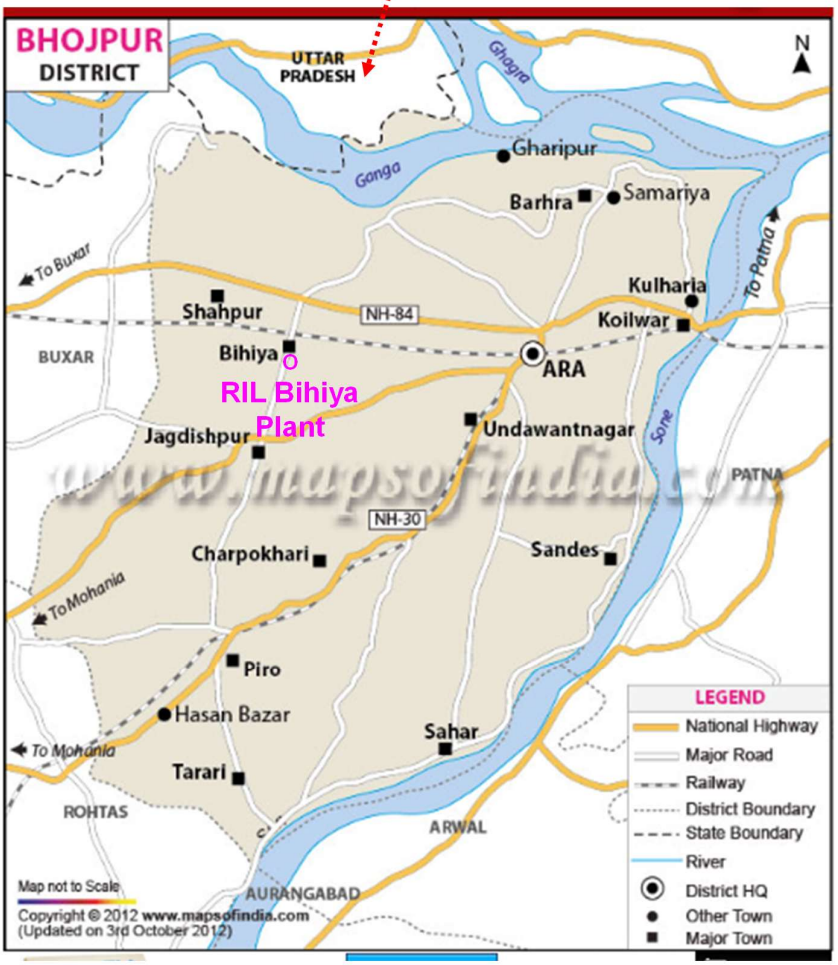


Fig. : 1.1 Index Map





The land particulars of the Industrial Plot are given in **Table 1.1**. RIL took the possession of the Plot on **25.11.2009** and commenced Production from the Year 2013-14.

Table : 1.1 Land Particulars

Industrial Plot	Details
Name of the Industrial Estate	Bihiya
Allotted Plot on Lease	BIADA Industrial Plot A-1
Plot Extent	8.09 Ha (20 Acres)
Survey Nos.	2440, 2072, 2446, 2070, 2575, 2069
Khata Nos.	748, 375, 157, 375, 429, 375
Village	Bihiya
Police Station & Pagana	Bihiya
District & State	Bhojpur, Bihar

The Factory Site is located in **Survey of India Topo Sheet No. 72 C/6** (Open Series Map – G45M6) between the Coordinates 25°33'06.40"-25°33'14.20" North Latitude & 84°27'38.60"-84°27'54.28" East Longitude. The boundary Coordinates are given in **Table 1.2**.

Table : 1.2 Plant Site Coordinates

Location ID	Site Location	North Latitude	East Longitude
1	NE Corner	25°33'12.13"	84°27'54.28"
2	SE Corner	25°33'06.40"	84°27'54.20"
3	SW Corner	25°33'07.26"	84°27'38.71"
4	NW Corner	25°33'14.20"	84°27'38.60"

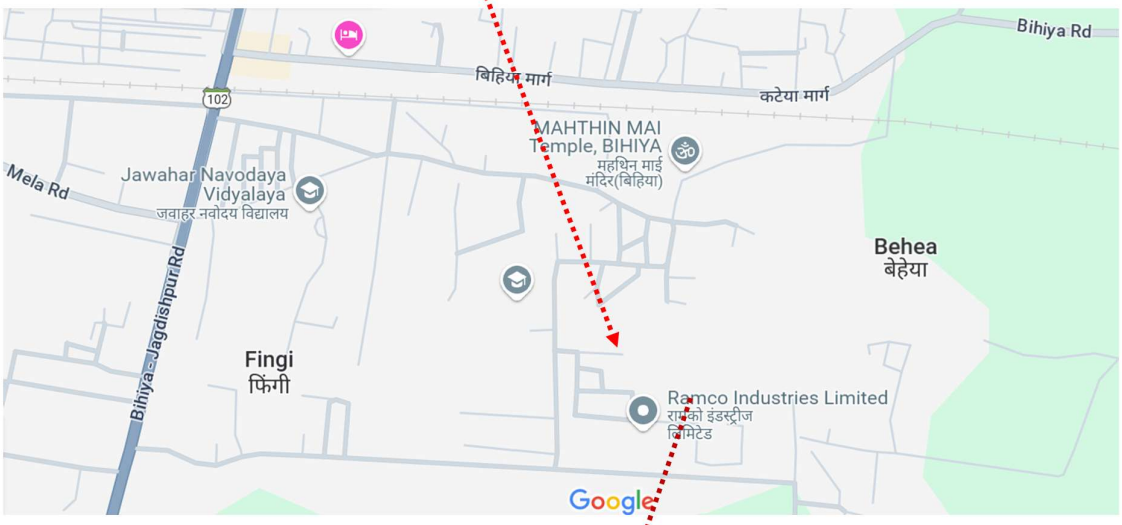
The Regional Setting of the Plant is given as **Fig. 1.2**. Plant Area in High Resolution Satellite (Google Earth) Imagery is given as **Fig. 1.3.** Topo Map is given as **Fig. 1.4** and Environmental Setting as **Fig. 1.5**. The Factory/ Plant & its Environs are shown in **Plates II-III**.

There are **150 workers** attending the Factory in the **General Shift**. There is **no Township** and also, **no Railway Siding** at the Factory. The Contact information of RIL Bihiya Plant is as below :

The Factory Manager,
Ramco Industries Limited
Plot No.A-1, BIADA Industrial Area,
Opp. Mahathin Mai Temple,
Jawahar Navodaya Vidyalaya Road,
Bihiya, Bhojpur District, Bihar - 802152,
Contact Mobile No. : 9534033900
Email : rmi@ril.co.in

Fig. : 1.2 RIL Bihiya Plant – Regional Setting





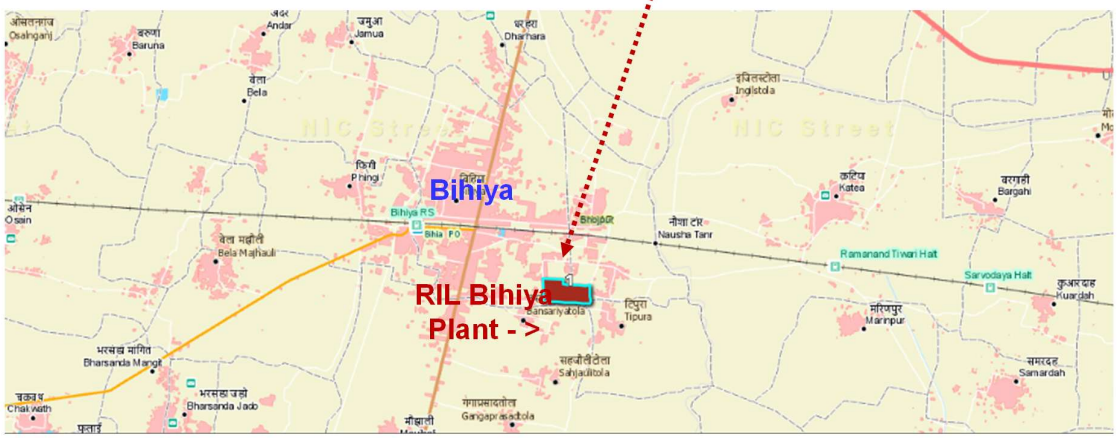
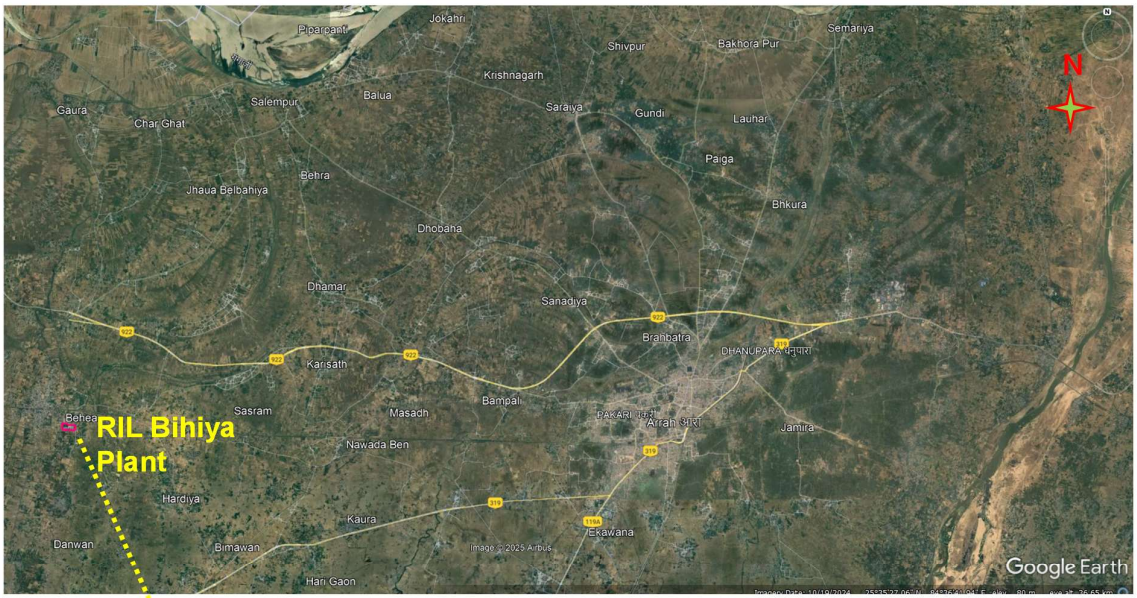
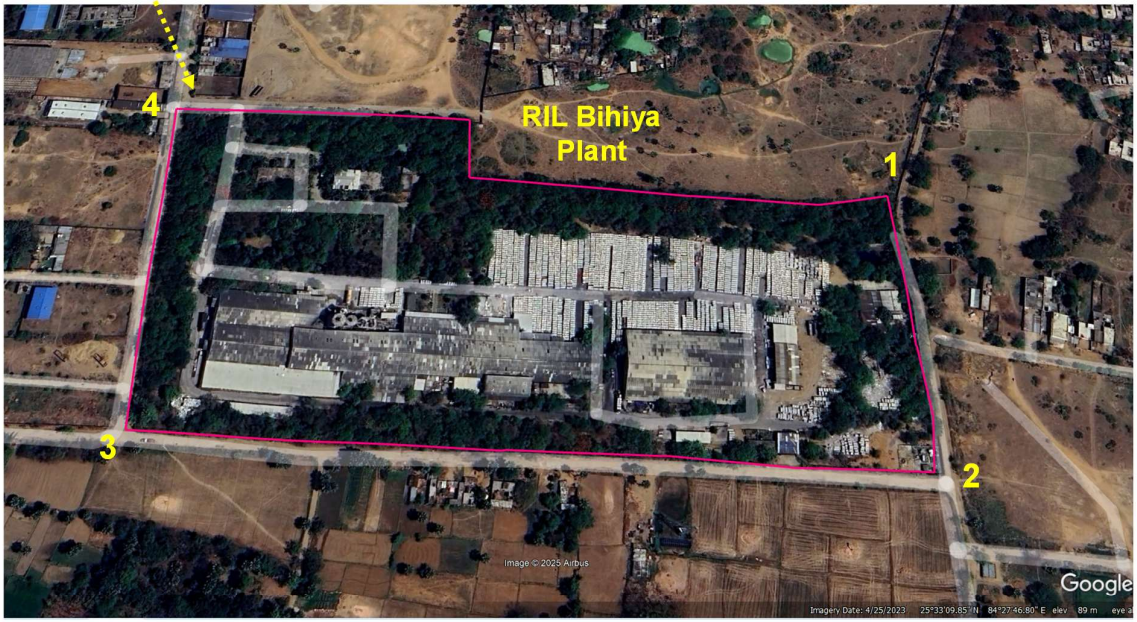


Fig. : 1.3 Plant Site in Google Earth Imagery

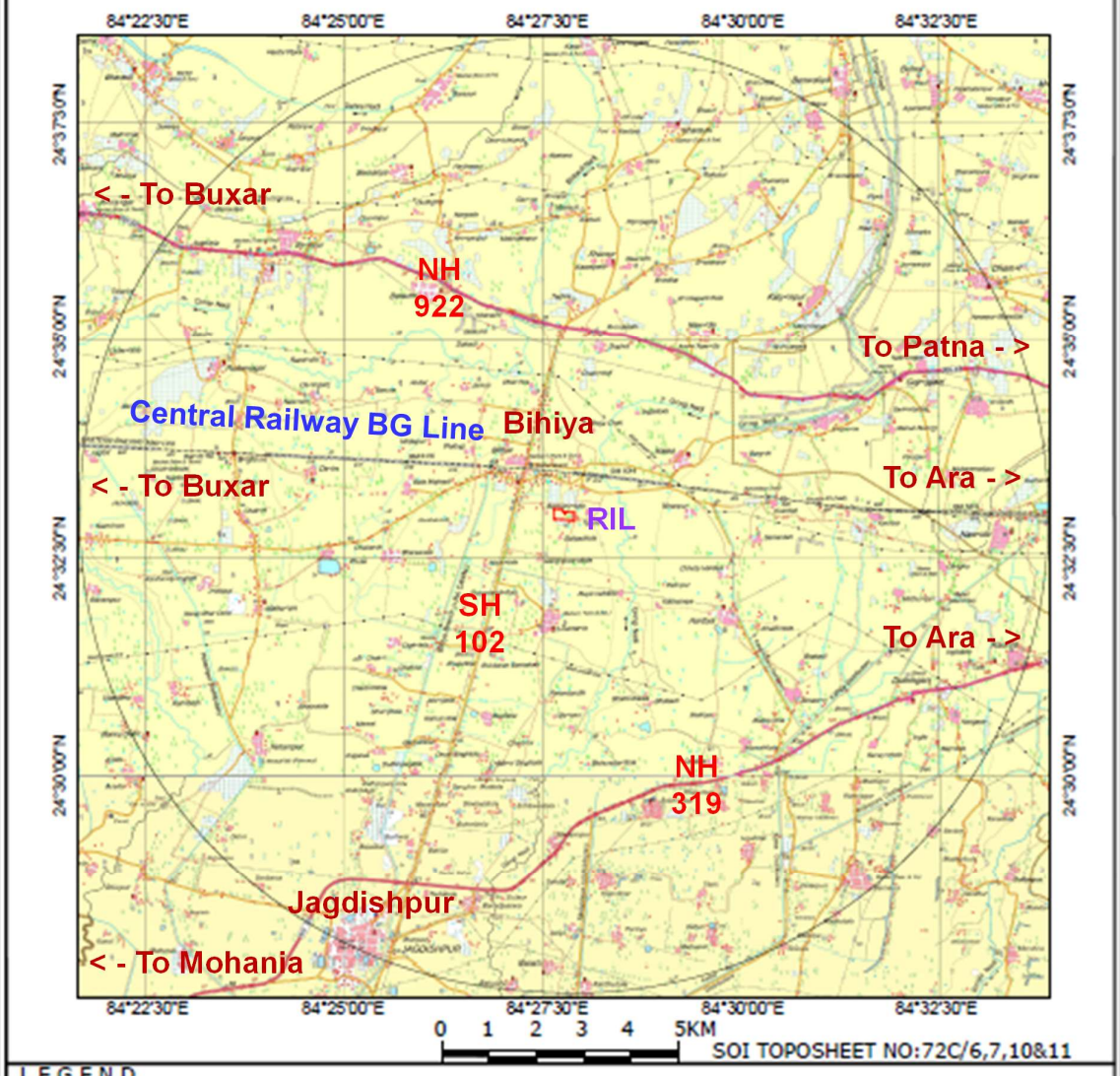




Location ID	North Latitude	East Longitude
1	25°33'12.13"	84°27'54.28"
2	25°33'06.40"	84°27'54.20"
3	25°33'07.26"	84°27'38.71"
4	25°33'14.20"	84°27'38.60"

Plant Coordinates : 25°33'06.40"-25°33'14.20" North Latitude & 84°27'38.60"-84°27'54.28" East Longitude

Fig. : 1.4 Topo Map - 10 km Radius



LEGEND

SITE

Survey of India Topo Sheet No. 72 C/6 (OSM : C45M6)

There is no Ecological Sensitive Area (ESA) or Zone (ESZ) within 10 km Radius.

Fig. : 1.5 Environmental Setting

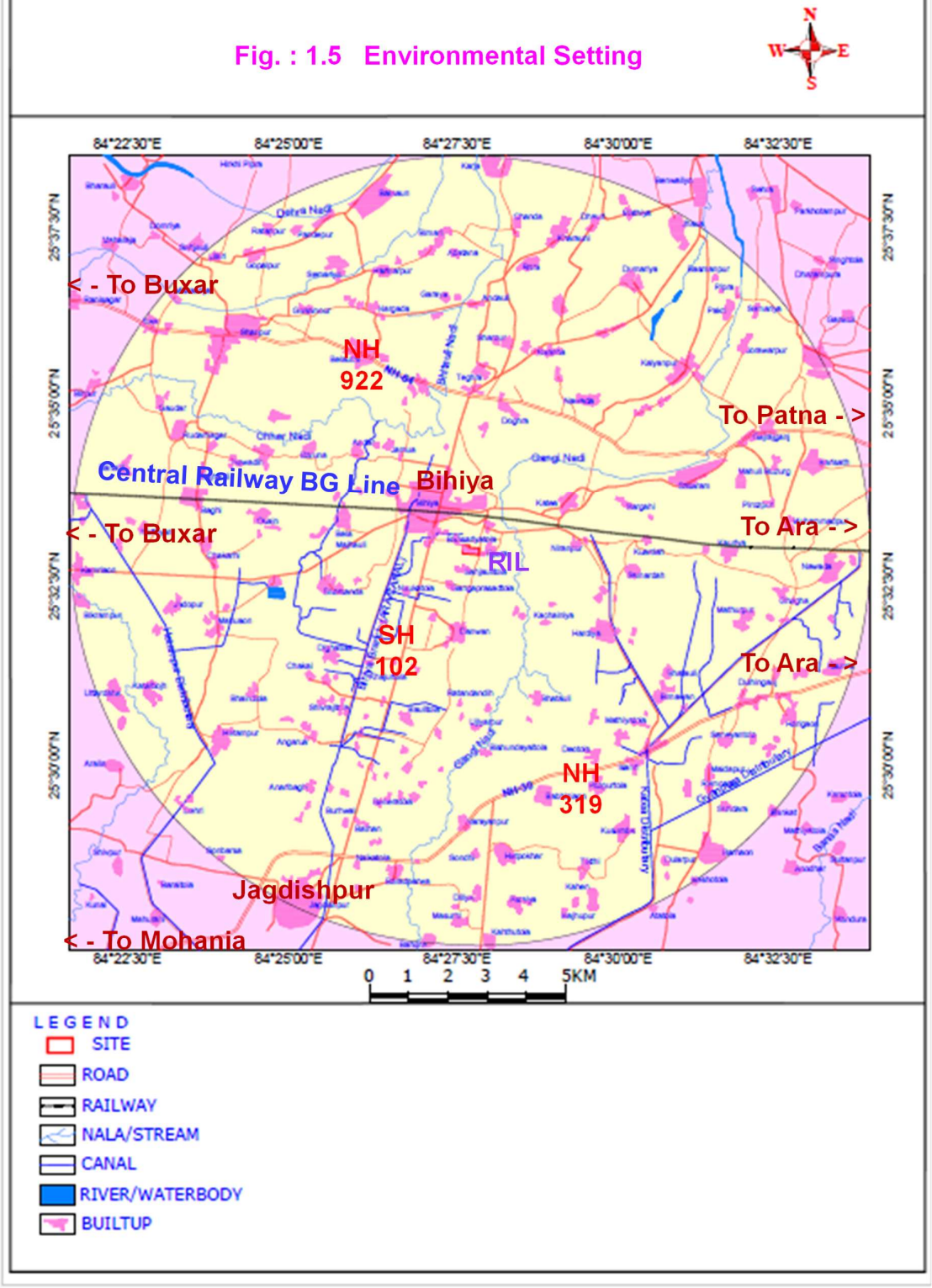


Plate-II : RIL Bihiya Plant & its Environs

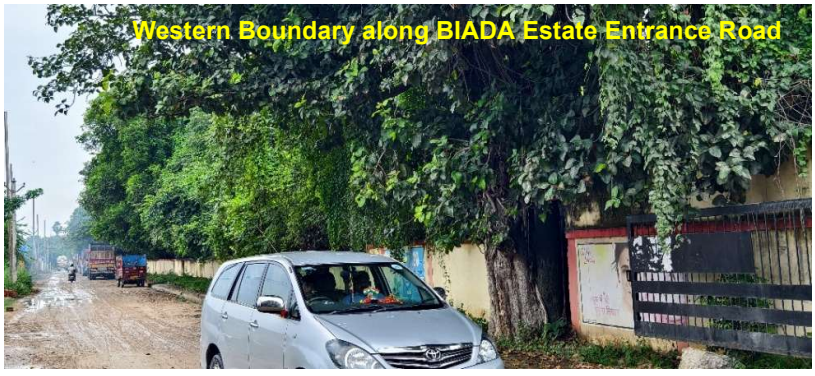




RIL Bihiya Plant - Main Gate



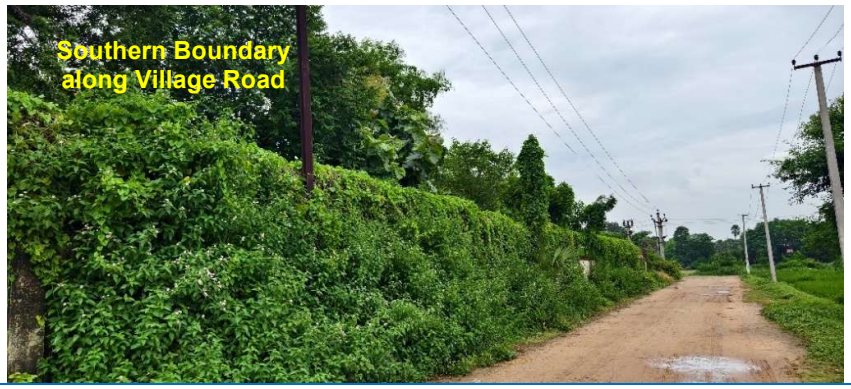
Northern Boundary near Main Gate

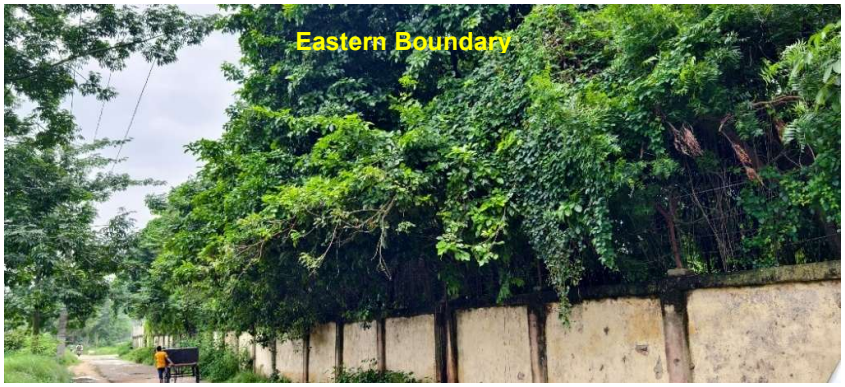


Western Boundary along BIADA Estate Entrance Road

Plate-III : RIL Bihiya Plant & its Environs







Northern Boundary



1.3 Statutory Approvals

1.3.1 Environmental Clearance

RIL **obtained Environmental Clearance** (EC) from the Ministry of Environment, Forest & Climate Change (MoEF&CC) for establishing the Asbestos Fibre Cement Sheet Plant (Asbestos Cement Roofing Sheets as per CTO) of **1,20,000 Tonnes per Annum (TPA)** production capacity in the Plot vide **F. No. J-11011/17/2010-IA.II(I) dated 17.01.2011** (attached as **Document-1**).

Awarded **EC was amended** by MoEF&CC **on 26.11.2019** for **ground water abstraction** from permitted 2 Nos. Borewell for 23,620 KL/Annum (**Document-2**).

1.3.2 Consents from BSPCB

Consent to Establishment (CTE/NOC) was obtained from Bihar State Pollution Control Board (BSPCB) vide Letter PT (NOC)-3912/10 dated 05.10.2010 (**Document-3**). The **Red Medium Hazardous Industry** was commissioned on **14.03.2011** with a Project Cost of **Rs.27.50 Crores**. Consents to Operate (CTOs) are obtained from BSPCB and renewed periodically by the Board. Present **Consolidated Consent & Authorisation (CCA)** issued by BSPCB vide Letter Ref. No. 1101 dated 23.06.2023 is **valid till 30.06.2028** (**Document-4**).

BSPCB has amended the CCA Ref. No. 1101 dated 23.06.2023 vide Letter Ref. No. 3-01/14/206 dated 24.01.2024 for quantity of **ground water consumption from 80 KLD to 195 KLD** from permitted 2 Nos. Borewell within the premises **for both Process & Curing** (**Document-5**).

1.3.3 Gound Water NOC

Initially, Directorate of Under Ground Water Resources, Bihar gave the permission on 22.02.2010 for ground withdrawal of 80 KLD. Subsequently, the Central Ground Water Authority (**CGWA**), Govt. of India, New Delhi issued the No Objection Certificate (**NOC**) for ground water abstraction of 23,620 KL/Annum for the Factory from permitted 2 Nos. Borewell in **Semi-Critical Area** vide its Order F. No. 21-4/282/BR/IND/2017-103 dated 22.01.2019.

With RWH measures implemented for recharging about 14,802 KL/Annum, CGWA has permitted further ground water abstraction of **29,200 KL/Annum** for the Factory from permitted 2 Nos. Borewell vide its NOC No. CGWA/NOC/IND/REN/2/2023/8793 dated 25.12.2023 with validity from 19.12.2023 to **18.12.2026** (**Document-6**). By considering proposed Expansion, CGWA has also permitted ground water abstraction of **94,900 KL/Annum @ 260 KLD** from permitted Borewells (2 Nos.) vide its NOC No. CGWA/NOC/IND/EXP/2024/73 dated 12.08.2024 with validity from 19.12.2023 to **18.12.2026** (**Document-7**).

1.4 Compliance to Statutory Approvals

1.4.1 Consents from BSPCB

The Consent Orders list, including Hazard Waste Authorisation, list is given in **Table 1.3**. The Consents were renewed periodically by the Board. The Factory is being operated with valid Consents only and **there is no violation** in this regard.

Table : 1.3 CTE / CTO & HWA Details

I	Consents to Establish	Order Reference	Validity Period
1	NOC/CTE	P/T (NOC)-3912/10 dated 05.10.2010	-
II	**Consents to Operate**	**Order Reference**	**Validity**
1a.	First CTO-Emission Consent Order	P/T (NOC)-3912/10-T/7368 dated 01.04.2011	31.03.2012
1b.	First CTO-Discharge Consent Order	Ref. No. 2-19/11-T 3769 dated 01.04.2011	31.03.2012
2a.	Emission Consent Order	P/T (NOC)-3912/10-T/11267 dated 03.07.2012	01.04.2012-31.03.2013
2b.	Discharge Consent Order	Ref. No. 2-19/11-T 11266 dated 03.07.2012	01.04.2012-31.03.2013
3a.	Emission Consent Order	P/T (NOC)-3912/10-T/15001 dated 13.09.2013	01.04.2013-31.03.2016
3b.	Discharge Consent Order	Ref. No. 2-19/11-T 15000 dated 13.09.2013	01.04.2013-31.03.2016
4a.	Emission Consent Order	Ref. No. 2886 dated 12.07.2018	30.06.2023
4b.	Discharge Consent Order	Ref. No. 2887 dated 12.07.2018	30.06.2023
5	Consolidated Consent & Authorisation (CCA)	Ref. No. 1101 dated 23.06.2023	30.06.2028
6	Amendment to CCA	Ref. No. 3-01/14/206 dated 24.01.2024	30.06.2028

1.4.2 Production

The **Industry** was commissioned on **14.03.2011** with process optimization & trial production. It is permitted to manufacture Asbestos Cement Roofing Sheets @ 1,20,000 Tonnes per Annum.

The production from the Factory, since commissioning, is given in **Table 1.4**. The maximum production achieved was **1,19,847.47 TPA** during FY 2022-23 and **there is no Production violation** in the Consented quantity.

Table : 1.4 Production of RIL, Bihiya Factory

Financial Year	Asbestos Cement Roofing Sheets Production, Tonnes
2011-12	-
2012-13	-
2013-14	21,546.38
2014-15	71,781.04
2015-16	68,153.43
2016-17	79,116.02
2017-18	81,229.35
2018-19	91,080.76
2019-20	95,188.00
2020-21	92,672.88
2021-22	1,05,042.82
2022-23	**1,19,847.47**
2023-24	1,18,418.22
2024-25	**1,18,231.00**

1.4.3 Certified Compliance Report

Based on a Compliant filed, the Factory was inspected by the Scientist 'C', Regional Office, MoEF&CC, Ranchi during 26/27.02.2024 and issued the Monitoring Report and Compliance Status of EC Conditions - **Certified Compliance Report (CCR) -** vide Letter File No. 105-76/11/EPE/421 **dated 09.07.2024** which is annexed to the Report **(Document-8)**. Also, **some Observations** were raised during the Inspection for which required details & updations were submitted to RO, MoEF&CC, Ranchi by RIL as '**Action Taken Report**' vide emails on **02.03.2024 and 13.06.2024 (Document-9)**. The **Conclusion of the Report** ended as below :

"1. From the Site Inspection carried out and perusal of the reports and documents submitted by the project proponent, it is noted that **there was proper housekeeping/maintenance of the roads inside the plant, the values of various parameters of air, noise and water quality** analysed during the two seasons, conform to the standards prescribed. During the inspection, it was also observed that the **industrial plant was not discharging any effluent/industrial water outside** the plant premises. The plant is recycling and reusing the process water generated. **Good plantation exists within the plant** and good roads are laid within the plant with proper maintenance. Rain water is being stored in reservoir for reuse in the plant.

2. From the observations made at site and verifying the reports/ documents submitted by the project proponents, it is noted that the **issues raised in the complaint were not found correct**."

1.4.4 Implementation of Norms/Guidelines

RIL is strictly following the Asbestos or Fibre Cement based Products (Quality Control) Order, 2024 issued by Ministry of Commerce & Industry vide its Notification S.O. 1152(E) dated 06.03.2024 & following BIS Standards and also complying the Hon'ble Supreme Court directives for Asbestos Industries.

- ✓ IS-11450 - For determination of airborne asbestos Fibre concentration in work environment.
- ✓ IS-11451 - For Safety and health requirements.
- ✓ IS-11769 & IS-11770 - For asbestos cement product.
- ✓ IS-12078 - For handling of asbestos Fibre.
- ✓ IS-12081 - For Pictorial warning signs & precautionary notices for asbestos & product containing asbestos.

1.5 Need for the Proposal

There is a significant gap between Supply & Demand of Asbestos Sheet products in Bihar State. RIL's supply to the market has to be increased at least by another 50% so as to meet the ever increasing demand. Thus, RIL proposes to increase the production capacity of Bihiya Factory by increasing with process optimization (Raw Material GGBS inclusion) of existing machineries & infrastructures and the operational days.

1.6 The Proposal

RIL has now proposed **process optimisation by 'Change in Raw Mix'** and enhancement of production capacity of Asbestos Cement Roofing Sheets from existing 1,20,000 TPA @ 400 TPD to **1,60,000 TPA** @ 500 TPD **(33.33% increase)** by **Process Optimaisation** ('**Change in Raw Mix**') **and increasing Plant operational days** from existing **300 days to 320 days** (with **6.25% Reduction in Asbestos Fibre Consumption on Expaansion**). Proposed Activities on Expansion are:

1. Change in Raw Mix includes Ground Granulated Blast Furnace Slag (GGBS) addition.
2. Process optimisation includes the followings :
   - ✓ Introduction of Variable Frequency Drive (VFD) for all RM & Slurry Feeding Pumps and Sheet forming machine which will increase the Sheet forming felt upto 50%.
   - ✓ Elimination of stripping & changing time of Trolly Units.
3. Plant operational days from existing 300 days to 320 days.

Existing Production :

Asbestos Cement Sheets @ 400 TPD for 300 days = 1,20,000 TPA.

Proposed Production :

Asbestos Cement Sheets @ 500 TPD for 320 days = 1,60,000 TPA.

No additional Land is required for the Proposal as **existing machineries and infrastructures are adequate** for the Expansion.

There is **no Rehabilitation & Resettlement (R&R) issue** due to the Proposal. There is **no Litigation/Pending Case** against the Proposal.

1.7 NIPL Study

The amendment in EIA Notification 2006 by MoEF&CC Notification SO 980(E) dated 02.03.2021 **(Document-10) exempts the requirement of prior Environmental Clearance** for any increase in production capacity in respect of processing or production or manufacturing sectors (listed against **item numbers 2, 3, 4 and 5 in the Schedule** to the notification) **with or without any change in (i) raw material-mix or (ii) product-mix** or (ii) quantities within products or (ii) number of products including new products falling in the same category or (iv) configuration of the plant or process or operations in existing area or in areas contiguous to the existing area specified in the environmental clearance of the project **provided that there is no increase in pollution load** (derived on the basis of such Prior Environmental Clearance). Provided that such exemption shall be applicable only consequent to:

A. The project proponent furnishing information regarding such changes along with no increase in pollution load certificate, from the environmental auditor or reputed institutions empanelled by the State Pollution Control Board or Union Territory Pollution Control Committee or Central Pollution Control Board or Ministry of Environment, Forest and Climate Change, as per the procedure laid down in Appendix-XIII, on PARIVESH portal as well as to the concerned State Pollution Control Board or Union Territory Pollution Control Committee.

B. Installation and implementation of Online Continuous Monitoring System (OCMS) with at least 95% uptime, connected to the servers of the Central Pollution Control Board and State Pollution Control Board or Union Territory Pollution Control Committee concerned to report the quantity and quality, of emission and discharges.

Note : As per CPCB Directions vide B-29016/04/06PCI-I/5401 dated 05.02.2014 (Annexure-II) **(Document-11)**, Installation and implementation of Online Continuous Monitoring System (OCMS) is applicable to '17-Category of Highly Polluting Industries' only. **OCMS is 'Not Applicable' to Asbestos Industries**.

Annexure-II

Sl No	Category	Effluent Parameters	Emission Parameters
1.	Aluminium	pH,BOD,COD,TSS	PM, Fluoride
2.	Cement	pH, BOD,COD,TSS	PM,NOx,SO_2
3.	Distillery	pH, BOD,COD,TSS	PM
4.	Dye and dye intermediate	pH, BOD,COD,TSS,Cr	-
5.	Chlor Alkali	pH, BOD,COD,TSS	Cl_2,HCl
6.	Fertilizers	pH, BOD,COD,TSS, Ammonia	PM, Fluoride, Ammonia
7.	Iron & steel	pH, BOD,COD,TSS	PM,SO_2
8.	Oil refinery	pH, BOD,COD,TSS	PM,CO,NOx,SO_2
9.	Petrochemical	pH, BOD,COD,TSS	PM,CO,NOx,SO_2,
10.	Pesticides	pH, BOD, COD, TSS, Cr, As	-
11.	Pharmaceuticals	pH, BOD, COD, TSS ,Cr ,As	-
12.	Power Plants	pH, BOD,COD,TSS	PM,NOx,SO_2
13.	Pulp & paper	pH, BOD, COD, TSS ,AOx	-
14.	Sugar	pH, BOD,COD,TSS	-
15.	Tannery	pH, BOD,COD,TSS	-
16.	Zinc	pH, BOD,COD,TSS	PM SO_2
17.	Copper	pH, BOD,COD,TSS	PM SO_2

The project proponent shall follow the following process:-

1. The project proponent is required to obtain **a certificate of "no increase in pollution load" from the environmental auditors** or reputed institutions, to be empanelled by State Pollution Control Board or Central Pollution Control Board or Ministry of Environment, Forest and Climate Change (hereinafter referred to as the Ministry).

2. A copy of "no increase in pollution load" certificate and intimation, as provided by the Ministry from time to time on PARIVESH portal, shall be uploaded by the unit for which system generated acknowledgement shall be issued online;

3. The unit shall inform the State Pollution Control Board or Union Territory Pollution Control Committee, as the case may be, in specified format along with :

    i. **"no increase in pollution load" certificate from the Environmental Auditor or reputed institutions empanelled by the State Pollution Control Board or Pollution Control Committee or Central Pollution Control Board or Ministry;**

ii. last Consent to Operate certificate for the project or activity; and

iii. online system generated acknowledgement of uploading of intimation and "no increase in pollution load" certificate on PARIVESH Portal.

4. The information so received shall be examined by the State Pollution Control Board or Union Territory Pollution Control Committee, as the case may be, who shall take decision on such information, received from the project proponent.

5. If on verification the State Pollution Control Board or Union Territory Pollution Control Committee, as the case may be, holds that the change or expansion or modernisation will result or has resulted in increase in pollution load, the exemption claimed under this clause shall not be valid and it shall be deemed that the project proponent was liable to obtain Prior Environmental Clearance before under taking such changes or increase, as per the clause (a) of sub-paragraph (ii) of Paragraph 7 of this notification and the provisions of Environment (Protection) Act, 1986 shall apply accordingly.

This provision is only for the project/activities granted EC under the provision of EIA Notification 1994/2006. Also, **this provision is only applicable for the EC projects in respect of Processing or Production or Manufacturing Sectors** (Item numbers 2, 3, 4 and 5 of Schedule to EIA Notification, 2006. The Asbestos Fibre Sheet Manufacturing Cement Plant in Manufacturing Sector has been listed at SI. No. 4(c) of Schedule of EIA Notification, 2006 under Category 'A'.

NIPL applicability for this Proposal :

- ✓ RIL has obtained the EC from MoEF&CC for this **Production Sector Industry under SI. No. 4** under EIA Notification 2006 as Category 'A' Proposal (**after TOR & Public Hearing**).

- ✓ The proposed Expansion of Bihiya Plant is not increasing the existing Pollution Load, as **certified by the Accreditated EIA Consultant Organisation**.

- ✓ The Factory has **valid Consent (CCA) from BSPCB** with its validity till 30.06.2028.

- ✓ Also, the Proposal is not tantamount to change the Category (like change in category from B2 to B1/A, etc.).

- ✓ As per CPCB Directions, **OCMS is 'Not Applicable' to Asbestos Industries**.

Also, for the Proposal :

- ❖ No additional land is required.
- ❖ No additional Plant and Machinery are to be installed.
- ❖ No additional Manpower is required.
- ❖ No additional water requirement is required beyond consented quantity.

- ‘Zero Liquid Discharge’ is to be maintained as such.
- No additional fuel is required.
- No increase in Solid & Hazardous Waste generation from that of sanctioned capacity.

Thus, the **Proposal is applicable for ‘No Increase in Pollution Load’ Certification** by BSPCB. Accordingly, RIL has preferred to file ‘**NIPL**’ Application online in Parivesh Portal and proceed further.

RIL has already obtained NIPL Certifications from various State PCBs for its Asbestos Plant Expansions as detailed in **Table 1.5**.

Table : 1.5 NIPL Certifications obtained for RIL Plant Expansions

Sl. No.	RIL Asbestos Plant at	Expansion Proposal Details	SPCB	Order Ref. & Date
1	Kharagpur, West Bengal	Fibre Cement Sheets from 1,00,000 TPA to 1,40,000 TPA	WBPCB	31-2N-29 dt. 19.01.2023 **(Document-12)**
2	Vijayawada, Andhra Pradesh	Asbestos Fibre Sheets & Accessories @ 1,08,000 TPA to 1,40,000 TPA	APPCB	346 dt. 07.11.2023 **(Document-13)**
3	Gangaikondan, Tamil Nadu	Asbestos Roofing Sheets @ 1,20,000 TPA to 1,50,000 TPA	TNPCB	012106 dt. 22.04.2024 **(Document-14)**

Earlier EIA Report for obtaining the existing EC was prepared by M/s.Vimta Labs, Coimbatore. RIL has engaged now **M/s.Gaurang Environmental Solutions Pvt. Ltd**., Jaipur - an Accreditated Consultant Organisation (ACO) by QCI/NABET for various Sectors including Sector 12 (Asbestos) vide Certificate No. NABET/EIA/23-26/RA 0338 with validity till 07.12.2026- for the Study & Certification. They have also issued the NIPL Certification for the Proposal. RIL has engaged the services of Ensyscon, Chennai for coordination of the Works.

***

2.0 Project Profile

2.1 Plant Location – Environmental Setting

The Factory Site is located in **Survey of India Topo Sheet No. 72 C/6** (Open Series Map - G45M6). There are **no Eco Sensitive Areas** like National Parks, Wildlife Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar Sites, Tiger/Elephant Reserves, Reserved Forests, etc. (existing as well as proposed) within 10 km Radius Area. Also, **None of the followings are located** in the Area :

☒ **Protected areas** notified under the Wild life (Protection) Act, 1972.
☒ **Critically Polluted Area (CPA) or Severely Pollution Area (SPA)** as notified by Central Pollution Control Board.
☒ **Eco -Sensitive Areas/Zones** as notified.
☒ **Interstate boundaries** within 5 km radius from the boundary of the proposed site.
☒ Coastal Regulation Zone (**CRZ**) Area.

Environmental Setting of 15 km Radius is delineated in **Table 2.1**.

Table : 2.1 Environmental Setting – 15 km Radius

Sl. No.	Areas	Aerial Distance (within 15 km) Project Location Boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	Nil
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Nil
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	Nil
4	Inland, coastal, marine or underground waters	Ganga River– 13 km (NNE) Bahar Nadi-10.8 km (NNW) Bhitauli Nadi – 2.5 km (NNW) Chaher Nadi – 3.9 km (NW) Gangi Nadi-0.65 km (NE) Bihiya Branch Ara Canal-1.4 km (W) [River Sone - 30 km (E)]
5	State, National boundaries	Nil
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	NH-922 (Patna-Buxar Section) @ 3.5 km (N) NH-319 (Ara-Mohania Section) @ 6.7 km (S) SH-102 (Jagdishpur-NH-922 Section) – 0.7 km (W)

Sl. No.	Areas	Aerial Distance (within 15 km) Project Location Boundary
		Central Railway BG Line @ 0.45 km in north
7	Defence installations	Nil
8	Densely populated or built-up area & Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	Bihiya @ 0.25 km (NW) Jagdishpur @ 9.3 km (SW) [Dist. HQ Ara Town @ 17 km (E)] BIADA Industrial Area – 0 km
9	Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)	Nil
10	Areas already subjected to pollution or environmental damage. (those where existing legal environmental standards are exceeded)	Nil
12	Areas susceptible to natural hazard which could cause the project to present environmental problems	The region falls in Seismic Zone III.

2.2 Plant Site – Land Use

Optimum Layout (**Fig. 2.1**) is provided for the Factory over an extent of 8.09 Ha. Site Land Use is given in **Table 2.2**.

Table : 2.2 Plant Site - Land Use

Sl. No.	Land for	Area, Ha	Coverage, %
1	Main Factory Building Area	1.01	12.5
2	Service & Utility Buildings	1.01	12.5
3	Sheet Stacking Area	1.21	15.0
4	Greenbelt	3.24	40.0
5	Curing Bay & Loading Shed	0.81	10.0
6	Paved / Parking & Vacant Areas	0.81	10.0
Total		**8.09**	**100.0**

No Railway Siding exists. All **internal roads** are concretised for smooth traffic flow inside the Plant. Road network is connecting all service areas. **Green Belt** has been developed over an extent of **3.24 Ha** (**40% Coverage**) **with 2,268 Trees** of predominantly native species **@ 700 Trees/Ha** & Survival Rate of 95%. Geotagged Green Belt Photographs are given as **Plates IV-V** and Layout with Green Belt as **Plate VI**.

Rain Water Harvesting (RWH) Structures are provided in the Factory for Roof Top Collection and Surface Runoffs (RWH Pond of 23 x 18 x 5 m depth with 2070 KL storage capacity).

Fig. : 2.1 RIL Bihiya – Factory Layout

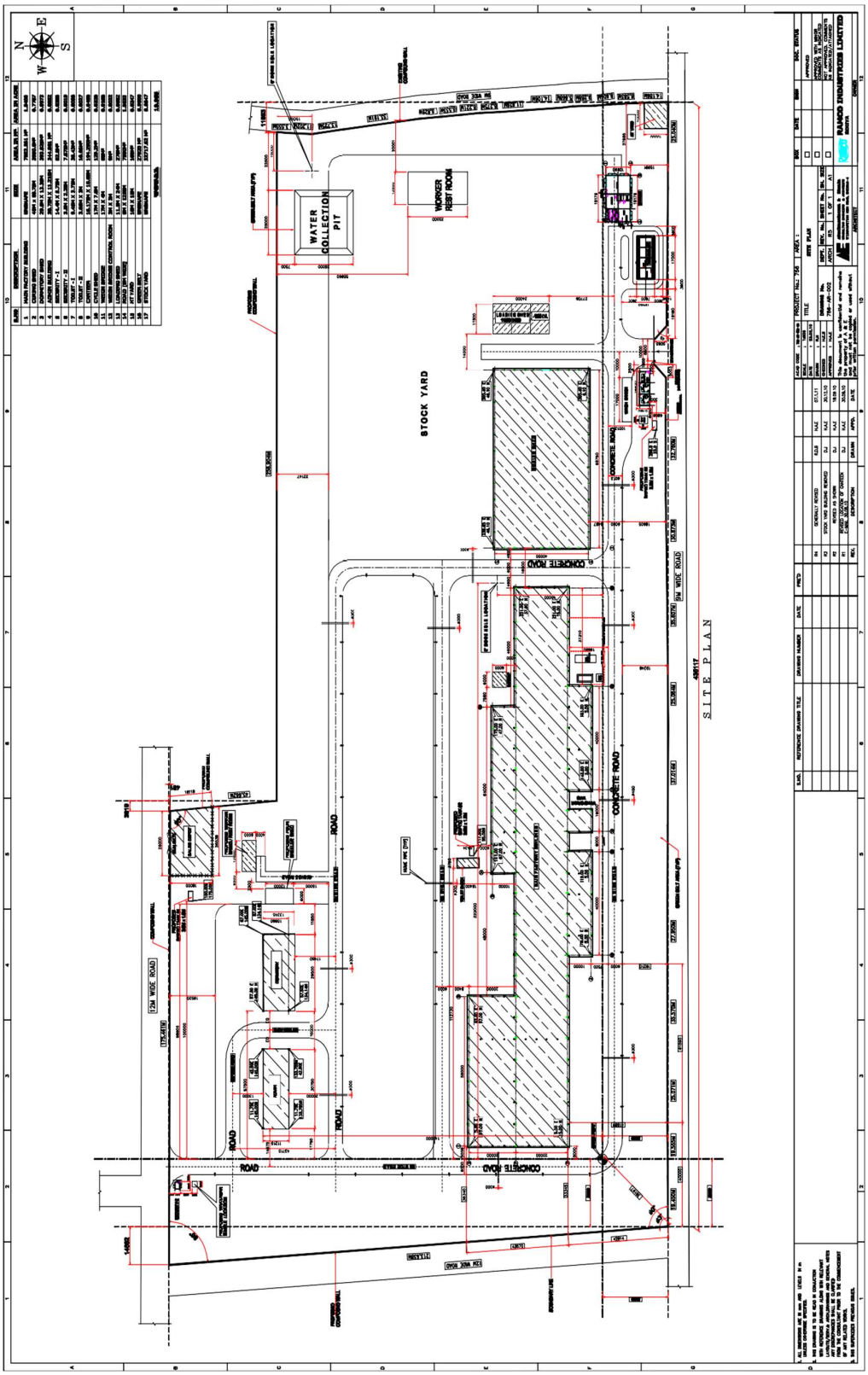


Plate-IV : Green Belt Photographs













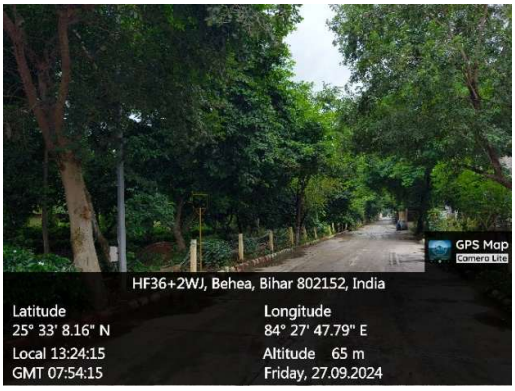


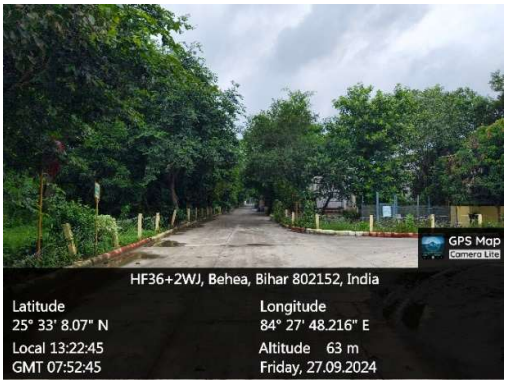






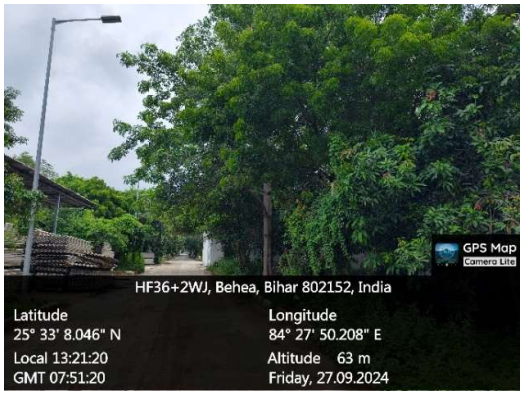
Plate-V : Green Belt Photographs - Geotagged













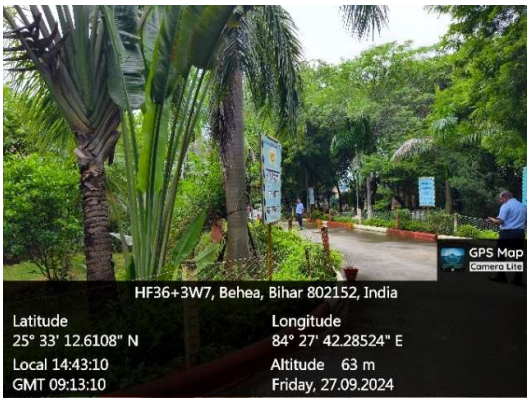
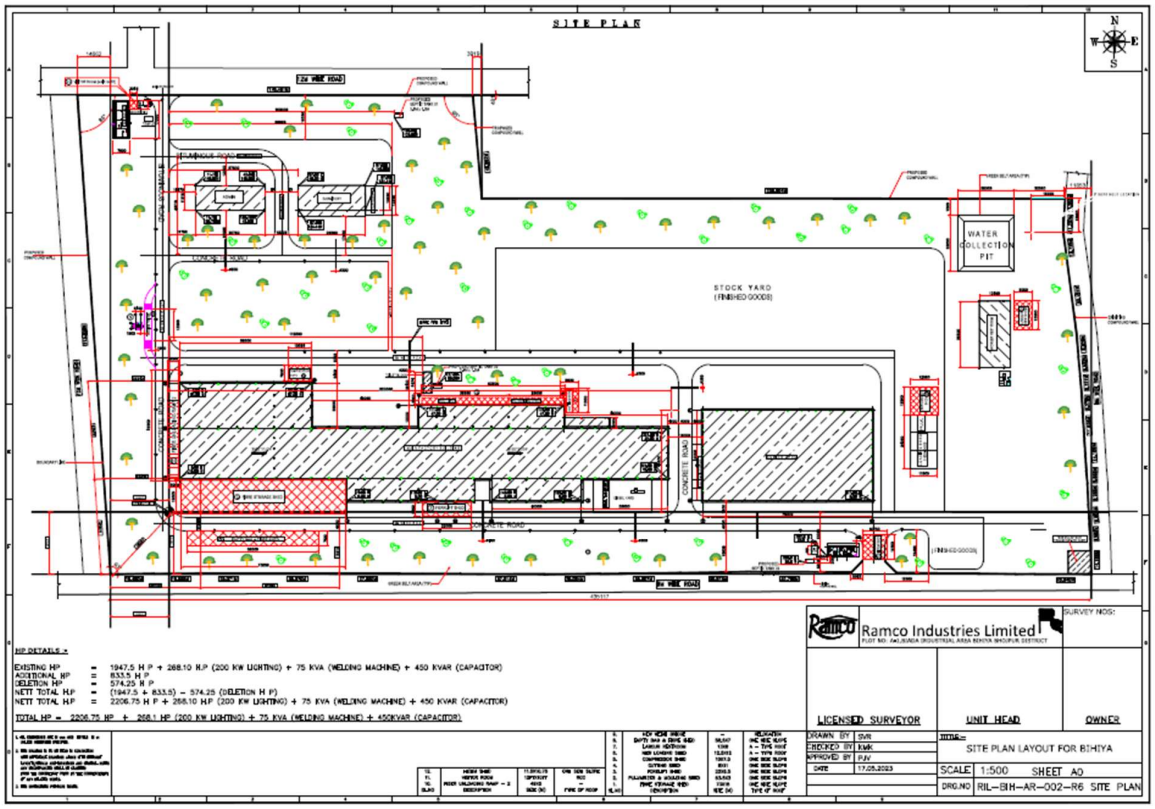
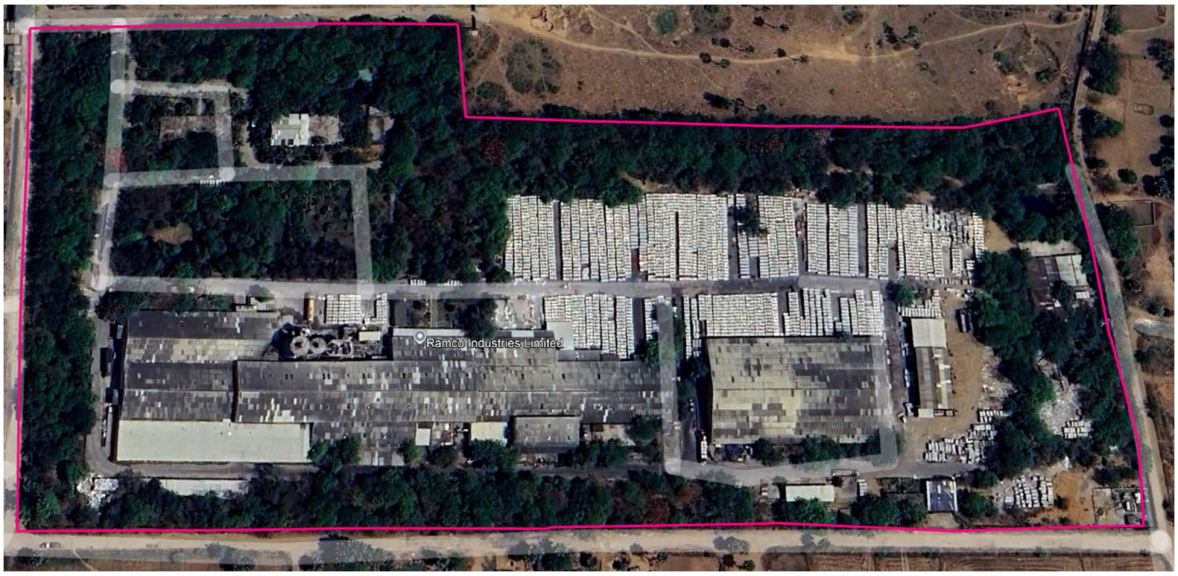




Plate-VI : Existing Layout with Green Belt





2.3 Existing & Proposed Productions

Presently, RIL is producing Asbestos Cement Roofing Sheets @ 1,20,000 TPA @ 400 TPD in Bihiya Plant with 300 Operational Days. **During Expansion,** with Process optimisations by '**Process Optimisation & Change in Raw Mix**' proposed, the Plant will produce Asbestos Cement Roofing Sheets @ **1,60,000 TPA @ 500 TPD with 320 Operational Days** (with 6.38% Reduction in Asbestos Fibre Consumption on Expansion). **No additional Land, Machineries, Man Power, etc. are required** for the Expansion Proposal. Existing infrastructures are adequate to achieve the proposed Production.

2.4 Raw Materials – Source & Transportation

Presently, **Asbestos (Chrysotile) Fibre** (Serpentine Group), Portland Cement, Fly Ash & Pulp are being used as raw materials for producing Fibre Cement Corrugated Roofing Sheets. On Expansion, other Raw Materials like **Ground Granulated Blast-furnace Slag (GGBS), Additives (Synthetic Fibre), etc. are to be utilised** as Raw Materials (**Change in Raw Mix**). At EC Stage, the Plant was **permitted to use Asbestos (Chrysotile) Fibre upto 15%** of Raw Materials. However, **RIL is now using only 10.3% of Asbestos** (10,200 TPA) in total Raw Material quantity. On Expansion, **Asbestos quantity will be retained as such** i.e. 10,200 TPA for 1,60,000 TPA production and its consumption will **be reduced to 6.38%** in total Raw Material requirement. There will be a **reduction of Asbestos consumption by 3.92%** on Expansion. Raw Materials demand, Sources and their mode of Transportation are given in **Table 2.3**. **Material and Water Balances** for existing & proposed Productions are given as **Figs. 2.2-2.3**.

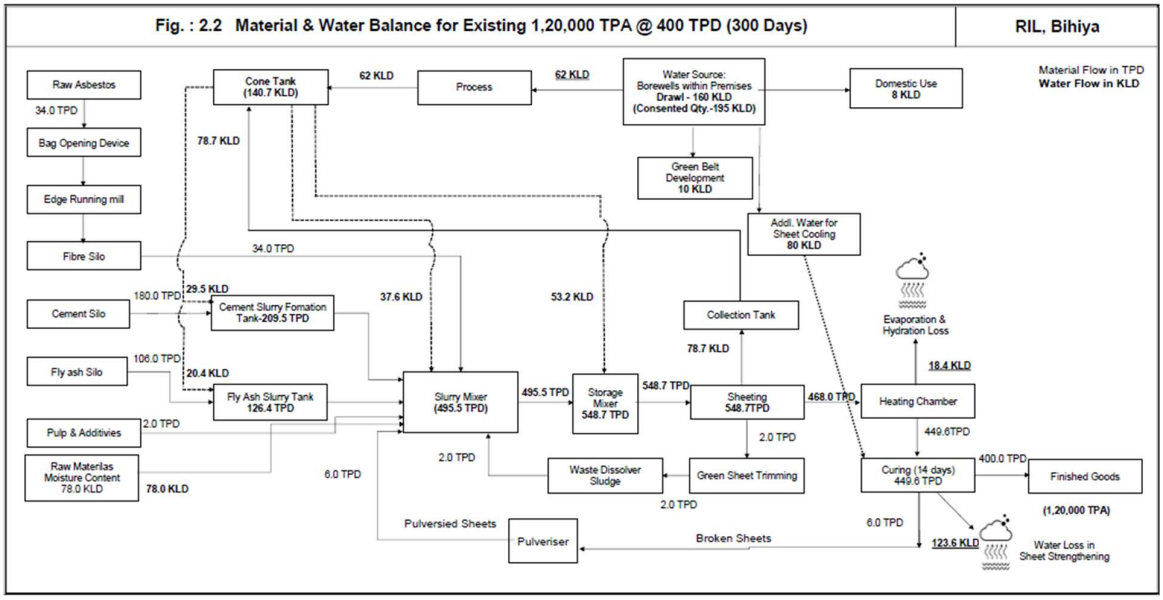
2.5 Raw Materials Storage & Handling

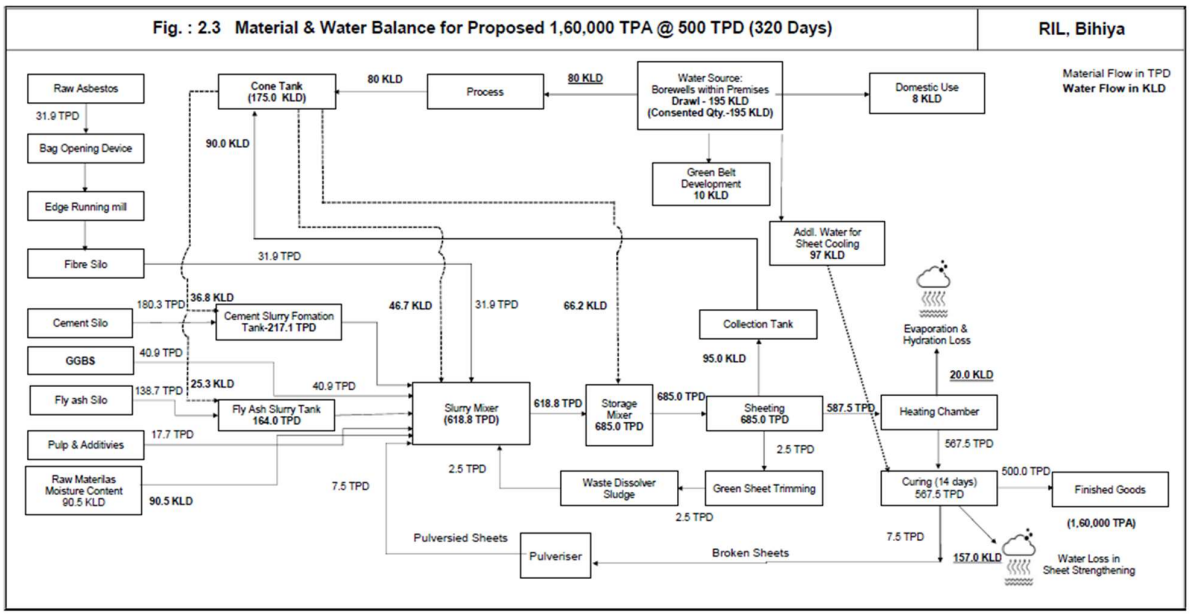
The general Process includes the following: different grades of asbestos fibre are milled in the Edge Runner Mill (ERM). Slurry is formed with Asbestos Fibre, Cement, Pulp and Fly ash. This Slurry is fed in to a Sheeting Machine where Sheet is formed. These Sheets are cut in to required size and corrugated. The Sheets are separated from the interleaves and cured.

Asbestos Handling : Chrysotile Asbestos Fibre is being imported, mainly from Brazil, with proper packing, received in polythene bags and stored in a confined location of 925 sq. m size within the Factory. For the Process, the bas is mechanically opened in an automatic Bag Opening Device (BOD) which is a completely closed chamber. The fibre bag is loaded to a platform which lifts and transfer them by a closed conveyor to BOD Chamber. As soon as bag enters the Chamber, its gate closes ensuring that no escape of dust into atmosphere. Inside the BOD, fibre containing bag is cut by circular knives and the fibre is fed into the lumb breaker from where it is conveyed to Edge Runner Mill (ERM). The empty bags are also shredded and mixed with fibre. Then the fibre are mixed with 30%-40% water in ERM to avoid fibre dust generation and processed. This milled fibres are then stored in **Fibre Silo** (7 Tonnes Capacity) in the wet form.

Table : 2.3 Raw Materials Demand – Existing & Proposed

Sl. No.	Raw Material	Existing Demand	Proposed Demand*	Source & Mode of Transport	Remarks*
1	Asbestos (C) Fibre	10,200 TPA @ 34 TPD	10,200 TPA **@ 31.88 TPD**	Import (from SA – Mineracoes Associadas, Brazil) By Ship & Road	**6.25% Reduction will be there in Asbestos Fibre consumption**
2	Cement	54,000 TPA @ 180 TPD	57,700 TPA @ 180.31 TPD	Ultratech, Maihav (MP) & Birla Cements (Satna, MP) By Road - Covered Trucks	Change in Raw Mix for optimized production
3	Fly Ash	31,800 TPA @ 106 TPD	44,400 TPA @ 138.75 TPD	Renu Sagar Power Plant (UP) By Road Bowsers	Increased by 31.13% for optimized production
4	Pulp	600 TPA @ 2 TPD	3,200 TPA @ 10 TPD	G.R.Pulps, Namakkal (TN) By Road - Covered Trucks	Change in Raw Mix for optimized production
5	Additives (Synthetic Fibre)	150 TPA @ 0.5 TPD	2,450 TPA @ 7.66 TPD	By Road - Covered Trucks	Change in Raw Mix for optimized production
6	GGBS	-	13,100 TPA @ 40.94 TPD	JSPL (Jindal Saw), (Raigarh, Chhattisgarh) & JSW Jindal Cement (WB) By Road - Covered Trucks	Change in Raw Mix for optimized production
7	Recycled Materials	2,400 TPA @ 8 TPD	3,200 TPA @ 10 TPD	Internal Process	-
8	Water for Process	18,600 TPA @ 62 KLD (0.16 KL/T of Product)	25,600 TPA @ 80 KLD (0.16 KL/T of Product)	Permitted Borewells within the premises	**No increase in Consented Quantity of 195 KLD**
9	Additional Water for Sheet Cooling	24,000 TPA @ 80 KLD	31,040 TPA @ 97 KLD	Permitted Borewells within the premises	**Total demand will be with in the Consented quantity of 195 KLD**
10	Plant Production	**1,20,000 TPA @ 400 TPD (300 days)**	**1,60,000 TPA @ 500 TPD (320 days)**	**-**	**33.33% increase in Production due to Change in Raw Mix and Increased Operational Days**


Fig. : 2.2 Material & Water Balance for Existing 1,20,000 TPA @ 400 TPD (300 Days)
RIL, Bihiya
Material Flow in TPD
Water Flow in KLD
Raw Asbestos
34.0 TPD
Bag Opening Device
Edge Running mill
Fibre Silo
Cone Tank (140.7 KLD)
62 KLD
Process
62 KLD
Water Source: Borewells within Premises Drawl - 160 KLD (Consented Qty.-195 KLD)
Domestic Use 8 KLD
Green Belt Development 10 KLD
Addl. Water for Sheet Cooling 80 KLD
78.7 KLD
34.0 TPD
180.0 TPD
29.5 KLD
Cement Silo
Cement Slurry Formation Tank-209.5 TPD
37.6 KLD
53.2 KLD
Collection Tank
78.7 KLD
Evaporation & Hydration Loss
18.4 KLD
Fly ash Silo
106.0 TPD
20.4 KLD
Fly Ash Slurry Tank 126.4 TPD
Slurry Mixer (495.5 TPD)
495.5 TPD
Storage Mixer 548.7 TPD
548.7 TPD
Sheeting 548.7TPD
468.0 TPD
Heating Chamber
Pulp & Additivies
2.0 TPD
2.0 TPD
449.6TPD
Raw Materilas Moisture Content 78.0 KLD
78.0 KLD
6.0 TPD
2.0 TPD
Waste Dissolver Sludge
Green Sheet Trimming
Curing (14 days) 449.6 TPD
400.0 TPD
Finished Goods
(1,20,000 TPA)
2.0 TPD
Pulversied Sheets
Pulveriser
Broken Sheets
6.0 TPD
123.6 KLD
Water Loss in Sheet Strengthening


Fig. : 2.3 Material & Water Balance for Proposed 1,60,000 TPA @ 500 TPD (320 Days)
RIL, Bihiya
Material Flow in TPD
Water Flow in KLD
Raw Asbestos
31.9 TPD
Bag Opening Device
Edge Running mill
Fibre Silo
Cone Tank (175.0 KLD)
80 KLD
Process
80 KLD
Water Source: Borewells within Premises Drawl - 195 KLD (Consented Qty.-195 KLD)
Domestic Use 8 KLD
Green Belt Development 10 KLD
Addl. Water for Sheet Cooling 97 KLD
90.0 KLD
31.9 TPD
180.3 TPD
36.8 KLD
Cement Silo
Cement Slurry Formation Tank-217.1 TPD
46.7 KLD
31.9 TPD
66.2 KLD
Collection Tank
95.0 KLD
Evaporation & Hydration Loss
20.0 KLD
GGBS
40.9 TPD
Fly ash Silo
138.7 TPD
25.3 KLD
40.9 TPD
Fly Ash Slurry Tank 164.0 TPD
Slurry Mixer (618.8 TPD)
618.8 TPD
Storage Mixer 685.0 TPD
685.0 TPD
Sheeting 685.0 TPD
587.5 TPD
Heating Chamber
Pulp & Additivies
17.7 TPD
567.5 TPD
Raw Materilas Moisture Content 90.5 KLD
90.5 KLD
7.5 TPD
2.5 TPD
2.5 TPD
Waste Dissolver Sludge
Green Sheet Trimming
Curing (14 days) 567.5 TPD
500.0 TPD
Finished Goods
(1,60,000 TPA)
2.5 TPD
Pulversied Sheets
Pulveriser
Broken Sheets
7.5 TPD
157.0 KLD
Water Loss in Sheet Strengthening

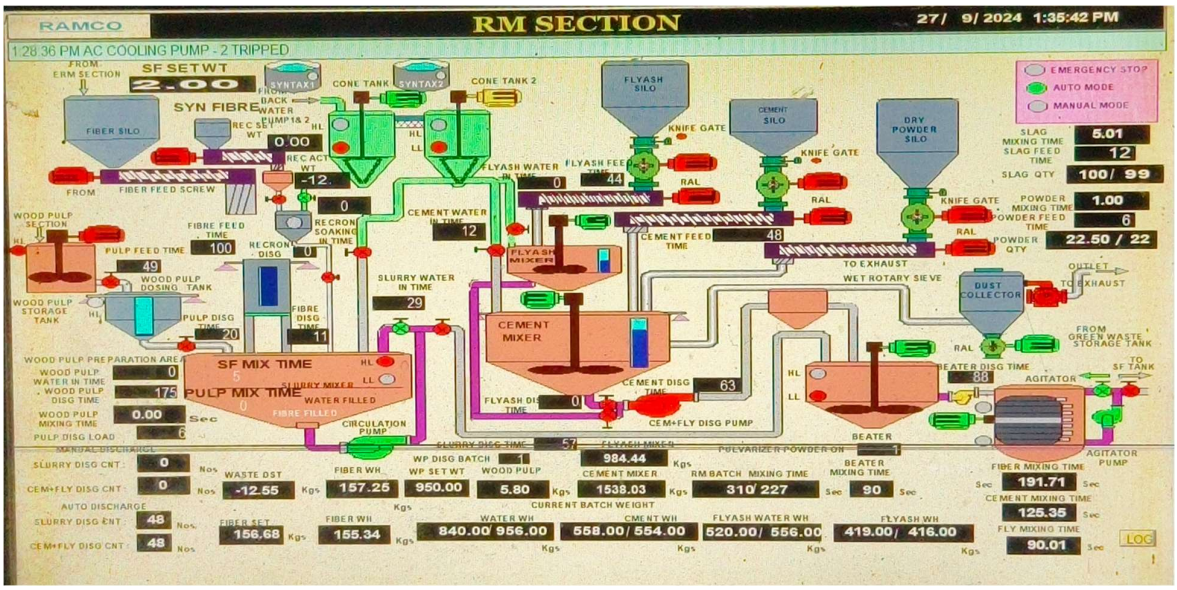
Asbestos handling **is the only source of fibre generation** in the Factory as all other operations are carried out with fibres in wet condition. Thus, the BOD Chamber is fitted with a powerful dust extraction system, Bag Filters, which extracts all the dust generated during bag opening & cutting process. The dust collected in Bag Filters are transported into raw material feeder for Process.

The personnel operating at BOD Chamber are fully equipped with PPEs - P2 Respiratory Masks and Hand Gloves, as recommended. An industrial vacuum cleaner is also used to clean the the area periodically.

Raw Materials Handling : Wood Pulp is received by Trucks and stored in the Factory in a confined Room with Fire Protection System. **Cement** is received **by Bowsers** and conveyed pneumatically into the Silo; if received by Covered Trucks, it will be stored in a separate confined Hall for further loading into Cement Silo (1,000 Tonnes Capacity). **Bulk cement**. **Fly Ash** received in bulk tankers/Bowsers is also **conveyed pneumatically** into Fly Ash Silo (350 Tonnes Capacity). Adequate Bag Filters are provided to the Silos to control the dust during Cement and Fly Ash handling.

Raw Materials handling process is fully automised and controlled in the CCR, as shown in the appended **Plate – VII**.

Plate-VII : Raw Materials Handling



2.6 Manufacturing Process

Plant Manufacturing activities Photographs are shown in **Plate – VIII**. The manufacturing process involves the following steps:

- Milling
- Hydro Disintegration of Fibres
- Cement /Fly Ash Handling and Conveying
- Batch Weighing and Mixing
- Sheet Formation
- Corrugation of Sheets
- Drying
- Stripping
- Curing
- Pulverising.

The milled fibre is fed to the slurry mixer and water poured. The fibre is stirred well and gets opened. The processed cellulose pulp is added to this. Then cement, GGBS, Additives and fly ash are added and the total raw materials are mixed well to form the slurry. This slurry is pumped and transferred to the agitator.

From the agitator the slurry is fed to the sheeting machine by slurry feeding system consists of 5 compartments called Vats. In each of which is a rotating sieve cylinder covered with fine mesh. The excess water, in the asbestos cement slurry, filters through the sieve covers depositing a fine film of asbestos cement on the sieve surface. This film is picked up by an endless belt moving in contact with the sieve cylinders and subsequently this film of asbestos cement is transferred to an accumulator drum. When the thickness of the layer on the accumulator drum reaches a specified value, the sheet is cut off and dropped on to a conveyor.

After the sheet is cut to the exact length and width, it is then corrugated by the corrugating machine. The Vacuum system and water circulation system forms the part of this machine. The excess water that filters through the sieve cylinder is pumped to the process water tank and thus the water is completely recycled. The wet trimmings of the fibre cement sheets are converted into slurry in the waste dissolver, pumped to agitator and thus recycled in the process.
The recuperator tank works as decanter as these equipments are equipped with cylindrical diaphragm. In recuperators the solid particles settled are used in the process and clean water goes to next tank to be used in spray cleaning system. The plain A.C. Sheets are then sucked into pneumatic corrugation box pneumatically with aspirators. The sheets are imparted requisite corrugation profile pneumatically. The sheets are then transferred on to a steel template having the requisite corrugation profile.

Plate-VIII : Photographs of Plant Activities

























The sheets along with templates are then picked up on overhead transfer unit and kept in a bogie, which is on rails. The sheets along with templates are then kept in stores for 8 hours.

The stripping machine consists of a double headed unit. Suction is created in one head which lifts the template while the unit moves with the second head to lift the AC Sheets. The first head releases the template on to the empty bogie. In this way the unit moves and alternatively separates the sheets and templates. The sheets are cured to attain sufficient strength.
The sheets not conforming to the quality standards as specified in the IS standards are rejected. The cracked and broken sheets along with the rejected sheets are pulverised, bagged and taken to Mixing Machine for recycling. The pulveriser section is provided with an exclusive Bag filter to prevent dust generation.

2.7 Water Demand – Existing & Proposed

Water requirement in the plant is mainly for fibre milling, slurry formation in the production process, domestic and green belt. Existing & Proposed water demand are given in **Table 2.4.**

Table : 2.4 Water Demand – Existing & Proposed

Sl. No.	Fresh Water for	Existing Demand, KLD	Proposed Demand, KLD	Source	CGWA NOC
1	Process	62	80	Permitted 2 Nos. Borewell within Plant Premises which is adequate for Expansion activities. Permitted Consent Water quantity- 195 KLD	For 94,900 KL/Annum @ 260 KLD vide NOC No. CGWA/NOC/IND/EXP/2024/73 dated 12.08.2024- valid from 19.12.2023 to 18.12.2026
2	Domestic Use	8	8		
3	Green Belt	10	10		
4	Addl. Water for Sheet Cooling	80	97		
5	**Total Fresh Water Demand**	**160** (0.40 KL/T of Product)	**195** (**0.39 KL/T of Product**)		
6	Recycled Water in the Process	78	95	Internal Process along with Raw Material Water Content	-
7	Percentage of Recycled Water	55.7%	54.3%	Due Raw Mix change	

2.8 Wastewaters Generation & Recycling

The major areas of water requirement in the process operation are Milling, Fibre Disintegration, Cement Section, Fly Ash Section, Mixing and Curing Sections. Water is added in the milling section to prevent crushing of fibres. Water is also added in the Cement/Fly-Ash section to prevent dust generation. Further water is also added in the Turbo Mixer to enable formation of Slurry. Water is also added in the Storage-Mixer to maintain homogeneity of the mix.

One of the significant factor is that the entire Process Water (along with Raw Material Water Content) will be re-cycled / reused in the Process. The re-cycling is effected by use of Back Water System in the Vat Machine. The entire water used in the Milling section, Cement/Fly-Ash section, Turbo Mixer and U-Mixer comes along with the Slurry, from which, the Vacuum System sucks the water. This sucked water is then pumped to the Water tanks. Water from the water tanks are then reused in the process operations. Any trace of water in the mix during sheet formation is also circulated within the machine to keep the felt wet by use of Water Re-circulating System.

The entire process operation is carried out in Wet Condition. The daily requirement of raw water is only to make-up for loss due to Evaporation & Hydration and Sheet Strengthening.

Only source of wastewater generation is domestic sewage. This will be treated in a Septic Tanks followed by dispersion in under ground strata through Dispersion Trenches.

2.9 Power Demand & Fuel Requirement

The total power demand is about 750 KVA which is being met from State Grid. For standby operation during power failures, a Diesel Generator of 1010 KVA (as stated in Updated Form-1 instead of 750 KVA) and permitted 750 KVA & 125 KVA DG Sets (as per CFO) exists in the Factory. High Speed Diesel (HSD) @ 400 Liters/hr. is used as fuel for standby DG Sets.

Also, Natural Gas @ 200 cu.m/day (average) is being used for Drying of Sheets in the Process.

2.10 Schedule

The proposed activities will be completed in a period of **3 months** from the date of receipt of all the approvals from statutory authorities.

***

3.0 Existing Environmental Quality Status

3.1 Post Project Monitoring

RIL is periodically monitoring the Ambient Air Quality at 4 Locations (on Quarterly basis), Respirable Asbestos Fibre Dust Concentration in Work Zones (both Static & Personal) at 11 Locations (on Monthly basis), Stack Emissions (3 Process Stacks & 3 DG Sets) on Monthly basis, Fugitive Emissions at 4 Locations, Noise Levels at 4 Locations & Water Quality at 3 Locations through accreditated Agencies and submitting Status Reports to BSPCB as Monthly Reports & Integrated Regional Office-IRO, MoEF&CC, Ranchi as Half Yearly Compliance Reports. The Survey Reports are compiled for establishing the existing Environmental Quality Status in the Plant vicinity.

3.2 Micrometeorological Status

Recent Meteorological Data for March-May 2025 period (Summer Season) collected from the Plant vicinity are given in **Tables 3.1-3.3** which are **utilised for Prediction Modelling** also. Abstract of the Data is given in **Table 3.4**. Seasonal Wind Rose for the Period is presented as **Fig. 3.1**.

Table : 3.4 Meteorological Data - Abstract

Date	Mean Wind Velocity, kmph	Pred. Wind Direction, Deg. (from)	Temperature, °C			Relative Humidity (Mean), %	Cloud Cover, oktas	Atm. Pressure (Mean), mm of Hg	Rain-fall, mm
			Min.	Max.	Mean				
Mar. 2025	3.3	196.6	16.7	38.5	25.4	55.6	2.1	761.9	0
Apr. 2025	3.9	193.9	21.1	43.2	30.0	46.0	1.5	760.1	0
May 2025	3.8	192.9	21.8	41.7	31.5	62.5	1.4	758.7	0
Season	**3.6**	**194.5**	**16.7**	**43.2**	**29.1**	**54.2**	**1.7**	**760.2**	**0**

During the Summer 2025 Season :

- Predominant winds were from SW quadrant.
- Mean Wind velocity was 3.6 kmph with Calm condition 15.3%.
- Temperature values were ranging from 16.7 °C to 43.2 °C with mean value of 29.1 °C.
- Mean maximum relative humidity value was 54.2%.
- Mean atmospheric pressure value was computed as 760.2 mm of mercury.
- Clear sky prevailed predominantly.
- There was no rainy day in the Season.

Table : 3.1 Micrometeorological Data – March 2025

Location : Plant Area

Date	Mean Wind Velocity, kmph	Pred. Wind Direction, Deg. (from)	Temperature, °C			Relative Humidity (Mean), %	Cloud Cover, oktas	Atm. Pressure (Mean), mm of Hg	Rain-fall, mm
			Min.	Max.	Mean				
01.03.2025	3.6	217	19.5	29.4	23.4	76	1.8	762.4	0
02.03.2025	2.9	190	18.2	30.2	23.6	72	1.9	761.6	0
03.03.2025	3.6	181	18.5	29.1	23.2	62	2.1	761.8	0
04.03.2025	2.9	183	18.1	30.2	23.6	63	2	761.8	0
05.03.2025	4	170	18.2	25.6	20.7	56	1.8	761.6	0
06.03.2025	2.5	155	18.4	25.0	19.4	58	2.1	761.9	0
07.03.2025	2.9	168	18.0	27.0	20.5	68	2	761.2	0
08.03.2025	2.2	144	16.7	29.8	22.6	61	2.1	761.5	0
09.03.2025	2.5	221	17.4	30.5	23.6	57	2.3	761.4	0
10.03.2025	4	192	19.7	30.2	24.2	64	2.4	762.7	0
11.03.2025	2.2	143	18.8	31.2	24.7	65	1.7	762.8	0
12.03.2025	2.5	120	20.9	33.6	27.0	59	2	762.6	0
13.03.2025	2.5	159	21.5	33.6	26.9	63	2.2	761.6	0
14.03.2025	2.9	203	21.1	34.3	27.0	62	2.3	761.9	0
15.03.2025	2.5	232	22.5	36.3	28.4	58	1.5	762.4	0
16.03.2025	1.8	263	23.7	27.5	25.2	71	2	762.1	0
17.03.2025	2.9	224	23.3	34.6	27.5	52	2.7	761.9	0
18.03.2025	4.7	172	18.9	32.7	25.4	46	1.7	761.9	0
19.03.2025	3.6	196	18.7	32.6	25.4	47	2	763.4	0
20.03.2025	2.9	218	21.7	27.1	24.0	65	1.8	764.2	0
21.03.2025	3.6	241	22.4	28.1	24.7	72	1.6	763.8	0
22.03.2025	3.2	208	18.6	33.1	25.0	59	1.9	763.5	0
23.03.2025	6.1	184	20.4	31.2	25.2	56	2.1	763.4	0
24.03.2025	4	205	20.8	33.0	26.6	51	2.4	763.2	0
25.03.2025	3.6	185	21.4	34.3	27.6	47	2.2	763.4	0
26.03.2025	3.2	198	22.3	35.7	28.2	46	1.8	761.4	0
27.03.2025	3.6	208	23.3	38.5	30.4	38	2.2	759.9	0
28.03.2025	4.7	220	24.5	38.4	30.8	37	2	759.4	0
29.03.2025	3.6	243	22.5	35.5	28.5	31	2.7	759.4	0
30.03.2025	2.9	233	20.0	35.0	27.1	30	2.3	759.8	0
31.03.2025	2.9	221	20.7	36.2	28.3	32	2.1	759.8	0
Monthly Abstract	**3.3**	**196.6**	**16.7**	**38.5**	**25.4**	**55.6**	**2.1**	**761.9**	**0**

Note : Abstract values are taken from the hourly readings (00:00-24:00 hrs.) recorded continuously during the monitoring period.

Table : 3.5 Micrometeorological Data – April 2025

Location : Plant Area

Date	Mean Wind Velocity, kmph	Pred. Wind Direction, Deg. (from)	Temperature, °C			Relative Humidity (Mean), %	Cloud Cover, oktas	Atm. Pressure (Mean), mm of Hg	Rain-fall, mm
			Min.	Max.	Mean				
01.04.2025	3.2	250.3	21.9	37.1	30.2	37	2.0	760.3	0
02.04.2025	2.2	238.6	22.5	32.9	27.9	33	2.1	760.7	0
03.04.2025	2.5	217.6	21.9	36.6	29.1	33	1.8	762.4	0
04.04.2025	3.2	223.8	24	36.8	35.1	39	1.6	762.2	0
05.04.2025	3.6	239.7	23.7	38.5	31	32	1.3	761.4	0
06.04.2025	1.8	276.3	24.4	34.5	27.2	40	1.5	760.2	0
07.04.2025	1.8	209.2	25.2	35.4	30.3	43	1.3	760.5	0
08.04.2025	4.3	188.4	26.8	35.5	31	52	1.6	761.2	0
09.04.2025	2.9	164.9	27.1	34.3	30.4	45	1.5	760.7	0
10.04.2025	5.0	154.1	24.5	31.8	27	41	1.1	758.9	0
11.04.2025	3.2	158.9	25.4	28.2	26.8	44	1.3	758.2	0
12.04.2025	5.8	168.7	23.5	33.6	28.6	53	1.1	758.4	0
13.04.2025	4.3	199.1	23.8	32.5	27.5	55	1.8	759.2	0
14.04.2025	4.7	169.5	22.1	33.9	26.1	57	2.0	760.1	0
15.04.2025	3.6	167.8	21.1	32.8	27.4	50	1.7	760.3	0
16.04.2025	4.0	160.6	24.1	34.2	29.5	53	1.4	760.6	0
17.04.2025	4.3	148.3	26.4	36.1	31	45	1.2	759.9	0
18.04.2025	5.8	159.2	23.7	29.8	26.4	53	1.0	759.4	0
19.04.2025	5.0	158.7	23.5	32.1	28.1	60	1.2	759.2	0
20.04.2025	2.9	157.5	25.9	36.3	31.3	54	1.3	759.2	0
21.04.2025	2.9	176	27.8	39.6	33.6	52	1.1	760.3	0
22.04.2025	3.6	206.3	28.2	40.1	34.3	45	1.3	761.3	0
23.04.2025	4.0	286.4	29.6	40.9	36.8	48	1.7	760.5	0
24.04.2025	4.0	254	26.2	41.1	33.6	41	1.5	759.2	0
25.04.2025	4.3	232.3	26.7	42.5	34	44	1.3	759.3	0
26.04.2025	3.2	185.9	27.7	43.2	34.6	43	1.5	759.6	0
27.04.2025	5.4	172.5	24.3	40	30.9	50	1.7	760.3	0
28.04.2025	4.7	174.6	22.4	29.8	25.8	48	1.5	759.6	0
29.04.2025	5.4	157.7	23.8	30.2	26.9	45	2.0	759.4	0
30.04.2025	4.7	160.9	24	32.9	28.6	44	1.5	760.3	0
Monthly Abstract	**3.9**	**193.9**	**21.1**	**43.2**	**30.0**	**46.0**	**1.5**	**760.1**	**0**

Note : Abstract values are taken from the hourly readings (00:00-24:00 hrs.) recorded continuously during the monitoring period.

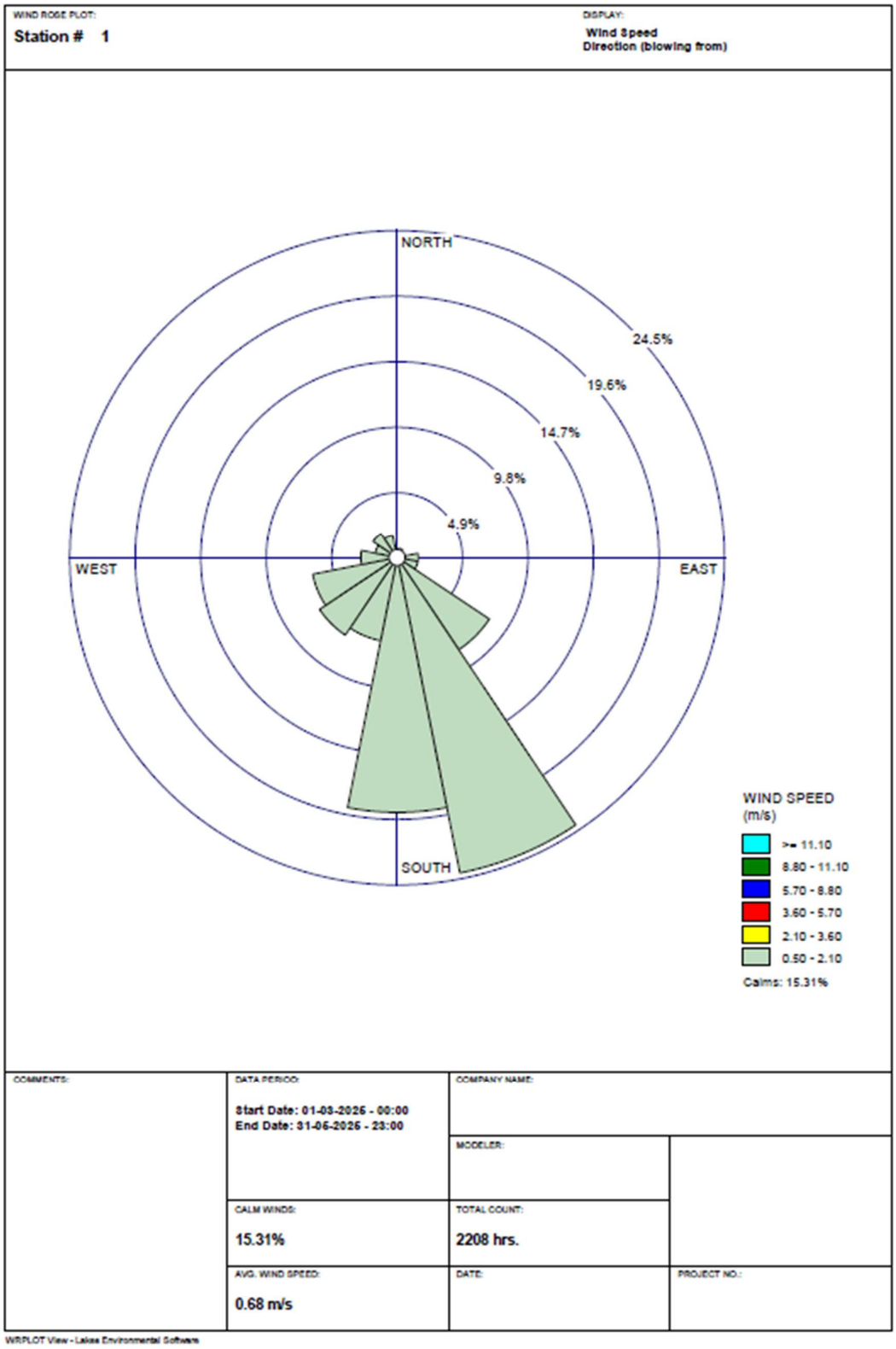
Table : 3.6 Micrometeorological Data – May 2025

Location : Plant Area

Date	Mean Wind Velocity, kmph	Pred. Wind Direction, Deg. (from)	Temperature, °C			Relative Humidity (Mean), %	Cloud Cover, oktas	Atm. Pressure (Mean), mm of Hg	Rain-fall, mm
			Min.	Max.	Mean				
01.05.2025	4.7	164.5	24.0	30.6	26.8	70	1.5	760.1	0
02.05.2025	3.6	180.7	21.8	33.2	27.7	61	1.4	759.9	0
03.05.2025	5.4	169.8	25.6	35.6	30.8	55	1.7	760.2	0
04.05.2025	5.0	167.5	25.3	33.9	29.5	61	1.7	760.1	0
05.05.2025	4.0	182.5	24.6	35.3	30.1	60	2.1	760.4	0
06.05.2025	3.6	180	22.8	31.0	27.3	72	2.3	759.2	0
07.05.2025	2.9	188.5	25.1	35.8	30.4	63	1.8	758.8	0
08.05.2025	3.6	224.8	25.9	38.1	32.5	51	1.3	759.4	0
09.05.2025	3.2	279.9	28.3	39.5	33.6	47	1.0	759.1	0
10.05.2025	3.2	263.3	28.4	40.3	34.5	45	0.7	759.7	0
11.05.2025	2.9	266.6	30.9	40.7	35.5	42	0.9	758.8	0
12.05.2025	5.0	226.4	28.7	38.9	34.3	51	1.2	757.8	0
13.05.2025	3.6	198.3	26.5	39.5	33.0	57	1.3	757.4	0
14.05.2025	3.6	248.8	29.0	41.7	35.0	50	1.7	757.7	0
15.05.2025	4.0	205.8	28.1	40.3	34.3	59	2.0	758.4	0
16.05.2025	4.7	161.9	27.2	38.1	32.5	66	2.3	758.4	0
17.05.2025	3.6	169	26.9	35.8	31.2	67	1.7	758.4	0
18.05.2025	4.7	168.3	26.2	33.5	30.0	68	1.1	757.6	0
19.05.2025	4.3	167.9	26.0	32.4	29.2	73	1.3	757.0	0
20.05.2025	3.6	165.7	29.8	36.5	33.5	62	1.5	756.4	0
21.05.2025	5.8	160.4	27.0	35.2	30.4	71	1.3	757.1	0
22.05.2025	2.9	168.6	26.3	34.1	30.0	69	1.0	757.6	0
23.05.2025	3.6	169.2	27.2	34.9	30.8	69	1.2	756.8	0
24.05.2025	2.9	167.5	26.6	32.0	29.5	74	1.5	756.7	0
25.05.2025	3.2	164.2	27.3	34.5	30.9	71	1.0	757.5	0
26.05.2025	4.7	165.5	28.2	33.8	30.7	73	1.3	760.1	0
27.05.2025	3.6	169.3	27.5	34.6	31.1	72	1.6	759.8	0
28.05.2025	3.2	201	29.1	36.0	32.5	69	1.5	760.3	0
29.05.2025	2.9	176.2	29.2	36.7	33.1	65	1.3	760.1	0
30.05.2025	2.9	221.5	27.9	37.3	32.3	66	1.2	759.9	0
31.05.2025	3.2	235.4	29.9	38.7	34.0	60	1.1	760.2	0
Monthly Abstract	**3.8**	**192.9**	**21.8**	**41.7**	**31.5**	**62.5**	**1.4**	**758.7**	**0**

Note : Abstract values are taken from the hourly readings (00:00-24:00 hrs.) recorded continuously during the monitoring period.

Fig. : 3.1 Seasonal Wind Rose



3.3 Ambient Air Quality

Ambient Air Quality is monitored at 4 Locations in the Plant once in a Quarter. All 12 AAQ parameters (**24/8/1 hourly basis**) were monitored in compliance with NAAQ norms during March-May 2025 representing **Summer Season**. The abstract of monitored Ambient Air Quality Data are given in **Table 3.5**.

Table : 3.5 Ambient Air Quality Status

Location	Statistical Parameter	Concentration, ug/m^3 (Mar.-May. 2025)			
		PM2.5	PM10	SO_2	NO_x
Near Office	Min.	20.4	40.7	8.6	10.8
	Max.	37.6	71.1	11.4	34.2
	Mean	26.9	51.0	9.7	19.2
Near Main Gate	Min.	24.2	48.1	10.2	14.1
	Max.	39.2	70.6	12.0	33.8
	Mean	30.0	57.0	11.1	21.3
Near Stripping Area	Min.	26.1	50.4	7.9	8.5
	Max.	36.7	65.9	13.2	30.7
	Mean	29.7	55.9	9.9	16.5
Near Laboratory	Min.	23.5	45.6	8.5	9.1
	Max.	36.7	66.8	10.4	32.6
	Mean	28.5	53.6	9.3	17.7
Summer 2025 Season	**Mean**	**28.8**	**54.4**	**10.0**	**18.7**
NAAQ Norms	**-**	**60**	**100**	**80**	**80**

Exceedance Factor (EF) : (Monitored Avg. Value of criteria Pollutant/NAAQ Norm of the Pollutant) : Critical Pollution if EF is 1.5; High Pollution if EF is between 1.0-<1.5, Moderate Pollution if EF is between 0.5-<1.0 and Low Pollution if EF is <0.5. **Plant Area is falling under Low Pollution** as Pollutant Levels **were <0.5 EF except PM10 which falls in Moderate Level (Table 3.6).**

Table : 3.6 Ambient Air Quality - Pollution Category

Pollutant	Mean Concentration	NAAQ Norm	Exceedance Factor (EF)	Pollution Category
PM2.5, ug/m^3	28.8	**60**	**0.48**	**Low**
PM10, ug/m^3	54.4	**100**	**0.54**	**Moderate**
SO_2, ug/m^3	10.0	**80**	**0.13**	**Low**
NO_x, ug/m^3	18.7	**80**	**0.23**	**Low**
CO, ug/m^3	<1000	**2000**	**-**	
O_3, ug/m^3	<10	**100 (8 hrs.)**	**-**	
NH_3, ug/m^3	<5	**400 (24 hrs.)**	**-**	
Pb, ug/m^3	<0.1	**1.0 (24 hrs.)**	**-**	
As, ng/m^3	<1	**6.0 (annual)**	**-**	
Ni, ng/m^3	<1	**20.0 (annual)**	**-**	
C_6H_6, ug/m^3	<0.01	**5.0 (annual)**	**-**	
BaP, ng/m^3	<0.1	**1.0 (annual)**	**-**	

3.4 Respirable Asbestos Fibre Dust Concentration in Workzones

It is ensured that we get Fibre bags with intact. Damages if any, would immediately be sealed before unloading at our site. There is no manual handling /opening of the Fibre bags. The Fibre bags are fed into a Bag opening device (BOD) wherein bags are automatically shredded.

Fugitive Asbestos Fibre Count and the stack are tested by a competent/approved NABL Accreditated inhouse Lab (MTL) of RIL and third party J R Lab once in a Month. Monitored values for the last one year are given in **Table 3.7**.

Table : 3.7 Fugitive Asbestos Fibre Dust Concentration

Location	Workzone Asbestos, Fibre/cc		
	Minimum	**Maximum**	**Mean**
Fibre Go-Down	0.035	0.092	**0.053**
BOD- ER Mill	0.035	0.068	**0.053**
SF Drum Cutter Off	0.024	0.080	**0.044**
Stripping Machine	0.024	0.076	**0.048**
Moulding	0.024	0.072	**0.042**
Sheet Cutting Salvaging	0.035	0.088	**0.056**
Lab	0.012	0.076	**0.037**
Pulverizer	0.041	0.088	**0.060**
Loading Area	0.029	0.088	**0.051**
Forklift Driver	0.024	0.076	**0.040**
Main Gate	0.018	0.064	**0.035**
Summary	**0.012**	**0.092**	**0.047**
Stipulate Norm	**0.1**		

Maximum Fibre content monitored was **0.092 fibre/cc** against the Norm of 0.1 fibre/cc.

Pre-employment tests are carried out as per factory act and all records pertaining to health checkup are maintained as per IS: 11451 and Factory Act. Medical examination of employees carried out by competent occupational health physician periodically for Sputum test, Lungs Function Test (PFT), bloat tests for TLC, DLC, ESR, HB, Chest X Ray and general medical checkup. 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. Riya Diagnostic, Bangalore is done.

The directive of Supreme court is followed strictly. All records are well maintained and available in office.

3.5 Stack Emissions

Shiva Test House-Patna, an **accreditated Agency by BSPCB**, is periodically carrying out the Stack Survey at the Plant on Monthly basis. Particulate Matter (PM) is the main Pollutant from Process Stacks while Sulphur dioxide (SO_2) & Nitrogen oxides (NOx) are found to be Nil/negligible. The average values of the data during 2024-25 are utilised for characterising the Stack Emissions from the Plant (**Table 3.8**). Stack characteristics of Standby DG Sets are given in **Table 3.9**.

Table : 3.8 Process Stack Emissions-Existing

Stack Parameter	Particulate Matter (PM)		
	Fibre Circuit	**Cement & Fly Ash**	**Pulveriser**
APC Measure	Bag Filters	Bag Filters	Bag Filters
Stack Height, m	30	26.2	15
Diameter, m	0.40	0.40	0.15
Temperature, °C	41	44	44
Discharge, $Nm^3/hr.$	5495	3725	945
PM (Mean), mg/Nm^3	1.67	13.46	1.63
BSPCB Limit	**2.0**	**100**	**2.0**
PM Emission, g/sec.	0.003	0.021	0.0004

Table : 3.9 Stack Emissions-Standby DG Sets as per CFOs

Stack Parameter	Stack Profile & Pollutants Concentration								
	1010 KVA			**750 KVA**			**125 KVA**		
APC Measure	Stack Height			Stack Height			Stack Height		
Stack Height, m	18.0			18.0			15.0		
Temperature, °C	171			163			-		
Discharge, $Nm^3/hr.$	343			640			-		
Pollutants	**PM**	**SO_2**	**NOx**	**PM**	**SO_2**	**NOx**	**PM**	**SO_2**	**NOx**
Avg. Emission, mg/Nm^3	21.9	14.2	156	20.0	14.4	150	Not Monitored		
EPA Limit	**75**	**-**	**710**	**75**	**-**	**710**	**75**	**-**	**710**

Cumulative emission from the Plant (if DG Sets run continuously - **Worst Case Scenario**) is as detailed below :

Total PM Emission : 0.0225 g/sec
SO_2 Emission : 0.0039 g/sec
NOx Emission : 0.0415 g/sec.

3.6 Noise Levels

The abstract of noise data monitored on Quarterly basis are presented in **Table 3.10**. Ambient Noise Levels were ranging from 35.9 dB(A) to 88.2 dB(A) during day times and from 34.1 dB(A) to 90.2 dB(A) during night times on the monitoring days. Day Equivalent Noise (Leq-d) level was found to be 63.0 dB(A) and Night Equivalent Noise (Leq-n) level was 58.0 dB(A).

While comparing with the MoEF&CC Leq Norms for day and night times, the monitored **ambient noise levels were well within the limit values** for Industrial Area.

Table : 3.10 Ambient Noise Level Data (Abstract)

Sl. No.	Location	Noise Levels, dB(A)					
		Day Time (06:00-22:00 hrs.)			Night Time (22:00-06:00 hrs.)		
		Lmin.	Lmax.	Leq	Lmin.	Lmax.	Leq
1	Near Main Gate	38.7	87.1	**65.3**	35.4	90.2	**60.4**
2	Near Office	35.9	82.5	**57.4**	34.1	85.5	**52.7**
3	Near Stripping Area	42.4	84.3	**62.5**	40.7	83.8	**60.1**
4	Near Fiber Mill	40.6	88.2	**65.7**	41.1	87.5	**62.4**
5	Near DG Room (working during day time)	42.8	80.5	**64.1**	41.0	83.5	**54.5**
Plant Vicinity		**35.9**	**88.2**	**63.0**	**34.1**	**90.2**	**58.0**
MoEF&CC Norms for Industrial Area		-		**75**	-		**70**

Lmin.-Minimum Levels; Lmax.-Maximum Levels & Leq-Equivalent Noise Levels.
* : MoEF&CC Norms-Ministry of Environment, Forest & Climate Change Norms.
Day time is reckoned in between 6 a.m-10 p.m and Night time is reckoned in between 10 p.m-6 a.m

3.7 Water Quality

There is **no generation of trade effluent** and entire process water is recycled back into the system. Domestic Sewage are treated in Septic Tanks followed by Dispersion Trenches. Thus, '**Zero Liquid Discharge**' is adopted.

A pond of holding capacity 2070 cu. m has been provided in the Plant for rain water harvesting. Also, three recharge pits are provided in the Plant to recharge the ground water.

3.8 Solid Wastes

The entire Solid waste generated including process rejects, dust from bag filters and empty asbestos bags are recycled back in the manufacturing process. Used/Spent Oil (Category 5.1) of 3.2 KL/Annum is being collected, stored and sold to Authorised Recyclers by BSPCB/CPCB as per HWA.

Used/Spent Oil (HW Cat. 5.1) : 3.2 KL/Annum
Discarded/Broken Asbestos Sheets (HW Cat. 15.2) : 1,200 Tonnes/Annum.

***

4.0 Pollution Load Assessment

4.1 Assessment Methodology

As per the Explanation given by MoEF&CC in its Notification, **'Pollution Load' shall be determined on the basis of multiplication of quantity and concentration of different components** and parameters (as provided or referred in the prior Environment Clearance or the Environment Impact Assessment Report - EIA and Environment Management Plan – EMP, based on which such prior Environment Clearance has been granted), **in respect of emissions, effluents or discharge, solid, industrial hazardous waste and such other parameters** notified under the Environment (Protection) Rules, 1986 as amended from time to time." The 'total pollution load' shall be ascertained by **multiplication of quantity and concentration of different components and parameters for Existing and Proposed activities**. Accordingly, Pollution Load due to the Proposal on Air Pollution, Water Pollution and Solid Wastes are assessed and details provided.

4.2 Air Pollution Load

There is no change in the Process Stacks Air Pollution Control (APC) Equipment viz. Bag Filters attached to Fibre Circuit, Cement & Fly Ash and Pulveriser. Particulate Matter (PM) is the only Pollutant from the Process Stacks. **There is no addition of Stack or Air Pollution Control Equipment during Proposal Stage.** The **designed volume of Stacks** are adequate to control PM Emission during Proposal Stage also. Air Pollution Load from the Unit at EC Stage (concern EIA Report Page appended), CTO Stage & proposed NIPL Stage are assessed and given in **Tables 4.1-4.2** and their abstract in **Table 4.3**.

Table : 4.1 Pollution Load at EC & CTO Stages

RIL Bihiya Plant	Pollution Load – Particulate Matter (PM)					
Period	EC Stage			CTO Stage		
Production, LTPA	1.20			1.20		
Stack	Discharge, $Nm^3/hr.$	PM Concn., mg/Nm^3	Pollution Load, kg/hr.	Discharge, $Nm^3/hr.$	PM Concn., mg/Nm^3	Pollution Load, kg/hr.
Fibre Circuit	5623	2	0.011	5623	2	0.011
Cement & Fly Ash	5623	150	0.843	5623	100	0.562
Pulveriser	945	2	0.002	945	2	0.002
Total			0.857			0.575
PM Emission, kg/day			20.56			13.81
Production, TPD			**400**			**400**
Load Based PM Emission, kg/Ton of Product	**-**	**-**	**0.0514**	**-**	**-**	**0.0345**
Reduction in PM Pollution Load, %	**-**			**32.82% (w.r.t. EC Stage)**		

Stack Emissions – EC Stage (EIA Report Page)

TABLE-4.1b
HOURLY MEAN METEORELOGICAL DATA – PRE MONSOON SEASON

Hour	Wind Direction	Wind Speed (m/s)	Temperature (°K)	Stability Class	Mixing Height (m)
1	85.0	1.04	290.3	6	50.0
2	95.0	1.05	289.6	6	50.0
3	95.0	1.03	289.3	6	50.0
4	93.0	1.06	288.6	6	50.0
5	92.0	1.09	287.6	6	50.0
6	272.0	1.17	288.3	5	100.0
7	275.0	1.22	289.6	5	100.0
8	95.0	1.28	291.9	5	100.0
9	95.0	1.30	292.6	4	200.0
10	95.0	1.32	293.8	3	500.0
11	90.0	1.37	295.4	2	900.0
12	95.0	1.68	296.3	1	1000.0
13	95.0	1.55	298.7	1	1000.0
14	95.0	1.66	300.3	1	1400.0
15	270.0	1.52	300.1	1	1300.0
16	270.0	1.14	299.3	1	1000.0
17	95.0	1.03	299.1	2	900.0
18	90.0	1.93	298.3	3	700.0
19	90.0	1.58	297.8	4	200.0
20	270.0	1.96	295.8	4	200.0
21	275.0	1.78	293.2	5	100.0
22	315.0	1.62	291.1	5	100.0
23	80.0	1.02	290.8	5	100.0
24	75.0	1.06	290.6	6	50.0

TABLE - 4.2
DETAILS OF STACK EMISSIONS FROM PROPOSED PLANT

Stack No	Unit	1	2	3	4
Stack attached to	---	Fibre circuit	Cement/ Fly Ash Circuit	Pulveriser plant	D.G. Set (750 KVA)
Co-ordinates					
X	m	0	0	95	67
Y	m	0	10	0	-38
Stack height	m	30.0	15.0	15.0	9.0
Stack Diameter	m	0.4	0.4	0.15	0.15
Temperature	°C	45	45	45	200
Exit Velocity	m/s	13.27	13.27	15.85	25.0
Flow Rate	Nm^3/hr	5623	5623	945	1001
Without APC Measure					
Particulate matter	mg/Nm^3	9.0	500	9.0	150
	g/s	0.014	0.781	0.0024	0.042
Sulphur dioxide	g/s	---	---	---	0.094
Nitrogen dioxide	mg/Nm^3	---	---	---	350
	g/s	---	---	---	0.097
With APC Measure					
Particulate matter	mg/Nm^3	2.0	150	2.0	150
	g/s	0.003	0.234	0.0005	0.042
Sulphur dioxide	g/s	---	---	---	0.094
Nitrogen dioxide	mg/Nm^3	---	---	---	350
	g/s	---	---	---	0.097
APC Measure	---	*Bag filter*	*Bag filter*	*Bag filter*	---

Table : 4.2 Pollution Load – CTO & NIPL Stage

RIL Bihiya Plant	Pollution Load – Particulate Matter (PM)					
Period	CTO Stage			NIPL Stage now		
Production, LTPA	1.20			1.60		
Stack	Discharge, $Nm^3/hr.$	PM Concn., mg/Nm^3	Pollution Load, kg/hr.	Discharge, $Nm^3/hr.$	PM Concn., mg/Nm^3	Pollution Load, kg/hr.
Fibre Circuit	5623	2	0.011	5623	2	0.011
Cement & Fly Ash	5623	100	0.562	5623	100	0.562
Pulveriser	945	2	0.002	945	2	0.002
Total	**-**	**-**	**0.575**	**-**	**-**	**0.575**
PM Emission, kg/day	-	-	13.81	-	-	13.81
Production, TPD			**400**			**500**
Load Based PM Emission, kg/Ton of Product	**-**	**-**	**0.0345**	**-**	**-**	**0.0276**
Reduction in PM Pollution Load, %	**-**			**20.00% (w.r.t. CTO Stage)**		

Table : 4.3 Load based Pollution Load

Sl. No.	Stage	Pollution Load - PM		% Reduction
		kg/day	kg/Ton of Product	
1	EC Stage-1.20 LTPA	20.56	**0.0514**	-
2	CTO Stage-1.20 LTPA	13.81	**0.0345**	32.82%
3	Proposed NIPL Stage - 1.60 LTPA Cement	13.81	**0.0276**	**46.30%-EC Stg. 20.00%-CTO Stg.**

There is a **reduction of 32.82% in PM Emission at proposed NIPL Stage** while comparing with EC Stage & **20.00% reduction with CTO Stage**. SO_2 & NOx Emission Levels are nil/insignificant.

4.3 Prediction Modelling

AERMOD View is used for the **Prediction Modelling**. **Summer Season 2025** Meteorological Data are utilised. The Model was run for both existing (EC Stage) and proposed (NIPL Stage) Operations. The Model Inputs and Outputs are appended. The predicted GLCs are given in **Table 4.4**. The predicted values were spatially distributed and given as **Figs. 4.1-4.3**.

Table : 4.4 Predicted GLCs – PM10

Sl. No.	Stage	PM10 Background Concn., ug/m^3	Max. Predicted Ground Level Concentration, ug/m^3	Distance from the Plant (max.), m	Total Concent-ration, ug/m^3	NAAQ Norms, ug/m^3	Buffer Available in the Atmosphere
i.	EC Stage Operations	54.4	1.05	30	55.45	100	**44.55%**
ii.	NIPL Stage Operations		**0.71**	30	**55.11**	100	**44.89%**

Fig. : 4.1 Predicted GLC - PM10 – EC Stage

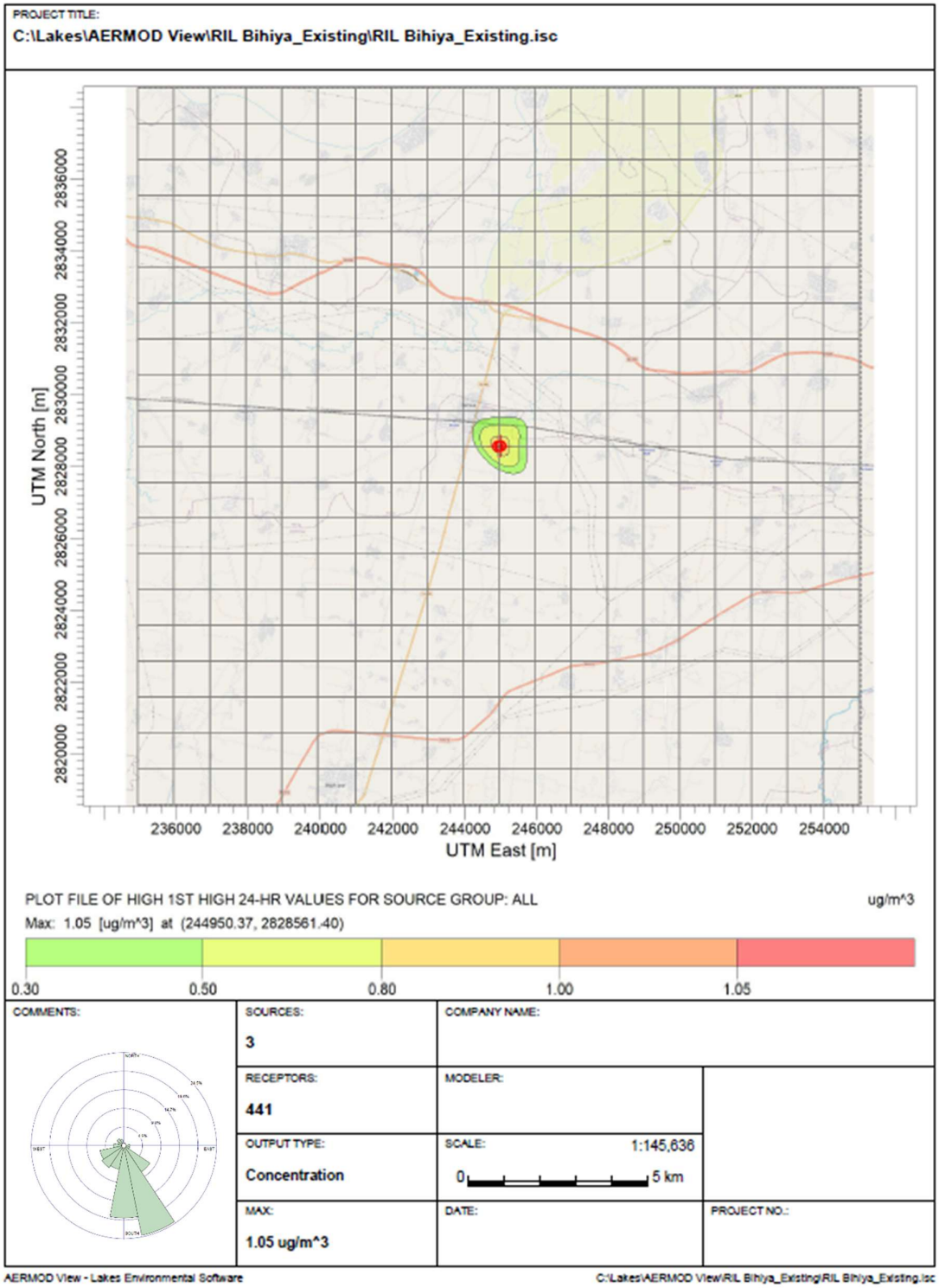


Fig. : 4.2 Predicted GLC - PM10 – NIPL Stage

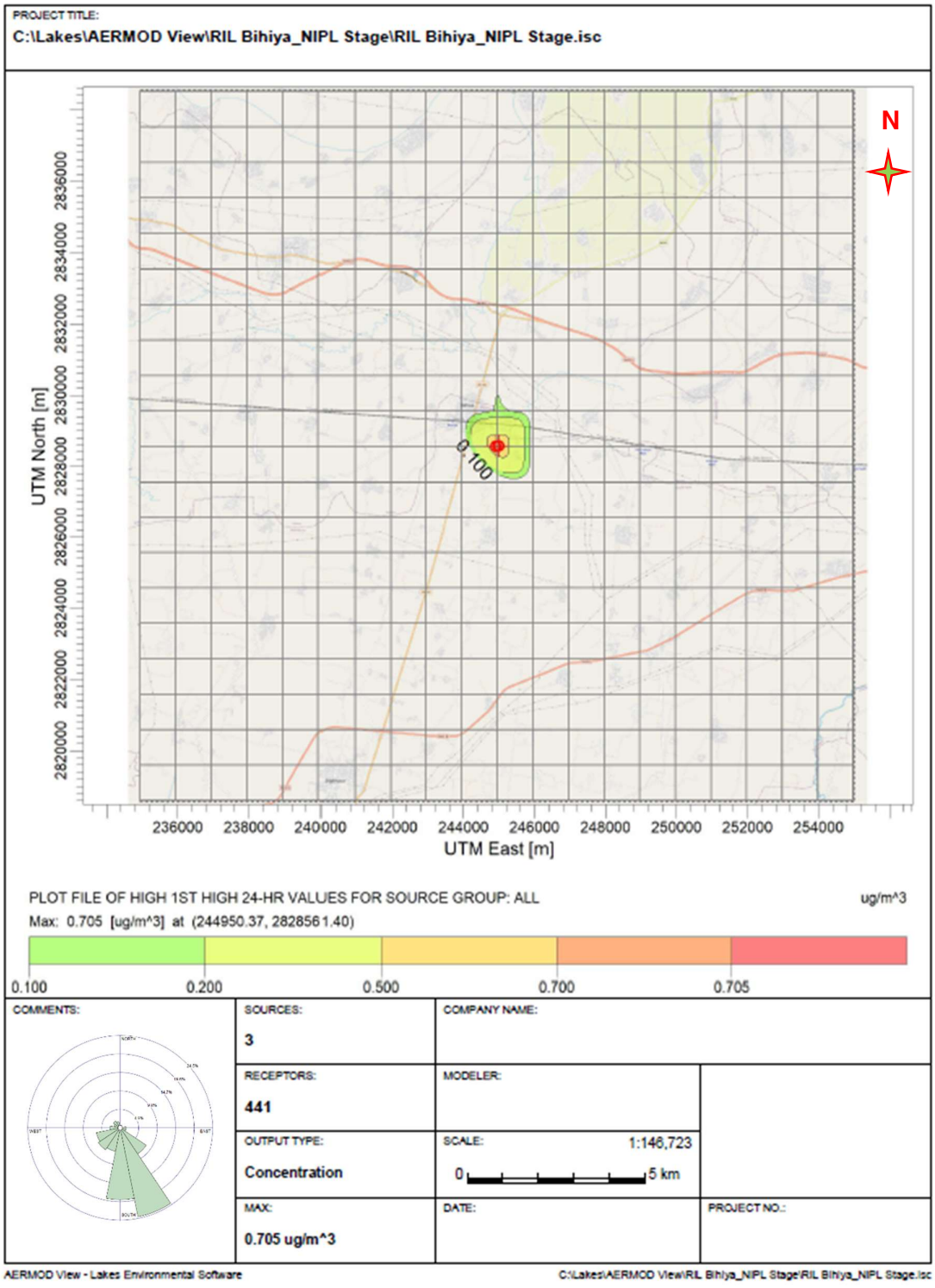
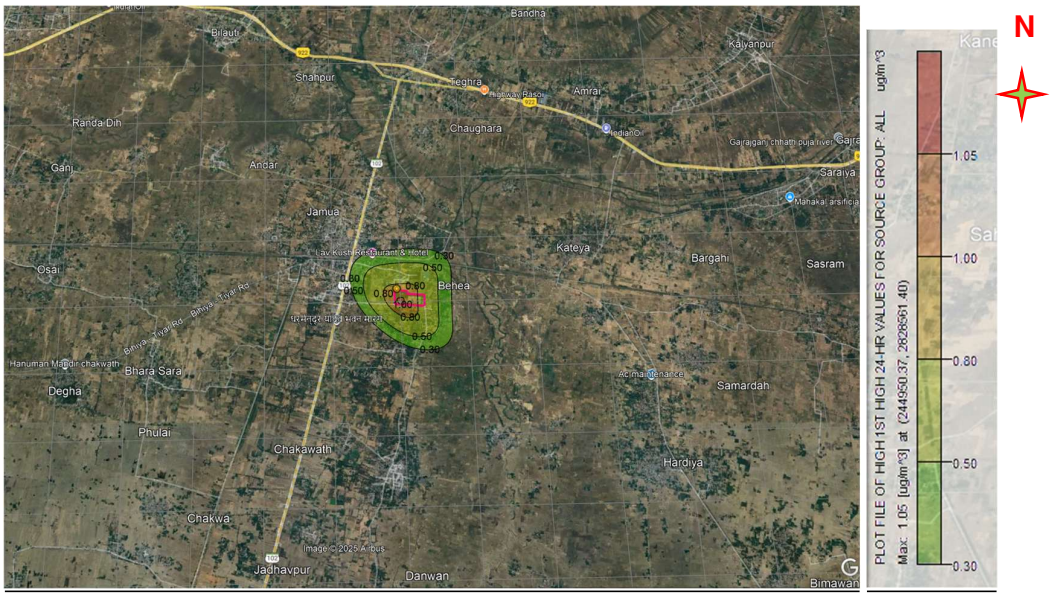
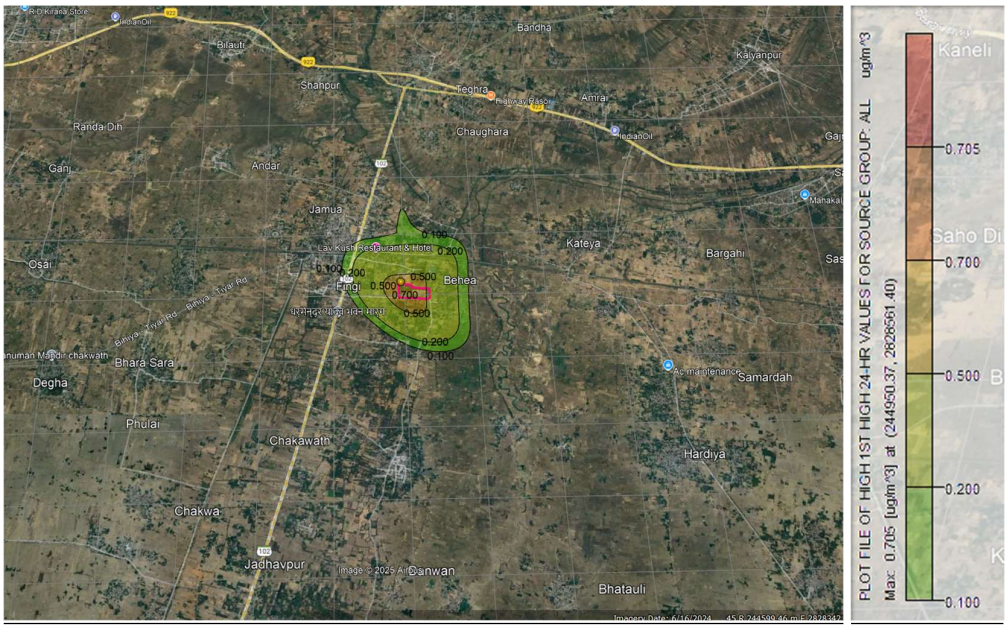


Fig. : 4.3 Predicted GLCs (PM10) in Google Earth Imagery

EC Stage



NIPL Stage



PM10 Input – EC Stage

Source Pathway - Source Inputs

AERMOD

Point Sources

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/s]	Gas Exit Temp. [K]	Gas Exit Velocity [m/s]	Stack Inside Diameter [m]
POINT	STCK1	244978.40 Fibre Circuit	2828583.19	87.00	30.00	0.00031	318.15	13.27	0.40
POINT	STCK2	244985.06 Cement & Fly Ash Circuit	2828583.55	87.00	15.00	0.02343	318.15	13.27	0.40
POINT	STCK3	244904.81 Pulveriser	2828568.12	91.00	15.00	0.00005	318.15	15.85	0.15

PM10 Output – EC Stage

Results Summary

C:\Lakes\AERMOD View\RIL Bihiya_Existing\RIL Bihiya_Existing.isc

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
24-HR	1ST	1.05190	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	11-05-2025, 24
24-HR	2ND	1.00910	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	30-05-2025, 24
24-HR	3RD	0.97898	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	14-05-2025, 24
24-HR	4TH	0.90352	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	29-05-2025, 24
24-HR	5TH	0.88028	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	10-05-2025, 24
24-HR	6TH	0.87855	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	15-05-2025, 24
24-HR	7TH	0.87602	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	05-04-2025, 24
24-HR	8TH	0.87420	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	25-05-2025, 24
24-HR	9TH	0.84587	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	15-03-2025, 24
24-HR	10TH	0.84135	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	09-05-2025, 24
PERIOD		0.62217	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	

PM10 Input – NIPL Stage

Source Pathway - Source Inputs

AERMOD

Point Sources

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/s]	Gas Exit Temp. [K]	Gas Exit Velocity [m/s]	Stack Inside Diameter [m]
POINT	STCK1	244978.40 Fibre Circuit	2828583.19	87.00	30.00	0.00031	318.15	13.27	0.40
POINT	STCK2	244985.06 Cement & Fly Ash Circuit	2828583.55	87.00	15.00	0.01562	318.15	13.27	0.40
POINT	STCK3	244904.81 Pulveriser	2828568.12	91.00	15.00	0.00005	318.15	15.85	0.15

PM10 Output – NIPL Stage

Results Summary

C:\Lakes\AERMOD View\RIL Bihiya_NIPL Stage\RIL Bihiya_NIPL Stage.isc

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
24-HR	1ST	0.70492	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	11-05-2025, 24
24-HR	2ND	0.67611	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	30-05-2025, 24
24-HR	3RD	0.65622	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	14-05-2025, 24
24-HR	4TH	0.60506	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	29-05-2025, 24
24-HR	5TH	0.59011	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	10-05-2025, 24
24-HR	6TH	0.58859	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	15-05-2025, 24
24-HR	7TH	0.58697	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	05-04-2025, 24
24-HR	8TH	0.58546	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	25-05-2025, 24
24-HR	9TH	0.56668	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	15-03-2025, 24
24-HR	10TH	0.56394	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	09-05-2025, 24
PERIOD		0.41662	ug/m^3	244950.37	2828561.40	91.00	0.00	91.00	

There is reduction in incremental Levels viz. PM (-) 0.34 ug/m^3 (32.38% reduction). SO_2 and NOx Levels are nil. Also, **adequate Buffer exists** in the Air Environment for the proposed activities. The impacts were found to be confined locally i.e. within **30 m** from the boundaries.

4.4 Water Pollution

There is no discharge of trade effluent and entire process water is recycled back into the Process. There are 3 Nos. Septic Tanks with dimension 3.6 x 1.8 m each followed by Dispersion Trenches to treat the Domestic Sewage biologically. There is no STP in the Plant and thus, **Water Pollution Load Assessment is not warranted** (based on BOD/COD). Surface Drains are connected to a Rain Water Harvesting Pond of holding capacity 2070 cu.m. The harvested water is fully utilised for green belt development. Thus, '**Zero Effluent Discharge**' is adopted in the Unit.

4.5 Solid Wastes

The entire Solid waste generated including process rejects, dust from bag filters and empty asbestos bags are recycled back in the manufacturing process. The Unit is authorized vide CCA dated 19.05.2023 (valid till 18.05.2028) to handle the following Hazardous Wastes :

Used/Spent Oil (HW Cat. 5.1)	:	3.2 KL/Annum
Discarded/Broken Asbestos Sheets (HW Cat. 15.2)	:	1,200 Tons/Annum

Used/Spent Oil (Category 5.1) of 3.2 KLPA is being used back in the Unit for template oiling purpose. The entire discarded/broken Asbestos Sheets are pulverised and reused as Raw Material in the Process. There will be **no change to the existing status** at the Proposal Stage.

Pollution Load of Solid Wastes is assessed and given in **Table 4.5**.

Table : 4.5 Hazardous Wastes Pollution Load – Existing & Proposed

Load based Solid Waste Pollution			
Details of Waste Category wise	**Existing**	**Proposed**	**Remarks if any**
Used / Spent Oil (5.1)	0.0085 kg/T of Product	0.008 kg/T of Product	5.88% Reduction
Discarded/Broken Asbestos Sheets (Cat. 15.2)	0.01 kg/T of Product	0.0075 kg/T of Product	25.00% Reduction

There is a **reduction of 5.88% to 25.00% in Hazardous Waste generation at proposed NIPL Stage.**

***

5.0 Summary & Conclusion

M/s. Ramco Industries Limited (RIL), under Ramco Group, are operating their Bihiya Plant with the permitted production of 1,20,000 Tonnes per Annum Asbestos Cement Roofing Sheets in an extent of 8.09 Ha at Plot No. A-1, BIADA Industrial Area, Village & Taluk-Bihiya, District-Bhojpur, Bihar. Production commenced from the Year 2013-14. There is no Production violation in the Consented quantity. To meet the market demand, RIL has now proposed 'Proposed Expansion of Asbestos Cement Roofing Sheets Plant in Existing Facility from 1,20,000 Tonnes per Annum to 1,60,000 Tonnes per Annum by Process Optimisation (Change in Raw Mix-GGBS Addition, VFD Introduction, etc.) and by increasing Plant operational days from 300 days to 320 days'.

The **activities are proposed within the existing Plant Premises without any major or significant impact**. There is no increase in Man Power. Pollution Load Assessment summary is given in **Table 5.1**.

Table : 5.1 Pollution Load – EC/CTO Stage & Proposed NIPL Operation Stage

Sl. No.	Environmental Component & Parameter	Pollution Load for		Change in Pollution Load	Remarks
		Existing Operation (EC/ CTO)- 1.2 LTPA	Proposed NIPL Operation- 1.6 LTPA		
I	**Air Pollution :-**				
1	Particulate Matter (PM) Emission	0.0514 kg/Ton of Product @ 20.56 kg/day	0.0276 kg/Ton of Product @ 13.81 kg/day	**Reduction of 32.82% in PM Emission**	**Reduction in Pollution Load**
II	**Water Pollution :-**				
1	Domestic Sewage Generation	5 KLD	5 KLD	No change	Existing Status
2	BOD Load	-	-	-	Domestic Sewage treated in Septic Tank
3	Trade Effluent	Nil	Nil	-	**No Trade Effluent discharge** as entire quantity is recycled and reused in the Process
III 1.	**Solid Wastes:-** Used/Spent Oil (5.1)	0.0085 kg/T of Product	0.008 kg/T of Product	**5.88% Reduction**	**Reduction in Pollution Load**
2.	Discarded/Broken Asbestos Sheets (Cat. 15.2)	0.01 kg/T of Product	0.0075 kg/T of Product	**25.00% Reduction**	

Due to proposed Process Modifications/Process optimization within the land and with existing machinery, Man Power, Project Cost, etc., there will be no increase in Pollution Load of the Unit.

Claim for NIPL is based on the following facts :

- ✓ At EC Stage, the Plant was **permitted to use Asbestos (Chrysotile) Fibre upto 15%** of Raw Materials. However, **RIL is now using only 10.3% of Asbestos** (10,200 TPA) in total Raw Material quantity. On Expansion, **Asbestos quantity will be retained as such** i.e. 10,200 TPA for 1,60,000 TPA production.
- ✓ There is a **reduction of 46.83% in PM Emission at proposed NIPL Stage** while comparing with EC Stage & **20.00% reduction with CTO Stage**.
- ✓ There is no trade effluent discharge.
- ✓ There is a **reduction of 5.88% in Used/Spent Oil generation and to 25.00% in** Discarded/Broken Asbestos Sheets **at proposed NIPL Stage.**

Also, for the Proposal :

- ❖ No additional land is required.
- ❖ No additional Plant and Machinery are to be installed.
- ❖ No additional Manpower is required.
- ❖ No additional water requirement is required beyond consented quantity.
- ❖ 'Zero Liquid Discharge' is to be maintained as such.
- ❖ No additional fuel is required.
- ❖ No increase in Solid & Hazardous Waste generation from that of sanctioned capacity.

Existing Project Cost is **Rs.27.50 Crores**. EMP Capital Cost will be Rs.50.00 Lakhs and operating Cost will be Rs.10.00 Lakhs/Annum. **No additional Cost is involved** for the Proposal.

RIL has filed the Application in Parivesh Portal for obtaining NIPL Certification without prior EC under the Provisions of MoEF&CC S.O 980(E) dated 21.03.2021. Following requirements for obtaining NIPL Certification without prior EC are also complied:

- ✓ 'No Increase in Pollution Load Certificate'.
- ✓ Valid CTO for the Unit.
- ✓ Acknowledgement of Online Application in Parivesh Portal.

EIA Stage Consultant : M/s. Vimta Labs, Hyderabad.
Consultant engaged now : M/s. Gaurang Environmental Solutions Pvt. Ltd., Jaipur.
(Certificate NABET/EIA/23-26/RA 0338 with Validity till 07.12.2026).

With the Application and required Documents submission, RIL requests the Board to peruse and **issue the 'No Increase in Pollution Load Certificate'** and allow us to undertake the Proposed activities with out prior EC.

***

F. No. J-11011/17/2010-IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi – 110 003.
E-mail: plahujarai@yahoo.com
Tele/fax: 011-24363973
Dated: 17th January, 2011

To,

The Sr. Vice President (Works)
M/s Ramco Industries Ltd
Auras Corporate Centre, VI Floor,
98A, Dr. Radhakrishnan Road
Post Box No. 2949, Mylapore,
Chennai-600 004.

Sub: Asbestos Fiber Cement Sheet Plant (1,20,000 TPA) at Plot No. A1, Industrial Area, Village & Taluk Bihiya, District Bhojpur, Bihar by M/s Ramco Industries Limited – regarding Environmental Clearance

Sir,

This has reference to your letter no. nil dated 29th November, 2010 along with copies of final EIA / EMP and public hearing reports seeking environment clearance under the provisions of EIA Notification, 2006.

2. The Ministry of Environment and Forests has examined the proposal. It is noted that M/s Ramco Industries Ltd. have proposed for the Asbestos Fibre Cement Sheet Plant (1,20,000 TPA) atVillage & Taluk Bihiya, District Bhojpur, Bihar. Total land available is 20.0 acres which has been allotted by the Bihar Industrial Area Development Authority (BIADA), Patna. Out of 20 acres of total land, green belt will be developed in 8 acres i.e. 40 % of total plant area. No rehabilitation and resettlement is involved. No national parks/wild life sanctuary/reserve forests are located within 10 km radius. No forest land is involved. Raw asbestos fiber (10,200 TPA), Cement (54,000 TPA), Fly Ash (31,800 TPA) and Paper pulp (600 TPA) will be used as raw materials. Raw material will be transported by covered trucks. Chrysotile Asbestos fibre received in the polythene bags will be mechanically opened in an automatic bag opening device. Total cost of the project is Rs. 30.0 Crores. Rs. 50.0 Lakhs and Rs 10.0 Lakhs are earmarked towards capital cost and recurring cost/annum for environmental pollution control measures. Rs. 1.5 Crores is allocated towards Corporate Social Responsibility (CSR) activities.

3. It is noted that water requirement of 80 m^3/day will be sourced from own bore wells. Permission for ground water withdrawal from Directorate of Under ground Water Resources, Bihar, has been obtained on 22.02.2010. No wastewater will be generated from process. The settling solids in slurry form the recuperating tank will be collected in a clarifier and reused in the process. Service water will be passed through oil separator to remove oil content in the effluent. Domestic effluent will be

treated in septic tank followed by dispersion in underground strata through dispersion trenches. No effluent will be discharged outside the premises and 'Zero' discharge will be adopted. Acoustic enclosures will be provided to D.G. sets. 750 KVA of Power will be required for the project and sourced from BSEB Grid. However, to meet the emergency power requirement during the grid failure, a diesel generator with capacity of 750 KVA will be installed.

4. All the solid waste generated will be recycled in the manufacturing process. HDPE fiber bags will be shredded in the shredder unit attached to the bag opening device and sent along with the fiber into fiber mill through conveyor.

5. The Asbestos Fibre Sheet Manufacturing Cement Plants have been listed at Sl. No. 4(c) of Schedule of EIA Notification, 2006 as Category 'A' and have to be appraised by the Expert Appraisal Committee in the Ministry.

6. The proposal was considered by the Expert Appraisal Committee-1 (industry) in its 17th meeting held during 13th & 14th, 2010. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions. Public hearing of the project was held on 22.11.2010.

7. Based on the information submitted by you, presentation made by you and consultant, M/s Vimta Labs, Hyderabad, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September 2006 subject to strict compliance of the following Specific and General conditions:

A. SPECIFIC CONDITIONS :

i. The project proponent shall adhere to the prescribed BIS standards and laws regarding use and handling of asbestos, safety of employees etc. Raw materials like asbestos fibre and cement shall be transported in closed containers. Asbestos fibre shall be brought in pelletized form in impermeable bags and under compressed condition.

ii. Only Chrysotile white asbestos fibre shall be used. Blue asbestos shall not be utilized as raw material in the manufacturing process.

iii. There shall be no manual handling/opening of asbestos fiber bags. The company shall install fully automatic asbestos fiber debagging system before commissioning the unit.

iv. Fugitive emissions shall be controlled by bringing cement in closed tankers, fly ash in 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 and Fly ash 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.

v. The Company shall comply with total dust emission limit of 2 mg/Nm^3 as notified under the Environment (Protection) Act, 1986. Adequate measures shall be adopted to control the process emission and ensure that the stack emission of asbestos fibre shall not exceed the emission limit of 0.2 fiber/cc. Asbestos fibre in work zone environment shall be maintained within 0.1 fibre/cc.

vi. Bags containing asbestos fibre shall be stored in enclosed area to avoid fugitive emissions of asbestos fibre from damaged bags, if any.

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 include:

(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. Quarterly monitoring of pollutant (PM_{10}, asbestos fibre count) in the work zone area and stack(s) shall be undertaken by the Project proponents. In addition, the asbestos fibre count in the work zone area shall be monitored by an Independent monitoring agency like NIOH / ITRC / NCB or any other approved agency and reports submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB.

ix. Total water requirement from ground water shall not exceed 80m^3/day. All the recommendations of the State Ground Water Department, Govt. of Bihar shall be implemented in time bound manner.

x. After the 5 years operation of plant, no ground water shall be used and only rain water shall be used.

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 wastewater shall be treated in septic tank followed by soak pit and used for green belt development.

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 reused 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 can not 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.

xiii. The cut and damaged fibre bags shall immediately be repaired. 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.

xiv. The Company shall obtain a certificate from the supplier of Chrysotile fibre that it does not contain any toxic or trace metals. A copy of certificate shall be submitted to the Ministry of Environment and Forests.

xv. 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 the directives of the Hon'ble Supreme Court.

xvi. 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.

xvii. The company shall also undertake rain water harvesting measures and plan of action shall be submitted to the Ministry of Environment and Forests within three months.

xviii. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 22nd November 2010 shall be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Bhubaneswar.

xix. Green belt shall be developed in at least 33 % of plant area as per the CPCB guidelines in consultation with the DFO.

xx. At least 5 % of the total cost of the project should be earmarked 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 Bhubaneswar. Implementation of such program should be ensured accordingly in a time bound manner.

xxi. The company shall provide housing for construction labour within the site with all necessary infrastructure and 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 structures to be removed after the completion of the project.

B. GENERAL CONDITIONS:

i. The project authorities must strictly adhere to the stipulations made by the Bihar Pollution Control Board and the State Government.

ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.

iii. The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th 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.

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 PM10, SO_2 and NO_X are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the SPCB/CPCB once in six months.

v. Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.

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 acoustic hoods, silencers, enclosures 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 shall be done on a regular basis and records maintained as per the Factories Act.

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.

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.

x. Requisite 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 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.

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 web site of the company by the proponent.

xii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their 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, SO_2, and NOx, (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

xiii. 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 and the SPCB. The Regional Office of this Ministry at Bhubaneswar/ CPCB / SPCB shall monitor the stipulated conditions.

xiv. The environmental statement for each financial year ending 31st March in Form-V as is mandated 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 alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEF at Bhubaneswar by e-mail.

xv. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at http:/envfor.nic.in.

This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one 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 as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

8. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

9. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

10. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules

(Dr. P.L. Ahujarai)
Scientist 'F'

Copy to:

1. Secretary, State Department of Environment, Government of Bihar, Mantralaya, Patna.
2. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
3. The Chairman, Bihar State Pollution Control Board, Beltron Bhavan, 2nd Floor, Lal Bahadur Shastri Nagar, Patna- 800023
4. The Chief Conservator of Forests, Regional Office (EZ),Ministry of Environment and Forests A-3, Chandrashekharpur, Bhubaneswar ? 751 023, Orissa
5. Additional Director, Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi- 110003.
6. Guard file.
7. Record file.
8. Monitoring file.

P. Ahujarai

(Dr. P.L. Ahujarai)
Scientist 'F'

F. No. J-11011/17/2010-IA.II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira ParyavaranBhawan
Jor Bagh Road, Aliganj,
New Delhi - 110003
E-mail: dirind-moefcc@gov.in
Tel: 011-24695368
Dated: 26.11.2019

To
M/s. Ramco Industries Limited
Industrial area, Bihiya,
District Bhojpur, Bihar

Subject: Asbestos Fiber Cement Plant (1,20,000 TPA) by **M/s. Ramco Industries Ltd** located at Industrial area, Bihiya, District Bhojpur, **Bihar** – regarding **Amendment in Environment Clearance**.

Sir,

This has reference to your online application vide proposal no. IA/BR/IND/20372/2010 dated 25.11.2015 in the prescribed format and communication vide letters dated 20.02.2017, 21.12.2018 and 18.01.2018. The proposed project activity is listed at Sl. No. 4 (c) Asbestos milling and asbestos based products under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

2. M/s Ramco Industries Limited (RIL) has established and operating an Asbestos Fiber Cement Sheet Plant at Industriai Area, Bihiya, District Bhojpur, Bihar. The project was accorded Environmental Clearance by the Ministry vide letter No. J-11011/17/2010- IA II (I) dated 17.01.2011.

3. The existing Environmental Clearance prohibits the ground water abstraction after 5 years operation of the project with a specific condition No.(x) mentioning that 'After 5 years operation of plant, no ground water shall be used and only rainwater shall be used. The Project Proponent made application to amend same for continuing the abstraction of ground water.

4. M/s Ramco Industries Ltd forwarded the permission from CGWA vide letter even No. dated 22.01.2019 to abstract 23620 cum/year of ground water through existing wells only. Besides, Consent to operate was also issued by State Pollution Control Bihar vide letter No. 2886 dated 12.07.2018.

Recommendations of the Committee:

5. The proposal was considered in the EAC (Industry-1) meetings held during 28-31st December 2015, 29-31st August 2016 and 26th June, 2019. After detailed deliberations, considering the permission from CGWA and consent to operate from State Pollution Control Board, the committee recommended the amendment to environmental clearance for continuing abstraction of ground water with following condition.

i. Rainwater harvesting and monitoring shall be carried out.

6. The Ministry has considered above recommendation of EAC and here by decide to amend the Environmental Clearance issued vide letter F.No.J-11011/17/2010-IAII(I) dated 17.01.2011 as below.

For	Read as
Para No.7: A. SPECIFIC CONDITIONS: (x) After 5 years operation of plant, no ground water shall be used and only rainwater shall be used.	The groundwater abstraction shall be through two existing tube wells only which shall be carried out with valid NOC from Central Ground Water Authority (CGWA). Abstraction of ground water shall not exceed 23,620 m^3/year as per the recommendation of CGWA vide order F. No. 21-4/282/BR/IND/2017-103 dated 22.01.2019. All of the conditions in the aforementioned order shall be strictly complied.

This issues with the approval of Competent Authority.

(A.K. Agrawal)
Director

Copy to:-

1. **Secretary**, Department of Environment, Government of Bihar, Secretariat, Patna.
2. **Additional Principal Chief Conservator of Forests**(C), Ministry of Environment, Forest and Climate Change, Regional Office (ECZ), Bungalow No. A-2, Shyamali Colony, Ranchi – 834002,
3. **Chairman**, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
4. **Chairman**, Bihar State Pollution Control Board Beltron Bhawan, ShastriNagarjawahar Lal Nehru Marg Patna (Bihar) - 800 023
5. **Member Secretary**, Central Ground Water Authority, 18/11, Jamnagar House, Man Singh Road, New Delhi-110011.
6. **District Collector**, **Bhojpur** District, Bihar.
7. **Guard File / Record file / Monitoring file.**
8. **MOEF&CC Website.**

(A.K. Agrawal)
Director

Doc 3 - NOC-CTE Approval

BIHAR STATE POLLUTION CONTROL BOARD
BELTRON Bhawan, Shastri Nagar, Patna – 800 023
EPABX – 0612-2281250/2282265, Fax – 0612-2281050
E-mail-bspcb@vsnl.net, Website – http://bspcb.bih.nic.in

Ref.No.:- PT (NOC)- 3912/10 Patna, Dated:-

'CONSENT-TO-ESTABLISH' (NOC)
UNDER SECTIONS 25/26 OF THE WATER (PREVENTION & CONTROL OF POLLUTION) ACT, 1974 AND UNDER SECTION 21 OF THE AIR (PREVENTION & CONTROL OF POLLUTION) ACT, 1981.

Reference application no. 29534, dated: 29.09.2010 of M/s Ramco Industries Limited, Proponent: Mr. R. Soundarajan, Sr. Vice President (Works), AURAS Corporate Centre, VI Floor, 98A, Dr. Radhakrishnan Road, Post Box no.-8949, Mylapore, Chennai -600004 for setting up a plant for production of Asbestos Fibre Cement Sheets & Accessories at Plot- A1, Industrial Area, Bihiya, Dist- Bhojpur with capacity- 120,000TPA.

2. AFTER CONSIDERING:

(i) The facts stated in their Application & Project report;
(ii) Bihar State Pollution Control Board's Notification No. 26, dated 08.11.2003;
(iii) Provisions of the Water (Prevention and Control of Pollution)Act, 1974 and the Air (Prevention and Control of Pollution)Act, 1981;
(iv) Provisions of The EIA Notification, 2006 and the amendment therein.

3. CONSENT-TO-ESTABLISH (NOC) IN FAVOUR OF THE PROPONENT AT THE SAID SITE IS HEREBY ACCORDED SUBJECT TO THE FOLLOWING CONDITIONS:

(i) That, they shall obtain prior Environmental Clearance (EC) from MoEF, Govt. of India under the EIA notification, 2006. The notification prohibits any construction of new Project activity unless prior EC is obtained.
(ii) That, they shall comply with the directions as per the EC;
(iii) That, they shall have adequate pollution control facilities as per the EC;
(iv) That, they shall obtain consent-to-operate under section 25/26 of the Water Act,1974 and u/s 21 of the Air Act, 1981 prior to commissioning of the plant from this Board.
(v) That, the effluent (Domestic & Trade) and emission, if any, shall conform to the standard as prescribed by the Board;
(vi) That, they shall procure the D.G set to meet the standard as per the Notification in the Environment (Protection) Rules, 1986 and the

(vii) That, the unit shall ensure the transportation of raw materials from source must be in environmentally condition.

(viii) Rain water harvesting arrangement shall be done.

(ix) Tree plantation shall be done and maintained in and all around the proposed site.

NOTE:

1. The Bihar State Pollution Control Board reserves the option to revise or add other conditions, if necessary, for protection of Environment in general and for pollution control in particular.
2. The present NOC should not be construed as an assurance for the grant of 'Consent-to-Operate' the proposed plant but shall be subject to compliance of all the conditions indicated above.
3. The NOC is valid for a period of twelve months from the date of issue.
4. Issued by the order of competent authority.

(M.K.Singh)
Member-Secretary

Memo No.:- T-10727 Patna, Dated:- 05/10/10

Copy to: R.Soundarajan, Sr. Vice President (Works), M/s Ramco Industries Limited, AURAS Corporate Centre, VI Floor, 98A, Dr. Radhakrishnan Road, Post Box no.-8949, Mylapore, Chennai -600004/ AEE, Patna for information and necessary action.

(M.K.Singh)
Member-Secretary

BIHAR STATE POLLUTION CONTROL BOARD

PARIVESH BHAWAN, PLOT NO. NS-B/2, PALIPUTRA INDUSTRIAL AREA
PATLIPUTRA, Patna – 800 010

Ref. No.: - 1101. Patna Dated:- 23/6/23.

To,

M/s Ramco Industries Ltd.,
Plot No.-A-1, Industrial Area,
Jawahar Navoday Vidayalay Road,
Bihiya, Dist.-Bhojpur

Consolidated Consent to Operate and Authorization hereinafter referred to as the CCA (Consolidated Consent & Authorization) Renewal under Section- 25 of the "Water (Prevention & Control of Pollution) Act., 1974"and under Section- 21 of the "Air (Prevention & Control of Pollution) Act, 1981" and Authorization under "Rule -6(2)"of the "Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016"notified under "Environment (Protection) Act, 1986"as applicable (to be referred hereinafter as Water Act, Air Act and HW Rules respectively).

PCB ID application no.- 7330724, CCA	dated - 19.05.2023

CCA is hereby granted to **M/s Ramco Industries Ltd.,** , located at **Plot No.-A-1, Industrial Area, Jawahar Navoday Vidayalay Road, Bihiya, Dist.-Bhojpur** (25.552813, 84.463531). subject to the provisions of the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the orders that may be made further and subject to following terms and conditions: -

1. This CCA is granted for the period upto **30.06.2028** from the date of issuance of this letter, under Section-25 of the "Water (Prevention & Control of Pollution) Act, 1974.
2. This CCA is granted for the period upto **30.06.2028** from the date of issuance of this letter, under Section-21 of the "Air (Prevention & Control of Pollution) Act, 1981.
3. This CCA is granted for the period upto **30.06.2028** from the date of issuance of this letter under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016" notified under "Environment (Protection) Act, 1986.
4. Production capacity

Sl. No	Type of Industry	Install Product Capacity	License Product Capacity	Permitted by the Board
I.	Asbestos Cement Roofing Sheets	120000 MTA	120000 MTA	

5. **Water conservation:**

A. Fresh water consumption: 80 m^3/day

a. Categorization of existing groundwater area: Semi-Critical

b. Status of NOC from CGWA/SGWB: Granted
c. Validity of NOC: 18.12.2023
d. Details of Artificial recharge system/rain water harvesting unit installed with capacity
e. Details of piezometer installed i.e., numbers with coordinates.
f. Industry shall install sealed and calibrated flow meters at fresh water abstraction and consumption points (process & domestic) and maintain the logbooks for same.

Sl. No.	Sources of fresh water	Nos. with daily abstraction capacity		Applied quantity (KLD)	Max. Permitted abstraction quantity (KLD)	Status of flow meter installed
1.	Borewell	BW-1	70 KLD	80 KLD	80 KLD	Yes
		BW-2	10 KLD			
2.	Supply water	--		--	--	No
3.	Surface water/ Treated used water	--				No

B. Effluent generation, treatment and disposal: -

S.No.	Kind of Effluent	Maximum daily discharge, KLD	Treatment Facility and Discharge point
1	Domestic	05 KLD	Soak pit
2	Industrial	No Discharge	Not applicable

a. The specific quantity of maximum daily effluent discharge should not be more than the following:

S. No.	Type of Industry	Maximum daily treated effluent discharge limit* (L/T of Product)
1.	Asbestos Industry	Not applicable

*Maximum daily discharge shall be equal to multiplication of total production as per Para 4 and specific effluent discharge as per Para 5 (B-a). The treated effluent shall be recycled to the maximum extent and remaining treated effluent after tertiary level treatment shall be used for irrigation purpose/disposed.

b. Proper colour coding of pipe lines and water channels to be implemented for the recycled process water, fresh water and effluent carrying lines.

C. Domestic sewage

i. The domestic effluent should be treated separately in sewage treatment plant/ soak pit so that it should be in conformity with the following norms.

S. No.	Parameter	Standard
1.	pH	5.5 to 9.0
2.	BOD	30
3.	COD	250
4.	TSS	100
5.	A. Nitrogen	50

*Trade effluent and domestic sewage shall be treated separately and also to be monitored for compliance w.r.t. notified norms separately. However, Single outlet can be provided after mixing for outside disposal.

Cleaner Technology and waste minimization options:

i. For pollution abatement, appropriate technologies for effluent treatment in industry and to comply with the prescribed environmental norms, accomplish desired level of environmental protection and achieve prescribed norms of discharge.
ii. The industry shall implement a "Model for conservation of Water Management System" focusing on maximum recycling of water.
iii. The industry shall create Environment Management Cell by appointing Environment officer, Engineer, chemist, agricultural expert and the same copy submitted to the board with contact details.
iv. The industry shall resort to rain water harvesting as a measure towards avoiding exploitation of natural resources. Rain water recharge structures/ pits/ ponds near to processing area should be discouraged due to possibilities of entering effluent/ industrial runoff in ground water.

Environmental management system

i. Industry shall setup the environmental management cell including unit head, purchase/store manager, process operation head, ETP in charge to effectively monitoring of environmental compliance
ii. Industry shall setup the environmental laboratory for testing of minimum wastewater quality parameters like pH, TSS, BOD, COD, MLSS and DO to effectively monitoring of ETP control parameters and ETP discharge norms.

6. Air pollution mitigation: -

(i) The applicant shall use following fuel and install a comprehensive control system consisting of control equipment as is required with reference to generation of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards:

Sr. No.	Stack attached with	Stack height (Mt)	Type of Fuel	Fuel Quantity	Emission Control Equipment	Emission standards not to exceed
1	DG Set 1010 KVA	18 M	HSD	--	Acoustic enclosure	
2	DG Set 750 KVA	18 M	HSD	--	Acoustic enclosure	
3	DG Set 125 KVA	15 M	HSD	--	Acoustic enclosure	

In case of stoppage of functioning of STP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(ii) Noise from the D.G set and other sources (s) should be controlled by providing an acoustic enclosure as is required for meeting and ambient noise standards for night and day time as prescribed for respective areas/zones (industrial, Commercial, Residential, Silence) which are as follows: -

Standards for noise level in db(A) leq	**Industrial Area**		**Commercial Area**		**Residential Area**		**Silence Zone**	
	Day time	**Night time**	**Day time**	**Night time**	**Day time**	**Night time**	**Day time**	**Night time**
	75	**70**	**65**	**55**	**55**	**45**	**50**	**40**

Day time: - 6.00 am to 10.00 pm, Night time: - 10.00 pm to 06.00 am

(iii) The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only.

(iv) The industry shall keep record for boiler ash & its disposal and maintain the designated boiler ash disposal site properly fenced with caution display to avoid accidents.

(v) The APCS for controlling emissions should be properly maintained and continuously operated. The stack should be as per norms and regular monitoring of stack and ambient air should be done by the laboratory recognized under E(P) Act 1986 and report be sent to the Board.

(vi) The water shall be sprinkled on the roads and premises for suppression of road dust.

(vii) The industry shall provide On-line emission (stack) monitoring system to monitor, record and transmit the data related to SPM level (mg/Nm^3) to BSPCB / CPCB.

(viii) The industry shall prepare Standard Operating Procedures (SOPs) for accident management and Process safety management.

7. Conditions under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016: -

Hazardous Waste Management (As per FORM 2 - [rule 6(2)])

1. Number of authorization and date of issue : HW/ Patna, dated-
2. Reference of application (No. and date) : **, dated-**
3. **M/s Ramco Industries Ltd.** is hereby granted an authorization based on the enclosed signed inspection report for generation, collection, reception, storage, transport, reuse, recycling, recovery, pre-processing, co-processing, utilization, treatment, disposal or any other use of hazardous or other wastes or both on the premises situated at **Plot no. A/1, BIADA Industrial Area, Bihiya, Dist-Bhojpur.**

Details of Authorization

Sl. No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorized mode of disposal or recycling or utilization or co processing, etc.	Quantity (Ton/Annum)
1.	Used or Spent oil (HW cat. no. 5.1) as per Schedule-I.	Generation, collection, storage, transportation and offer for sale for the purpose of its recycling to authorized recycler.	Used oil: **3.2 KLA**
2.	Discarded asbestos/broken asbestos sheets (HW Category no. 15.2) as per Schedule-I.	Reuse after pulverization along with the raw materials in small proportion in the plant.	Discarded asbestos/ broken asbestos sheets: **1200 MTA**

1) The authorization shall be valid for a period of **five years from date of issue.**
2) The authorization is subject to the following general and specific conditions (Please specify any conditions that need to be imposed over and above general conditions, if any):

A. General conditions of authorization:

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty".
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12. An application for the renewal of an authorization shall be made as laid down under these Rules.

13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

B. Specific conditions:

a) ***The unit shall display details of hazardous waste at the main gate on board of 6'x 4' size.***
b) ***The unit shall maintain a record of hazardous and other wastes handled in Form-3 and shall submit annual return in Form-4 to this Board on or before 30th June of every year.***
c) ***The unit shall not store the hazardous waste in the premises for a period of more than 90 days provided the board has extended the said period.***
d) ***The unit shall store its hazardous waste used or spent oil (HW cat. no. 5.1) for the temporary period in MS drums for sale to the authorized recycler.***
e) ***The discarded asbestos (HW cat. no. 15.2) for its reuse after pulverization along with the raw materials in small proportion.***
f) ***The unit shall ensure that no damage is caused to environment during collection, storage & transportation of its HW.***
g) ***The unit shall ensure that HW are packaged in a suitable manner for safe handling, storage, transport and labelled as per Form-8 of the rule.***
h) ***The unit shall provide relevant information regarding hazardous nature of waste and measures to be taken in case of an emergency in Form-9 to the transporter.***
i) ***The unit shall maintain the manifest system (movement document) for the movement of HW within the country in Form-10 of the rule.***
j) ***In case of transportation of hazardous waste for recycling or utilization including co-processing, the unit (sender) shall intimate the State Board of the destination & transit State Board in compliance with rule-18(4 & 5) in addition with this Board.***
k) ***The unit (sender) shall obtain No Objection Certificate (NOC) for final disposal of hazardous & other waste to a facility existing in a state other than state where waste is generated, from the SPCB of both the state in compliance with rule-18(3).***
l) ***The unit shall sale the hazardous and other wastes to the authorized recycler/actual user after making the entry into their passbook.***

General Conditions

1. That, he/they shall not make any alteration, addition, deletion or modification in the plant without the prior clearance from the Board and shall also abide by the obligations under sections 22,23 and 31A of the Air(Prevention & Control of Pollution) Act, 1981 and further shall extend co-operation to the Board in performing its functions entrusted under sections 24,25 and 26 of the Act ;
2. That, he /they shall comply with the requirements of Rule 14 of the Environment (Protection) Rules, 1986; Rules 4, 5, 7, 9, 10 and 11 of the Hazardous and Other Wastes (Management & Transboundary Movement), Rules 2016; Rules 4, 5, 7, 8, 10, 11, 12, 13, 15, 17 and 18 of the Manufacture, Storage and Import of Hazardous Chemical Rules,1989; and the provisions of the Public Liability Insurance Act, 1991, whichever is applicable;
3. That, he/they shall monitor his/their emission(s) and the ambient air quality from representative point regularly and shall maintain its quality in conformity with Board's standards and shall produce its proof, as and when asked for;
4. That, he/they shall submit application for consent again 30 days before the expiration of the period of consent or within 30 days from the date of receipt of this order, whichever is applicable;
5. That, they shall comply with and ensure emission standard as prescribed in schedule-I of the Environment (Protection) Rules, 1986 as amended to date and as Notification G.S.R. 497 (E) Dated 10.05.2016 of MoEFCC which copy is being attached;

6. As per CGWA permission the unit shall extract 80 KLD water. After due permission of CGWA, the unit may extract as per the quantity approved.
7. That, all air pollution control facilities (Bag filters/cyclone etc at various points) shall be maintained properly and they shall be operative all the time;
8. That, online continuous emission monitoring of stack emission of cement mill & slag mill shall be calibrated periodically, maintained properly and they should be connected to Bihar State Pollution Control Board (BSPCB) server for data transfer;
9. That, covered shed should be provided to area of tippler (if any) for all raw materials, loading area for finished products and for storage of all raw materials;
10. That, they shall ensure installation of windscreens at required places to break up the wind flow, wetting of road inside the campus to reduce traffic dust, control of vehicle speed on sight, providing dust collection equipment at all possible points, periodical washing of construction equipment and transport vehicles to prevent fugitive emission from accumulated dust, vehicles should be covered during transportation, limitation of certain activities etc;
11. That, they should submit an action plan to further improve the fugitive emission from several points in the plant;
12. That, they should ensure further improvement in housekeeping including road dust collection, regular sweeping, water sprinkling etc and maintain a log book in this regard;
13. That, massive tree plantation shall be done to improve ecology of the surroundings specially to minimize fugitive dust in the ambient air;
14. That, diesel generating sets (DG Sets), if any; as source of backup power should be provided with an integral acoustic enclosure and the maximum permissible sound pressure level for new D.G. set shall be 75 dB(A) at 1 meter from the enclosure surface. The height of exhaust of DG sets should be as: Exhaust Stack Height formula:- (Ht of Building in meter + $0.2\sqrt{KVA}$) m; it should be installed on pucca base with anti vibration pads;
15. That, they shall ensure all possible measures to be implemented to control noise pollution and the ambient noise levels should conform to the standards prescribed under the Noise Pollution (Regulation and Control) Rules, 2000, as amended to date viz. 75 dB(A) during day time and 70 dB (A) during night time;
16. That, they shall comply with conditions of EC obtained from the Authority in previous and report shall be submitted accordingly;
17. That, solid waste shall be managed properly so that no any nuisance is created in nearby area. They should provide adequate and appropriate arrangements to store solid waste (if any) inside their industrial premises in an environmentally sound manner and shall be disposed of properly at designated place and a quarterly report containing quantity of generation, re-used, if any and disposed, site of disposal etc shall be submitted to the Board;
18. That, they shall submit Ambient Air Quality (AAQ) report (including noise) quarterly to the Board within consent period and air quality should confirm to the prescribed standard;
19. That, the Environmental Statement as prescribed in the E (P) Rules, 1986 [see rule 14] for the each financial year ending the 31st March, shall be submitted by the month of September every year;
20. That, they shall make provisions for display of data outside main factory gate about quantity and quality of water discharge and air emission along with solid waste generated within the factory premises;

21. The unit shall provide arrangement to control fugitive emission caused due to pliance of vehicle, loading/unloading of Raw meterials/products;
22. That, notwithstand any thing stated above, the applicant unit shall abide by all the provisions of the environmental laws including policies and guidelines made there under;.
23. The applicant shall get analyses the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF&CC and shall report to the SPCB.
24. The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gases emission or sewage waste from the unit.
25. Treated waste water and domestic waste water shall be disposed jointly at one disposal point. The applicant shall provide discharge measurement equipment at final disposal point.
26. The applicant shall maintain good housekeeping. All valves/pipes/sewer/drains etc. must be leak-proof.
27. The industry shall provide uninterrupted entry to this STP's/ETP's inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control measures.
28. The industry shall provide "Inspection Book" at the time of inspection to the Board's officials.
29. Whenever due to any accident or other unforeseen act or event, such emission occurs or is apprehended to occur in excess of standards laid down, such information shall be reported to the Board's offices and all other concerned offices. In case of failure of pollution control equipment, the production process connected to it shall be stopped with immediate effect.
30. In case of any damage to the agriculture productivity, human habitation etc. by the operation of industry, it shall be imperative to stop production in the industry with immediate effect and such information shall be reported to Board's offices. The industry shall be liable to pay compensation also in such cases as decided by the Competent Authority.
31. The applicant shall apply before the 60 days of expiry of CCA or any change in production types/production capacity/manufacturing process/capacity enhancement etc. or any change in effluent discharge point or emission point.
32. The **Board** reserves the right to revoke/add/modify any stipulated conditions issued along with CCA, as may be necessary.
33. Any unauthorized change in personnel, equipment as working condition as mentioned in the application by the person authorized shall constitute a breach of his authorization.
34. It is the duty of the authorized person to take prior permission of the **Board** to close down the facility.
35. Industry shall submit the latest copy of Audit Balance sheet/C.A. Certificate (Fixed Assests + Current Assets-Current Liabilities) so that the Consent fee payable by the industry may be verified.
36. Generated hazardous waste shall be stored temporarily in the factory premises and disposed of through authorized TSDF after obtaining the authorization from the Board
37. Unit shall develop green belt.
38. The industry shall comply with the provisions of Environment (Protection) Amendment, Rules 2018 notified by MoEF&CC by Notification no 49 Dt. 25.01.2018, Environment (Protection) Act 1986, Water (Prevention and Control of Pollution) Act, 1974 as amended, Air (Prevention and Control of Pollution) Act, 1981 as amended, Plastic Waste Management Rule 2016, E-Waste (Management and Transboundary Movement) Rules 2016 (Whichever is applicable).

39. If closure order is issued by CPCB or SPCB against the unit then CCA will remain suspended during the closure period. After ensuring the compliance and after revocation of the closure order, the CCA will automatically be effective from the date of issuance of the closure revocation order with additional conditions mentioned in the closure revocation order.

23/6/23

(S. Chandrasekar)
Member-Secretary

BIHAR STATE POLLUTION CONTROL BOARD
PariveshBhawan, NSB-2, PatliputraIndustrial Area
Patliputra, Patna - 800 010

Ref. No. – प/त 3-01/14 206. Patna, dated:- 24.1.24

From,

S. Chandrasekar, IFS
Member Secretary

To,

Authorize Signatory
M/s. Ramco Industries Limited,
Plot No. A 1,
BIADA Industrial Area,
Opp. Mahathin Mai Temple Bihiya,
Dist-Bhojpur-802152

Sub.: Amendment of the quantum of the abstraction of the Ground Water from 80 KLD to 195 KLD.

Ref:- (i) Your Letter dated- 18.01.2024
(ii) Consolidated Consent to Operate and Authorization Vide Board's Letter no. 1101, dated 23.06.2023

Sir,

With reference to above and this office Consolidated Consent to Operate and Authorization Vide Letter no. 1101, dated 23.06.2023 under the Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 & Hazardous and other Wastes (Management and Transboundary) Rules, 2016 was issued in favour of M/s Ramco Industries Ltd. Plot No. A 1, BIADA Industrial Area, Opp. Mahathin Mai Temple Bihiya, Dist-Bhojpur-802152

Your request for increase in the quantity of Water Consumption (Manufacturing) by the unit for different purposes was received in response to which the amended quantity of water consumption for various purposes may henceforth be read as;

Manufacturing	=	188.00 KLD
Domestic	=	07.00 KLD
Total	=	195.00 KLD

Other terms and conditions vide Consent Order No. 1101, dated 23.06.2023 shall remain unchanged.

Yours faithfully
24/1/24
(S. Chandrasekar)
Member Secretary

EPABX & 0612-2261250/2262265, Fax & 0612-2261050
E-mail: mmbspcb-gov.in, Website &http://bspcb.bih.nic.in

Doc 6 - GW NOC - CGWA

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
केन्द्रीय भूमि जल प्राधिकरण
Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)
NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	Ramco Industries Limited		
Project Address:	Plot No. A-1, Biada Ind Area, Bihiya		
Town:	Behea (np)	Block:	Behea
District:	Bhojpur	State:	Bihar
Pin Code:			
Communication Address:	Ramco Industries Limited, Plot No. A-1,, Biada Industrial Area, Bihiya, Behea, Bhojpur, Bihar - 802152		
Address of CGWB Regional Office :	Central Ground Water Board Mid Eastern Region, 6th & 7th Floor, Lok Nayak Jai Prakash Bhawan, Frazer Road Dak Banglow, Patna, Bihar - 800011		

1.	**NOC No.:**	CGWA/NOC/IND/REN/2/2023/8793	2.	**Date of Issuence**	25/12/2023
3.	Application No.:	21-4/282/BR/IND/2017	4.	Category: (GWRE 2022)	Semi Critical
5.	Project Status:	Existing Ground Water	6.	NOC Type:	Renewal
7.	**Valid from:**	19/12/2023	8.	**Valid up to:**	18/12/2026

9. Ground Water Abstraction Permitted:

Fresh Water		Saline Water		Dewatering		Total	
m³/day	m³/year	m³/day	m³/year	m³/day	m³/year	m³/day	m³/year
80.00	29200.00						

10. Details of ground water abstraction /Dewatering structures

Total Existing No.:0							Total Proposed No.:0					
DW	DCB	BW	TW	MP	MPu		DW	DCB	BW	TW	MP	MPu

*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit;MPu-Mine Pumps

11.	Ground Water Abstraction/Restoration Charges paid (Rs.):	116800.00
12.	Environment Compensation (if applicable) paid (Rs.):	0.00

13.	Number of Piezometers(Observation wells) to be constructed/ monitored & Monitoring mechanism.	No. of Piezometers	Monitoring Mechanism		
			Manual	DWLR**	DWLR With Telemetry
	**DWLR - Digital Water Level Recorder	1	0	1	0

(Compliance Conditions given overleaf)

This is an auto generated document & need not to be signed.

CENTRAL GROUND WATER AUTHORITY

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011
Phone: (011) 23383561 Fax: 23382051, 23386743
Website: cgwa-noc.gov.in

पानी बचाये – जीवन बचाये
SAVE WATER - SAVE LIFE

Validity of this NOC shall be subject to compliance of the following conditions:

Mandatory conditions:

1) Installation of tamper proof digital water flow meter with telemetry on all the abstraction structure(s) shall be mandatory for all users seeking No Objection Certificate and intimation regarding their installation shall be communicated to the CGWA within 30 days of grant of No Objection Certificate.

2) Proponents shall mandatorily get water flow meter calibrated from an authorized agency once in a year.

3) Construction of purpose-built observation wells (piezometers) for ground water level monitoring shall be mandatory as per Section 14 of Guidelines. Water level data shall be made available to CGWA through web portal. Detailed guidelines for construction of piezometers are given in Annexure-II of the guidelines.

4) Proponents shall monitor quality of ground water from the abstraction structure(s) once in a year. Water samples from bore wells/ tube wells / dug wells shall be collected during April/May every year and analysed in NABL accredited laboratories for basic parameters (cations and anions), heavy metals, pesticides/ organic compounds etc. Water quality data shall be made available to CGWA through the web portal.

5) In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGWB for ground water level monitoring four (4) times a year (January, May, August and November) in core as well as buffer zones of the mine.

6) In case of mining project the firm shall submit water quality report of mine discharge/ seepage from Govt. approved/ NABL accredited lab.

7) The firm shall report compliance of the NOC conditions online in the website (www.cgwa-noc.gov.in) within one year from the date of issue of this NOC.

8) Industries abstracting ground water in excess of 100 m 3 /d shall undertake annual water audit through certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 20% over the next three years through appropriate means.

9) Application for renewal can be submitted online from 90 days before the expiry of NOC. Ground water withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of Environment (Protection) Act, 1986.

10) This NOC is subject to prevailing Central/State Government rules/laws/norms or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/discharge of effluents or any such matter as applicable.

General conditions:

11) No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).

12) The proponent shall seek prior permission from CGWA for any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).

13) Proponents shall install roof top rain water harvesting in the premise as per the existing building bye laws in the premise.

14) The project proponent shall take all necessary measures to prevent contamination of ground water in the premises failing which the firm shall be responsible for any consequences arising thereupon.

15) In case of industries that are likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm.

16) Wherever feasible, requirement of water for greenbelt (horticulture) shall be met from recycled / treated waste water.

17) Wherever the NOC is for abstraction of saline water and the existing wells (s) is /are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any.

18) Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.

19) In case of violation of any NOC conditions, the applicant shall be liable to pay the penalties as per Section 16 of Guidelines.

20) This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.

21) The issue of this NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of the NOC.

22) In case of change of ownership, new owner of the industry will have to apply for incorporation of necessary changes in the No Objection Certificate with documentary proof within 60 days of taking over possession of the premises.

23) This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/court orders in cases related to ground water or any other related matters.

24) Proponents, who have installed/constructed artificial recharge structures in compliance of the NOC granted to them previously and have availed rebate of upto 50% (fifty percent) in the ground water abstraction charges/ground water restoration charges, shall continue to regularly maintain artificial recharge structures.

25) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, pharmaceutical, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution as per Annexure III of the guidelines.

26) In case of new infrastructure projects having ground water abstraction of more than 20 m3/day, the firm/entity shall ensure implementation of dual water supply system in the projects.

27) In case of infrastructure projects, paved/parking area must be covered with interlocking/perforated tiles or other suitable measures to ensure groundwater infiltration/harvesting.

28) In case of coal and other base metal mining projects, the project proponent shall use the advance dewatering technology (by construction of series of dewatering abstraction structures) to avoid contamination of surface water.

29) The NOC issued is conditional subject to the conditions mentioned in the Public notice dated 27.01.2021 failing which penalty/EC/cancellation of NOC shall be imposed as the case may be.
30) This NOC is issued subject to the clearance of Expert Appraisal Committee (EAC) (if applicable).
31) In the self-compliance report, the PP shall submit details of Drilling Agency/ Agencies, which has/ have constructed BW(s)/ TW(s) along with undertaking to the effect that all necessary measures have been taken as per directions of Hon'ble Supreme Court provided in Annexure-VII of guidelines dated 24.09.2020 in respect of abandoned/ failed BW(s)/ TW(s)/Piezometer(s), if any. The PP is advised to engage registered drilling agency/ agencies. In the event of any mishap/ unfortunate incident due to negligence in taking measures for prevention of accident due to falling in Bore Well, both PP and concerned drilling agency shall jointly be held responsible and penal action as per extant Government rules shall be taken.

(Non-compliance of the conditions mentioned above is likely to result in the cancellation of NOC and legal action against the proponent.)

CENTRAL GROUND WATER AUTHORITY

CENTRAL GROUND WATER AUTHORITY

Department of Water Resources, River Development and Ganga Rejuvenation
Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011
Phone: (011) 23383561 Fax: 23382051, 23386743
Website: cgwa-noc.gov.in

पानी बचाये – जीवन बचाये
SAVE WATER - SAVE LIFE

Doc 7 - CGWA NOC- 260 KLD

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
केन्द्रीय भूमि जल प्राधिकरण
Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Ground Water Authority

MODIFICATION REQUEST
(EXPANSION)

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	Ramco Industries Limited		
Project Address:	Plot No. A-1, Biada Ind Area, Bihiya		
Town:	Behea (np)	Block:	Behea
District:	Bhojpur	State:	Bihar
Pin Code:			
Communication Address:	A1, Biada Industrial Area, Bihiya, Ara, Ara, Bhojpur, Bihar - 802152		
Address of CGWB Regional Office :	Central Ground Water Board Mid Eastern Region, 6th & 7th Floor, Lok Nayak Jai Prakash Bhawan, Frazer Road Dak Banglow, Patna, Bihar - 800011		

1.	**NOC No.:**	CGWA/NOC/IND/EXP/2024/73	2.	**Date of Issuence**	12/08/2024
3.	Application No.:	21-4/282/BR/IND/2017	4.	Category: (GWRE 2023)	Semi Critical
5.	Project Status:	Existing Project	6.	NOC Type:	Expansion
7.	**Valid from:**	19/12/2023	8.	**Valid up to:**	18/12/2026

9. Ground Water Abstraction Permitted:

Fresh Water		Saline Water		Dewatering		Total	
m³/day	m³/year	m³/day	m³/year	m³/day	m³/year	m³/day	m³/year
260.00	94900.00						

10. Details of ground water abstraction /Dewatering structures

	Total Existing No.:2						**Total Proposed No.:0**					
	DW	DCB	BW	TW	MP	MPu	DW	DCB	BW	TW	MP	MPu
Abstraction Structure*	0	0	2	0	0	0	0	0	0	0	0	0

*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit;MPu-Mine Pumps

11.	Ground Water Abstraction/Restoration Charges paid (Rs.):	131400.00
12.	Environment Compensation (if applicable) paid (Rs.):	0.00

13.

Number of Piezometers(Observation wells) to be constructed/ monitored & Monitoring mechanism.	No. of Piezometers	Monitoring Mechanism		
		Manual	DWLR**	DWLR With Telemetry
**DWLR - Digital Water Level Recorder	1	0	1	0

(Compliance Conditions given overleaf)

This is an auto generated document & need not to be signed.

Validity of this NOC shall be subject to compliance of the following conditions:

Mandatory conditions:

1) Installation of tamper proof digital water flow meter with telemetry on all the abstraction structure(s) shall be mandatory for all users seeking No Objection Certificate and intimation regarding their installation shall be communicated to the CGWA within 30 days of grant of No Objection Certificate.

2) Proponents shall mandatorily get water flow meter calibrated from an authorized agency once in a year.

3) Construction of purpose-built observation wells (piezometers) for ground water level monitoring shall be mandatory as per Section 14 of Guidelines. Water level data shall be made available to CGWA through web portal. Detailed guidelines for construction of piezometers are given in Annexure-II of the guidelines.

4) Proponents shall monitor quality of ground water from the abstraction structure(s) once in a year. Water samples from bore wells/ tube wells / dug wells shall be collected during April/May every year and analysed in NABL accredited laboratories for basic parameters (cations and anions), heavy metals, pesticides/ organic compounds etc. Water quality data shall be made available to CGWA through the web portal.

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भारत सरकार / Government of India
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forest & Climate Change
क्षेत्रीय कार्यालय/ Regional Office
पता: द्वितीय तल, झारखण्ड राज्य आवास बोर्ड मुख्यालय, हरमू चौक, राँची, झारखण्ड - 834002
Add: 2nd Floor, Headquarter-Jharkhand State Housing Board, Harmu Chowk, Ranchi, Jharkhand - 834002
Tel: 0651-2410002, 2410007; E-mail: ro.ranchi-mef@gov.in

DOC & CCR ISSUED

File No. 105-76/11/EPE/ A21 Date: 09.07.2024

सेवा में ,

वैज्ञानिक 'F' / निदेशक(अनुवीक्षण सेल),
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय,
इंदिरा पर्यावरण भवन, जोर बाग रोड, अलीगंज,
नई दिल्ली - 110003

(Kind attention: Dr.Shruti Rai Bhardwaj),

विषय: Public Grievance received from Shri. Akhilesh Yadav, Shri. Saroj Singh and Shri. Mantu Yadav vide email dated 27.10.2023 regarding the pollution caused by Ramco Indutries Limited located at Plot No. A1, Industrieal Area, Village & Taluk Bihiya, District Bhojpur, Bihar

सन्दर्भ: 1.Ministry's EC letter no. J-11011/17/2010-IA II (I) dated 17.01.2011 and EC amendment letter no. J-11011/17/2010-IA.II(I) dated 26.11.2019
2. Ministry's email dated 11-12-2023.

महाशया/ महाशय,

I am directed to inform that w.r.t. Ministry's email dated 11-12-2023 the project "Asbestos Fibre Cement Sheet Plant (1,20,000 TPA) at Plot No. A1, Industrial area Village & Taluk Bihiya, District Bhojpur, Bihar by M/s Ramco Industries Limited" was monitored by Shri M. R. Prasad, Scientist 'C' on 26/27-02-2024 and the site inspection/monitoring report as well as point wise reply to the issue raised in Public Grievance are attached herewith. This is for your kind perusal and necessary action, please.

This issues with the approval of Dy. DGF(C) and HoD, RO Ranchi.

विश्वासभाजन,

अनुलगनक : संलगन

MRPrasad

(एम. आर. प्रसाद)
वैज्ञानिक 'C'

प्रतिलिपि:

1. PPS to DGF&SS, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, इंदिरा पर्यावरण भवन, जोरबाग रोड, अलीगंज, नई दिल्ली- 110003 (को सूचनार्थ)
2. वन महानिरीक्षक (ROHQ), पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, इंदिरा पर्यावरण भवन, जोरबाग रोड, अलीगंज, नई दिल्ली- 110003 (को सूचनार्थ)

3. वैज्ञानिक 'F', (Kind attention: Dr. R.B.Lal), पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, इंदिरा पर्यावरण भवन, जोरबाग रोड, अलीगंज, नई दिल्ली- 110003
4. सदस्य सचिव, बिहार राज्य प्रदूषण नियंत्रण पर्षद्, पटना , बिहार
5. वरिष्ठ महाप्रबंधक, (कार्य), मेसर्स रामको इंडस्ट्रीज लिमिटेड, जिला भोजपुर, बिहार

(एम. आर. प्रसाद)
वैज्ञानिक 'C'

MONITORING REPORT ON THE SITE INSPECTION OF THE PROJECT ASBESTOS FIBRE CEMENT SHEET PLANT (1,20,000 TPA) OF M/S RAMCO INDUSTRIES LIMITED.

The Ministry had accorded environment clearance to the project " Asbestos Fibre Cement Sheet Plant (1,20,000 TPA) at Plot no. A1, Industrial area Village & Taluk Bihiya, District Bhojpur, Bihar by M/s Ramco Industries Limited" vide letter number J-11011/17/2010-IA II (I) dated 17.01.2011.

Subsequently, the Ministry issued an amendment of the condition no, x of the Environment clearance letter granted to the project earlier vide dated 17.01.2011, which stated that after five years operation of the plant no ground water shall be used and only rain water shall be used". The amendment letter bears the number J-11011/17/2010-IA.II(I) dated 26.11.2019 with modification of the condition no x. .....of the Environment clearance, which is to be read as " *The ground water abstraction shall be through two existing tube wells only which shall be carried with valid NOC from Central Ground Water Authority (CGWA). Abstraction of ground water shall not exceed 23,620 m3/year as per the recommendation of CGWA vide order F.no. 21-4/282/BR/IND/2017-103 dated 22.01.2019.*"

The Ministry had received Public Grievance from Shri Akhilesh Yadav, Shri Saroj Singh and Shri Mantu Yadav via email dated 27.10.2023. The issues raised in the petition were pollution caused by M/s Ramco Industries Limited. The Complaint alleged that:

a. The project was causing pollution in the nearby area.
b. There is issue of TSS, BOD in the water due to the project
c. Roads were not cleaned
d. Parking and sanitation issues.

In light of the Ministry's directions to the Regional Office, seeking latest inspection report with respect to the issues raised in the Public Grievance, a Site Inspection was carried out by Shri M. Rajeshwar Prasad, Scientist 'C' from the Regional Office on 26th and 27th of February, 2024. During the inspection, the following Executives / Officials were present from the project:

i. Shri S. Rama Moorthi, Senior General Manager, (Works)
ii. Col (Rtd.) Chandrasekhar Singh, Sr. Manager
iii. Shri Gaurav Mittal, Assistant Manager, Works
iv. Shri Shankar Narayan, Engineer (Civil)

COMPLIANCE STATUS OF MOFF CONDITIONS

Letter No F.No.J-11011/17/2010-lA Il (l) dated 17.01.2011

A. SPECIFIC CONDITIONS

<table>
<tr><th>Sl. No.</th><th>CONDITION</th><th>STATUS OF COMPLIANCE</th><th>REMARKS</th></tr>
<tr><td>i.</td><td>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.</td><td>From the reports submitted by the project authorities, it is noted that the project is adhering to the BIS standards. It is stated that the project is following the standards prescribed the details of which is mentioned in the table below:</td><td>Being complied but further action needed.</td></tr>
<tr><td colspan="4">Tablular statement on various BIS standards being followed by the project.
<table>
<tr><th>Sl.no</th><th>BIS PARTICULARS</th><th>APPLICABLE FOR THE PURPOSE</th></tr>
<tr><td>1</td><td>IS – 11450</td><td>Determination of airborne asbestos fibre concentration in the work environment.</td></tr>
<tr><td>2</td><td>IS – 1141</td><td>Safety and health requiremments</td></tr>
<tr><td>3</td><td>IS – 11769 and IS-11770</td><td>Asbestos cement product</td></tr>
<tr><td>4</td><td>IS – 12078</td><td>Handling of asbestos fibre</td></tr>
<tr><td>5</td><td>IS – 12081</td><td>Pictorial warning signs and precautionary notices for asbestos and product containing asbestos.</td></tr>
</table>
The project proponents need to provide a copy of all the certificates of the BIS standards issued by the competent authority and being followed by them to the Regional Office.</td></tr>
<tr><td>ii.</td><td>Only Chrysotile white asbestos fiber shall be used. Blue asbestos shall not utilized as raw material in the manufacturing process.</td><td>It is submitted by the project proponents in their reports and during the site inspection that only chrysolite white fibre was being used as raw material in the manufacturing process and no blue asbestos was being used. It is also noted from the reports submitted by the supplier that Chrysolite white fibres were being supplied. Further it is assured by the project proponents that they will not be using blue asbestos as raw material in the manufacturing process. (picture given in compliance to specific condition no. iv)</td><td>Being complied with an assurance.</td></tr>
<tr><td>iii.</td><td>There shall be no manual handling/opening of asbestos fiber bags. The</td><td>As observed during the inspection of the plant, it was noted that opening of asbestos bags was being done mechanically. It was also observed</td><td>Being complied,</td></tr>
</table>

	company shall install fully automatic asbestos fiber debagging system before commissioning the unit.	that there is no manual handling/opening of asbestos Fibre bags. Fibre was observed to be stored in polythene woven bags and de bagging was being done through the automatic bag opening device (BOD) wherein the bags are automatically shredded.	
iv.	Fugitive emissions shall be controlled by bringing cement in closed tankers, fly ash covered trucks and asbestos in impervious bags opening inside a closed mixer. 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.	Within the industrial plant it was observed that Cement & Fly ash were bought in closed Bulk carrier vehicles and loading as well as unloading was being carried out through pneumatic processes in which spillage and dust emission was not seen. Fibre bags were opened in fully automatic closed circuit area called BOD (Bag Opening Device). Duct collectors with cyclone type are used For pollution control in cement flyash, fibre silo. In above circuit and pulverized the positive fugitive emission are recycled and used in RM. Vacuum cleaner was being used in Fibre mill area. Cement and fly ash are storage in separate silos. **However, it was observed that the project authorities may increase the frequency of wetting the roads connecting the plant and the asbestos storage areas so that fugitive emissions generated due to movement of transport vehicles may be further reduced,**	**Being complied but further action needed.**
 **The manufacturing process**		 **Closed circuit fibre bag opening, dust collector pulverised and recycling process**	
v.	The company shall comply with total dust emission limit of 2mg/Nm3 as notified under the Environment (Protection) Act, 1986.	From the data on emissions is observed that the project proponent are complying with the prescribed emission standards. From the details of Stack Monitoring submitted at the Work place. It is noted that the Fibre count is within the standards prescribed norms,	**Being complied.**

	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 O.1 fiber/cc.	Details on the Fibre concentration from different locations is tabulated below:	
	Table : Statement on the Fibre Concentration (at static locations) during the period Mar 2022 to Mar 2024.		
vi.	Bags containing asbestos fiber shall be stored in enclosed area to avoid fugitive emissions of asbestos fiber from damaged bags, if any	It was observed that the project has an area of earmarked separately for storage (reportedly925 sq.mtrs). However, bags containing asbestos fibre were not observed. It was stated that all the damaged bags are recycled in the process.	**Being complied.**
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 include: a. All monitoring transfer points shall be connected to dust extraction system. b. Leakages or dust from machines and ducts shall be plugged.	It was observed during the site inspection that the project authorities are in the process of complying with the stipulated conditions by adopting measures like good housekeeping facility with vacuum cleaning of the floor in the plant area. Installation of a complete closed circuit manufacturing process with enclosed belt conveyer. The asbestos bags are being brought through conveyor to BOD.	**Being complied.**

Sl	Station Location	December, 2022	March, 2023
1	D E Stack connected to Pulverizer	0.098	0.034
2	Fibre Godown	0.060	0.04
3	Work Zone area of the plant	0.048	0.064
4	Ambient Air near Canteen	0.08	0.06
5	DE Stack connected to BOD & Edge Mill	0.086	
6	Fibre DE Stack connected to BOD & Edge Runner Mill		0.022
7	ER Mill Hydro Distintegrator		0.048

	c. Floor shall be cleaned by vacuum cleaner only. Enclosed belt conveyer shall be used instead of manual transportation of asbestos within the premises.		









Wastes generated from the machines are sent into the pulveriser for recycling and reuse





Good Housekeeping being maintained in the industrial 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;NlOS-lTRC/NCB or any other approved agency and report submitted to the Ministry's Regional Office at Ranchi SPCB and CPCB.	The project have their own laboratory set up for asbestos industrial plants With respect to monitoring of asbestos fibre count in the work zone at their R & D Center, Chennai, with the Phase contrast Microscope Olympus BX-50, t on monthly basis. It is also submitted by the project proponents that they have also engaged Third Party for Asbestos fibre count in the work zone by M/s J R Lab. The details of tested data's at our site by the third party is tabulated below:	

Table: Fiber concentration at static locations As submitted by the project proponent

Sl	Station location	December, 2022	March, 2023
1	D E Stack connected to Pulverizer	0.098	0.034
2	Fibre Godown	0.060	0.040
3	Work Zone area of the plant	0.048	0.064
4	Ambient Air near Canteen	0.08	0.060
5	DE Stack connected to BOD & Edge Mill	0.086	
6	Fibre DE Stack connected to BOD & Edge Runner Mill		0.022
7	ER Mill Hydro Distintegrator		0.048

Table: Concentration of fibres in persons working at diff locations as submitted by the project proponents.

Sl	Station location	December, 2022	March, 2023
1	BOD – E R Mill	0.052	0.088
2	Fork Lift operator	0.032	0.056
3	Q C Lab Assistant	0.040	0.060
4	SF Drum Cutter Office		0.084
5	Stripping Mill		0.052
6	MG Section Moulding		0.056
7	Salvaging Section		0.096
8	Ball Mill		0.084
9	Pulverizer		0.088

Limit prescribed: 0.1 fibre / cc of air.

From the reports it is noted that the monitoring agency, M/s JR Labs is not stated to be NABL accredited laboratory. The project proponents are suggested to get the analysis carried out through NABL accredited laboratory.

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.	The project has developed a pond of holding capacity 2070 m3 for rain water harvesting. The project has also developed three numbers of recharge pits for recharge of ground water with runoff rain water. It is reported that monitoring is done on daily basis for consumption of water and limiting it to within the stipulated limit 80cum/day. **The project proponents need to provide recorded meter readings on the ground water drawl per day to the Regional Office.**	**Being complied but further action needed.**
	 **Rain water harvesting pond constructed within the industrial plant.**		
x.	After five years operation of plant, no ground water shall be used and only rain water shall be used. The amended condition reads as follows: *The ground water abstraction shall be through two existing tube wells only which shall be carried with valid NOC from Central Ground Water Authority (CGWA). Abstraction of ground water shall not exceed 23,620 m3/year as per the recommendation of CGWA vide order F.no. 21- 4 / 282/ BR/ IND/ 2017-103 dated 22.01.2019.*	The Ministry has amended the stipulated condition and has permitted the project to continue ground water abstraction from exiting two nos tube well by MoEFCC New Delhi office, on 26.11.2019. This is an amendment in the condition of EC F.No. J11011/17/2010-IAII(I) dated 17.01.2011. In compliance to the amended condition, it is noted that the project authorities are drawing ground water from two wells and limiting their water drawl to within the prescribed limit.	**Being complied.**



Photograph of one of the two bore wells in operation within the plant.

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.	It is reported by the project authorities that the project is not discharging any industrial effluent to the outside. During the inspection, it was also noted that that there was a closed system circuit for water consumption and recycle/reuse in the industrial process. The project has reported that they are ensuring zero discharge. Further, it is stated that additional surface runoff and waste water in the pond, is used for green belt development.	
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 cannot 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	During the inspection, it was noted that the project is in the process of utilizing various solid wastes generated in the process through recycling and reuse. It is also submitted by the project authorities that Solid wastes generated in the industrial process, including process rejects, dirt from bag filters and empty asbestos bags are being pulverized and recycled back in the manufacturing process. It was observed during the inspection that the sludge, and other hazardous waste are being recycled and reused in the industrial plant. The asbestos fibres and broken to pieces of asbestos are pulverised and recycled in the plant. The project authorities have stated that there was no waste generated in the plant which has been disposed outside the plant.	**Being complied.**

	Bureau of Indian Standard Code.		
xiii.	The cut and damaged fibre bags shall immediately be repaired. 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.	During the site visit, there was no cut or damaged bag noticed within the industrial plant. It is reported by the project authorities that the damaged fibre bags would be immediately sealed before unloading at site. There was no manual handling /opening of the fibre bags observed in the plant. The fibre bags are fed into a Bag opening device (BOD). It was noted that bags are automatically shredded, recycled and reused in the plant.	**Being complied.**
xiv.	The company shall obtain a certificate from the supplier of chrysotile fibre that it does not contain any toxic or trace metals. A copy of certificate shall be submitted to the Ministry of Environment and forest.	It has been submitted by the project authorities that they receive certificates from the suppliers for every lot Chemical analysis report of chrysotile fibre from supplier. This certificate is submitted to Regional Office.	**Being complied.**
xv.	Regular medical examination of the workers and health monitoring of all the employees shall be carried out and if cases of asbestos are detected, necessary compensation shall be arranged under the existing laws. A competent occupations health physician shall be appointed to carry out medical surveillance. Occupational health of all the workers shall be monitored for lung function test , chest x-ray, sputum for acid-fast-bacilli (AFC) and asbestos body(AB) ,urine for sugar and albumen, bloat tests for TLC,DLC,ESR, Hb and records maintained for at least 40 years from the beginning of the employment or 15 years after the retirement or cessation of employment whichever is later. Occupational health surveillance shall be carried out as per the directives of the Hon'ble supreme court.	It was noted from the reports submitted to this Regional Office, that the project was carrying out Medical examination of employees carried out by competent occupational health physician periodicaiiy for Sputum test, Lungs Function Test (PFT), bloat tests for TLC,DLC,ESR, Hb , Chest X Ray and general medical checkup. Pre-employment tests were also reported to have been carried out as per factory act and all records pertaining to health checkup are maintained as per IS : 11451 and factory act. The project authorities submit to the Office that the directive of Supreme court is being followed. Records were being maintained in office. **However, details on the number of employees medically examined and results of the medical examinations need to be submitted to the Regional Office.**	**Being complied but further action needed.**
xvi.	To educate the workers, all the work places where asbestos dust may cause hazard shall be clearly indicated as a dust exposure area through the use	It was observed during the inspection that the project has provided display signs of Asbestos fibre for identifying the hazards and associated health effects, at some locations inside the factory for safety awareness.	**Being complied but further action needed.**

	of display signs which identifies the hazard and the associated health effects.	**However, it is viewed that the project authorities may also conduct Health Awareness and Safety Workshops in the plant in a year for the betterment and safety of the workers. Project proponents should provide details on the training of workers during the last 3 years including number of workers undergone training per year.**	
xvii.	The company shall also undertake rain water harvesting measures and plan of action shall be submitted to the Ministry of Environment and forest within three months.	The project authorities have constructed a pond for storage of rain water. The pond has a capacity of 2070 m3 with a depth of 5 m for rain water harvesting system. This apart, the project authorities have made three rain water recharge pits in tri angle position.	**Being complied.**





Photographs of rain water harvesting structures/ pits in the plant

xviii.	All the commitments made to the. public during the public hearing / public consultation meeting held on 22nd Nov., 2010 shall be satisfactorily implemented and separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Ranchi.	Public hearing points are as follows: 1. Controlling emission from chimney it is well controlled and time to time checked by third party. There is no coal based activity. 2. Implementing rain water harvesting: Rain water harvesting pond and recharge pit are made available.	**Being complied.**
xix.	Green belt shall be developed in at least 33% of plant area as per the CPCB guidelines in consultation with DFO.	A good green belt area has been developed within and around the plant by the project. The green belt developed is in an area of 8 acres which is reported by project proponents to be approximately 40% of the total land area of the project. **It is viewed that DFO may be consulted and guidelines issued by CPCB may be followed.**	**Being complied but further action needed.**




Photographs of green belt and plantations carried out in the plant

	 		
xx.	At least 5% of the total cost of the project should 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 Ranchi. Implementation of such programme should be ensured accordingly in a time bound manner.	The project authorities have submitted that under the Corporate Social Responsibilities, an amount of Rs. 106,17,642 has been spent till 31st March 2023. **The project authorities need to provide details on various activities undertaken and submit details on the expenditure item-wise and year -wise to this Regional Office.**	**Partially complied.**
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, créche etc. the housing may be in the form of temporary structures to be removed after the completion of the project.	During the site inspection, it was observed that there was no construction being undertaken within the plant. The project authorities have submitted that during the construction of the project, they had provided necessary infrastructure and facilities to construction laborers within the site.	**Complied.**

B. GENERAL CONDITIONS

Sl. No.	CONDITION	STATUS OF COMPLIANCE	REMARKS
i.	The projects authorities must strictly adhere to the stipulations made by the Bihar Pollution control board and the state government .	The project authorities submit that they are adhering to the stipulations made by the Bihar Pollution Control Board and the State Government.	**Being complied.**

<table>
<tr><td>ii.</td><td>No further expansion/modifications in the plant shall be carried out without prior approval of the ministry of environment and forests.</td><td>During the visit, it was observed that there was no construction/ modification of the industrial unit. It is submitted by the project proponents that they would not carry out expansion/ modifications in the plant without prior approval of the Ministry of Environment and Forests.</td><td>Being complied with an assurance.</td></tr>
<tr><td>iii.</td><td>The gaseous emissions from various process unit shall conform to the load / mass based standards notified by this Ministry on 19th 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</td><td>From the reports / documents submitted by the project authorities to this Office, it is noted that the gaseous emissions are within the prescribed norms. Fibre dust emission fibre stack is 1.50 mg/Nm3 against 2.0 mg/Nm^3 SPM in cement stack is 28.2 mg/m^3 against 100 gg/m SPM in DG set 29.0 mg/m3 against 75 mg/m^3</td><td>Being complied.</td></tr>
<tr><td colspan="4">Table: Monitoring of Respirable Dust
<table>
<tr><th>Sl</th><th>Station Location</th><th colspan="2">RECORDED VALUE</th></tr>
<tr><th></th><th></th><th>23.03.2023</th><th>06.03.2024</th></tr>
<tr><td>1</td><td>Fibre Mill</td><td>90.6</td><td>87.14</td></tr>
<tr><td>2</td><td>Hats Check Machine</td><td>81.9</td><td>78.42</td></tr>
<tr><td>3</td><td>Stripping Machine</td><td>87.9</td><td>81.36</td></tr>
<tr><td>4</td><td>Pulveriser Area</td><td>83.8</td><td>73.65</td></tr>
<tr><td>5</td><td>Near DG Room</td><td></td><td>76.46</td></tr>
<tr><td>6</td><td>PRESCRIBED LIMIT</td><td colspan="2">100</td></tr>
</table></td></tr>
<tr><td>iv.</td><td>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, S02 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 Ranchi and the BSPCB /CPCB once in six months.</td><td>The ambient air quality is being monitored at four places in the project. From the reports submitted to this Office, it is noted that the parameters are within the prescribed limits. Details on the Ambient Air Quality monitored in the project is compiled and tabulated below:</td><td>Being complied.</td></tr>
</table>

Table : Ambient Air Quality monitored in the project

Sl	Parameter	Prescribed Limit	Near Office		Near Gate		Stripping Area		Near Laboratory	
			23.3.23	6.3.24	23.3.23	6.3.24	23.3.23	6.3.24	23.3.23	6.3.24
1	P $M_{2.5}$	60	41.0	36.7	40.06	38.8	38.8	40.33	39.63	35.86
2	P M_{10}	100	68.47	67.6	67.93	69.8	70.86	69.53	71.06	67.46
3	SOx	80	12.57	12.73	14.05	12.9	12.13	13.22	12.9	14.88
4	NOx	80	34.0	34.6	32.91	37.2	26.8	35.35	31.7	33.85
5	Lead (Pb)	1.0	0.08	0.01	0.07	0.06	0.08	0.04	0.09	0.08
6	Ammonia	400	11.9	13.1	14.8	13.2	13.3	13.6	15.1	14.0
7	Ozone	180	29.5	41.7	21.7	42.9	24.1	39.0	30.6	44.2
8	Benzene	5	0.18	0.15	0.20	0.16	0.18	0.17	0.21	0.18
9	Arsenic	6	0.18	0.16	0.21	0.17	0.18	0.18	0.14	0.19
10	Benzo-pyrene	1.0	0.18	0.16	0.17	0.11	0.17	0.19	0.19	0.12

v.	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May, 1993 and 31st Dec., 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	During the site visit, water /industrial effluent was not seen to be discharged outside the plant. It was noted that the process water generated in the industrial plant was being recycled and reused in the manufacturing process. However, the quality of industrial water generated is being analysed and the quality of the water is being monitored by the project. From the reports submitted to the Regional Office, it is noted that the parameters are within the prescribed limits.	**Being complied.**
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 acoustic hoods, silencers, enclosures 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).	Noise level is being monitored by the project and from the reports submitted to this Office, it is noted that the Noise levels in around the Plant area are within the limit prescribed. The noise level monitored is compiled and tabulated below:	**Being complied.**

Table : Noise quality monitored in the industrial plant

Sl	Station Location	RECORDED VALUE dB(A)	
		March, '23	June, '23
1	Near Main Gate	64.6	67.1
2	Near Office	59.4	54.6
3	Near Stripping Area	63.8	66.8
4	Near Fibre Mill	64.6	61.0
5	Near DG Room	64.5	70.5

vii.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	It is submitted by the project proponents that Occupational Health Surveillance is being undertaken at the project. **However, details on the date, total number of employees examined and the final results of the health surveillance carried out has not been submitted to this Office. The project authorities need to submit details on the above.**	**Reportedly complied but further action needed.**
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.	The project proponents have developed storage lagoon of size 23x18x5 meters for harvesting rain water. Further, they have also established ground water recharging structures within the plant.	**Being complied.**
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.	From the reports submitted by the project authorities, it is noted that they have incurred expenditure on the following community development activities: 1. Rs. 57,053, Road paving work of BIADA connecting road. 2. Rs. 29,520, 40 Nos of AC Sheets provided to Udwant Nagar Police Station for Shed construction 3. Rs. 1,87,000, Nausetand Mathiya Govt Primary School (40 Steel Desk and chair, 1 Steel Amirah and 1 TV). 4. Rs. 20,000, SDM Office - Scanner cum Printer. 5. Rs. 12,960, 20 Nos.of AC Sheets provided to DSP for Shed construction. 6. Rs. 8,910, 11 Nos.3.6 Mtr of AC Sheets provided to Vidya Nand Pandey on DIVI recommendation for roof lentingon. **However, the project authorities need to provide details on the year-wise and head-wise expenditure incurred on**	**Being complied but further action needed.**

<table>
<tr><td></td><td></td><td>Environment Management measures adopted in the plant.</td><td></td></tr>
<tr><td>x.</td><td>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 Ranchi. The funds so provided shall not be diverted for any other purchase.</td><td>Environmental Expenses details are

Capital Expenses :-
Oct- 2022 to Mar- 2023 - Rs.OO.OO

Recurring Expenses :
Oct- 2022 to Mar- 2023
–Rs.14,62,113.39

Tabular statement on the expenditure incurred on Envt. Management
<table>
<tr><th>Sl</th><th>Particulars of expenditure</th><th>Amount (Rs. In lakhs)</th></tr>
<tr><td>1</td><td>Water Pollution</td><td>1.80</td></tr>
<tr><td>2</td><td>Air Pollution

Bag Filters Procurement</td><td>3.25</td></tr>
<tr><td>3</td><td>Green Belt Development</td><td>1.60</td></tr>
<tr><td>4</td><td>Miscellaneous</td><td>2.75</td></tr>
</table></td><td>Being complied.</td></tr>
<tr><td>xi.</td><td>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.</td><td>From the reports submitted to this Office, it is noted that the project has provided copy of the EC letter to the concerned authorities.</td><td>Complied.</td></tr>
</table>

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 : PM 10 , S02 , NOX , (ambient levels as well as stack emission) or critical sectoral parameters indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	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 near the main gate in the public domain.	**Being complied.**
xiii.	The project proponent shall also submit Six Monthly report on the status of the compliance of the stipulated environmental condition 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 and the SPCB. The regional office of this ministry at Bhubaneswar /CPCB/SPCB shall monitor the stipulate condition.	The project authorities are submitting half yearly reports on the status of compliance to the conditions stipulated in the EC letter to this Office, BSPCB and CPCB. The monitoring data is being sent to this office along with the compliance report. Last report received was for the period of Oct-2022 to Mar-2023 and Oct – 23 to March, 24.	**Being complied.**
xiv.	The environmental statement for each financial year ending 31st March in Formed —V as is mandated 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	The project proponents have submitted Environmental Statement to the Bihar State Pollution Control Board for the financial year 2022- 23. **The project proponents need to inform this Regional Office on details on their company's website and also whether uploading of all the relevant information is being carried out regularly.**	**Being complied but further action needed.**

	respective Regional office of MOEF at Bhubaneswar by Email.		
xv.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with SPCB and may also be seen at the Website of the Ministry of Environment and Forests at htLælLen-v-funisJn 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 Ranchi.	It is submitted by the project proponents that advertisement in the newspaper has been published in newspaper in Hindi. **However, details on the newspapers along with date of publication and copy of the advertisement made need to be submitted to this Office.**	**Reportedly complied but further action needed.**
xvi.	Project authorities shall inform the regional office 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.	The project authorities have informed this Office on the financial closure and the date of commencement of work by the project.	**Complied.**

MRPrasad

(M. R. Prasad)
Scientist, C
MoEF&CC, Regional Office,
RANCHI

एम. राजेश्वर प्रसाद / M. Rajeshwar Prasad
वैज्ञानिक 'सी' / Scientist 'C'
भारत सरकार / Govt. of India
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
M/o Environment, Forest & Climate Change
क्षेत्रीय कार्यालय, रांची
Regional Office, Ranchi

POINT-WISE REPLY TO THE ISSUES RAISED IN THE COMPLAINT FILED BY SHRI AKHILESH YADAV

The Ministry had received Public Grievance from Shri Akhilesh Yadav, Shri Saroj Singh and Shri Mantu Yadav via email dated 27.10.2023. The issues raised in the petition were pollution caused by M/s Ramco Industries Limited. The Complaint alleged that:

A. The project was causing pollution in the nearby area.
B There is issue of TSS, BOD in the water due to the project
C. Roads were not cleaned
D. Parking and sanitation issues.

POINT-WISE REPLY TO THE ISSUES RAISED:

A. THE PROJECT WAS CAUSING POLLUTION IN THE NEARBY AREA

1. The undersigned carried out inspection of the project at site on 27.02.2024 and surveyed all around the industrial project. It was observed that the housekeeping was good; the project was clean inside the plant. There were no solid wastes being dumped either inside the plant or disposed outside the industrial premises. All the solid waste / rejects being generated in the plant are reported to be sent to the pulveriser, recycled and re-used in the plant. There were no rejects or asbestos fibre lying inside the plant or outside.

2. Further, from the Ambient Air Quality monitoring data being collected from four stations within the plant, analysed and reported by a third party M/s JR Labs, it is noted that the parameters are within the prescribed limits. The AAQ monitoring data reported to this Office, for two different sampling dates i.e. 23.3.2023 and 06.03.2024, have been compiled and tabulated below:

Table: Tabulated data on different parameters of AAQ monitored (as reported by project proponent)

Sl	Parameter	Prescribed Limit	Near Office		Near Gate		Stripping Area		Near Laboratory	
			23.3.23	6.3.24	23.3.23	6.3.24	23.3.23	6.3.24	23.3.23	6.3.24
1	P $M_{2.5}$ ug/m^3	60	41.0	36.7	40.06	38.8	38.8	40.33	39.63	35.86
2	P M_{10} ug/m^3	100	68.47	67.6	67.93	69.8	70.86	69.53	71.06	67.46
3	SOx ug/m^3	80	12.57	12.73	14.05	12.9	12.13	13.22	12.9	14.88
4	NOx	80	34.0	34.6	32.91	37.2	26.8	35.35	31.7	33.85
5	Lead (Pb)	1.0	0.08	0.01	0.07	0.06	0.08	0.04	0.09	0.08
6	Ammonia	400	11.9	13.1	14.8	13.2	13.3	13.6	15.1	14.0
7	Ozone	180	29.5	41.7	21.7	42.9	24.1	39.0	30.6	44.2
8	Benzene	5	0.18	0.15	0.20	0.16	0.18	0.17	0.21	0.18
9	Arsenic	6	0.18	0.16	0.21	0.17	0.18	0.18	0.14	0.19
10	Benzo-pyrene	1.0	0.18	0.16	0.17	0.11	0.17	0.19	0.19	0.12

From the tabulated data it is observed that the parameters of air quality were within the prescribed limits.

3. Discharge of any effluent / water to the outside of the plant was not observed during the plant site visit. It has been reported by the project authorities that they were using all the water spilled or flowing out

from the plant by treating and recycling into the industrial process. Therefore, there was no discharge or outflow of any process effluent generated observed flowing into the surroundings or outside of the industrial plant during the site inspection carried out.

4. With respect to noise quality in the industrial premises, it was noted that the noise quality was within the prescribed limits. From the table mentioned below, it is noted that the noise quality was well within the prescribed limits.

Sl	Station Location	RECORDED VALUE dB(A)	
		March, '23	June, '23
1	Near Main Gate	64.6	67.1
2	Near Office	59.4	54.6
3	Near Stripping Area	63.8	66.8
4	Near Fibre Mill	64.6	61.0
5	Near DG Room	64.5	70.5

From the values of noise quality reported in the table, it is observed that the values recorded are within the prescribed norms.

B. ISSUE OF TSS, BOD IN THE WATER DUE TO THE PROJECT

During the site inspection, it was noted that there was no discharge of any water / effluent to the outside of the industrial plant. All the water drawn by the plant was being used in the industrial process and the water generated or spillage of water in the industrial plant was being recycled and reused in the industrial process. Therefore, the issue raised in the complaint with respect to TSS, BOD in the water, could not be ascertained during the site visit.

From the reports submitted by the project authorities on the quality of water analysed, both the ground water drawn and the water generated in the industrial process, which is later recycled and reused in the process, have been tabulated below:

Table : Ground water quality analysed and reported by the project proponents in their reports (as submitted by Project proponent)

Sl	Parameters	Prescribed limit	RECORDED VALUES	
			23.03.2023	06.03.2024
1	pH			7.45
2	Turbidity NTU	1.0	0.5	0.84
3	Total Dissolved Solids mg/l	500	180.0	248
4	Total Hardness mg/l	200	132.0	140
5	Total alkalinity mg/l	200	156.0	212
6	Chloride as Cl- mg/l	250	8.0	23
7	Sulphate mg/l	200	16.7	24.5
8	Nitrate mg/l	45	1.68	2.11
9	Fluoride mg/l	1.0	0.41	0.30
10	Total Coliform	NIL	Nil	NIL
11	E. coli	NIL	Nil	NIL

Table : Quality of the water generated due to the industrial process as effluent which is recycled & reused.

Sl	Parameters	Prescribed limit	RECORDED VALUES	
			23.03.2023	6.03.2024
1	pH		7.96	7.11
2	Suspended solids mg/l	100	52.0	55.0
3	Oil and grease	10.0	1.2	1.3
4	BOD (3 days)	30.0	24.0	20.0
5	COD	250.0	164.0	136.0
6	Dissolved Phosphate mg/l	5.0	0.82	1.02
7	Fluoride mg/l	5.0	0.62	0.59
8	Ammonical nitrogen mg/l	50.0	12.3	12.9
9	Total kjeldahl nitrogen mg/l	100	23.0	19.6

From the tables mentioned above, it is observed that the parameters of water quality used inside the plant are within the prescribed limits.

C. ROADS WERE NOT CLEAN

i. During the site inspection of the industrial plant, it was observed that the roads inside the industry were black topped or cemented. The roads were well maintained and there were no pot-holes or damages noted on the roads inside the plant. It was submitted by the project authorities that the roads were being cleaned at regular intervals to avoid any spillage of materials due to transportation of vehicles. It was also noted that the project authorities water the roads intermittently on daily basis to avoid any generation of fugitive dust due to movement of vehicles. The project has adopted a mechanised way for transportation of asbestos sheets manufactured and for this good quality of roads are maintained.







Black topped / concrete roads laid within the industrial plant for smooth movement of vehicles.

ii. Roads outside the industry premises. : It was observed that the project does not have any control over the quality of the road located outside its industrial premises as the ownership is of the Department of Industrial Development Corporation. The road quality needs improvement and black topping / concrete roads are to be laid for smooth movement of trucks and other vehicles in the area.

D. PARKING AND SANITATION ISSUES:

It was observed that there was sufficient place within the industrial premises to park at least 15 – 20 trucks (approx). The vehicles enter and leave the industry for unloading of the raw materials and despatch of the finished asbestos sheets for delivery outside the industry.

It was seen that a few vehicles / trucks, about 3-4 trucks, were parked outside the industry premises, in the open space /field on the other side of the approach road. It was informed by the project proponents that the trucks parked were temporarily for shift change of the staff. All these trucks were empty / unloaded trucks and were waiting to move out shortly. It was also stated by the project authorities that the trucks parked were parked in the common space belonging to the Industrial Development Area.

It is viewed that the project authorities may create space within the industry for all the trucks coming to the industry for loading and unloading and avoid parking outside the industrial premises, though it is in the common space of the Industrial Development Area.

CONCLUSION:

1. **From the Site Inspection carried out and perusal of the reports and documents submitted by the project proponents, it is noted that there was proper housekeeping/maintenance of the roads inside the plant, the values of various parameters of air, noise and water quality analysed during the two seasons, conform to the standards prescribed. During the inspection, it was also observed that the industrial plant was not discharging any effluent/ industrial water outside the plant premises. The plant is recycling and reusing the process water generated. Good plantation exists within the plant and good roads are laid within the plant with proper maintenance. Rain water is being stored in reservoir for reuse in the plant.**

2. **From the observations made at site and verifying the reports / documents submitted by the project proponents, it is noted that the issues raised in the complaint were not found correct.**

(M. R. Prasad)
Scientist, C
MoEF&CC, Regional Office,
RANCHI

एम. राजेश्वर प्रसाद / M. Rajeshwar Prasad
वैज्ञानिक 'सी' / Scientist 'C'
भारत सरकार / Govt. of India
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
M/o Environment, Forest & Climate Change
क्षेत्रीय कार्यालय, रांची
Regional Office, Ranchi

Doc 9 - ATR

Re: Compliance report Sep'23 to Mar'24

Sarvesh Pandey - Deputy Manager Quality

Thu 13-Jun-24 11:24 AM

To:ro.ranchi-mef Gov <ro.ranchi-mef@gov.in>;

Cc:Ramamoorthi S - Senior General Manager Works <rmi@ril.co.in>;

4 attachments (1 MB)

IOM_AFRICA Certifacate Round 67_2023.pdf; PHOTO-2024-06-12-09-31-06 (2).jpg; PHOTO-2024-06-12-09-31-06 (1).jpg; MSDS of Chrysotile Asbestos.pdf;

Respected Sir,

Further to the below mail, we would like to update the following:-

- Attached the certification of J.R. Labs for your kind reference.
- We have installed the ground water flow meters. Attached the images.
- We have the certificate from the Chrysolite fibre supplier. Attached the documents for your reference.
- Around 240 employees are covered in the medical examinations, Which are conducted once in six months.
- We provide training on the topic of Safety, Near miss, Hygiene working Industrial work Culture , Absenteeism, smoking, Alcohol consumption, first Aid, Environment, Electrical safety etc.
- Total Nos of training given in last 3 years are 488 Man-days.
- All related documents are already available at our web site- https://www.ramcoindltd.com/images/pdf_images/RIL%20Bihar%20MoEF%20approval.pdf

Thanks & regards.....

Sarvesh Pandey
(Deputy Manager Quality)
Ramco Industries Limited
Bihiya, Bihar Pin-224190
Mob- 9534033500

From: Sarvesh Pandey - Deputy Manager Quality
Sent: Tuesday, April 23, 2024 11:31 AM
To: ro.ranchi-mef Gov
Cc: Bihar Government - MSBSPCB; Yahoo - BSPCB; Preston Davis C - Head EHS and C; Rajesh R - Senior Manager Quality Systems; Ramamoorthi S - Senior General Manager Works; Durai Shankar R - Deputy General Manager Quality
Subject: Compliance report Sep'23 to Mar'24

Respected Sir,

We are sending compliance report of Period Sep'23 to Mar'24 for your reference as per attachment.

Please review the same.

Note- Hard copy send to RO Ranchi and also uploaded in our Website.

1. परियोजना प्रस्तावक से अपेक्षा की जाती है कि वह ऐसे पर्यावरण संपरीक्षकों या प्रतिष्ठित संस्थाओं, जो राज्य प्रदूषण नियंत्रण बोर्ड या केंद्रीय प्रदूषण नियंत्रण बोर्ड या पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय (जिसे इसमें इसके पश्चात् मंत्रालय कहा गया है) द्वारा पेनलीकृत की जाएं, से 'प्रदूषण भार में कोई वृद्धि नहीं' का प्रमाणपत्र अभिप्राप्त करे ।

2. मंत्रालय द्वारा परिवेश पोर्टल पर, समय-समय पर उपलब्ध कराए गए अनुसार, 'प्रदूषण भार में कोई वृद्धि नहीं' प्रमाणपत्र और सूचना की एक प्रति उस यूनिट द्वारा अपलोड की जाएगी, जिसके लिए प्रणाली सृजित अभिस्वीकृति आनलाइन जारी की जाएगी ।

3. यूनिट, यथास्थिति, राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति को विनिर्दिष्ट रूपविधान में निम्नलिखित के साथ सूचित करेगी,--

i. राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति या केंद्रीय प्रदूषण नियंत्रण बोर्ड या मंत्रालय द्वारा पैनलीकृत पर्यावरण संपरीक्षक या प्रतिष्ठित संस्था से 'प्रदूषण भार में कोई वृद्धि नहीं' का प्रमाणपत्र ;

ii. परियोजना या क्रियाकलाप के लिए प्रचालन के लिए अंतिम सहमति प्रमाणपत्र ; और

iii. परिवेश पोर्टल पर सूचना और 'प्रदूषण भार में कोई वृद्धि नहीं' प्रमाणपत्र अपलोड करने की आनलाइन सृजित प्रणाली अभिस्वीकृति ।

4. इस प्रकार अभिप्राप्त सूचना की, यथास्थिति, राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति द्वारा परीक्षा की जाएगी, जो, परियोजना प्रस्तावक से अभिप्राप्त, ऐसी सूचना पर विनिश्चय करेगा/करेगी ।

5. यदि, यथास्थिति, राज्य प्रदूषण नियंत्रण बोर्ड या संघ राज्यक्षेत्र प्रदूषण नियंत्रण समिति, सत्यापन किए जाने पर पर यह पाते हैं कि परिवर्तन या विस्तार या आधुनिकीकरण का परिणाम प्रदूषण भार में वृद्धि के रूप में होगा या हुआ है, तो इस खंड के अधीन दावा की गई छूट विधिमान्य नहीं होगी और यह माना जाएगा कि परियोजना प्रस्तावक, ऐसे परिवर्तन या वृद्धि करने से पहले, इस अधिसूचना के पैरा 7 के उपपैरा (ii) खंड (क) के अनुसार, पूर्व पर्यावरणीय अनापत्ति अभिप्राप्त करने का दायी होगा और पर्यावरण (संरक्षण) अधिनियम, 1986 के उपबंध तदनुसार लागू होंगे ।

टिप्पण : शंकाओं को दूर करने के लिए, यह स्पष्ट किया जाता है कि परियोजना प्रस्तावक का यह उत्तरदायित्व होगा कि वह, ऐसा परिवर्तन या वृद्धि करने से पूर्व, यथास्थिति, परिवर्तन, विस्तार या आधुनिकीकरण के परिणामस्वरूप 'प्रदूषण भार में कोई वृद्धि नहीं' के संबंध में स्वयं का समाधान करे और परियोजना प्रस्तावक, पर्यावरण (संरक्षण) अधिनियम, 1986 के उपबंधों के अधीन कार्रवाई के लिए दायी होगा, यदि तथ्यों या दावे के सत्यापन किए जाने पर यह पाया जाता है कि ऐसे परिवर्तन, विस्तार या आधुनिकीकरण से प्रदूषण भार में वृद्धि अंतर्वलित है ।"।

[फा. सं. 22-33/2019-आईए.III]

गीता मेनन, संयुक्त सचिव

टिप्पण : मूल अधिसूचना, भारत के राजपत्र, असाधारण, भाग II, खंड 3, उपखंड (ii) में, अधिसूचना संख्या का.आ. 1533(अ), तारीख 14 सितंबर, 2006 द्वारा प्रकाशित की गई थी और अधिसूचना संख्या का.आ. 221(अ), तारीख 18 जनवरी, 2021 द्वारा उसमें अंतिम बार संशोधन किया गया था ।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 2nd March, 2021

S.O. 980(E).—WHEREAS, by notification of the Government of India in the erstwhile Ministry of Environment and Forests number S.O.1533 (E), dated the 14th September, 2006 issued under sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986, read with clause (d) of the sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 (hereinafter referred to as the EIA Notification), the Central Government directed that on and from the date of its publication, the new projects or activities or the expansion or modernisation of existing projects or activities listed in the Schedule to the EIA notification entailing capacity addition with change in process or technology and/or product mix shall be undertaken in any part of India only after obtaining prior environmental clearance from the Central Government or as the case may be, by the State Level Environment Impact Assessment Authority, duly constituted by the Central Government under sub-section (3) of section 3 of the said Act, in accordance with the procedure specified therein;

AND WHEREAS, with core principle of 'no increase in pollution load', the Central Government has amended the EIA notification by notifications number S.O. 3518(E), dated the 23rd November, 2016 and number S.O. 236 (E), dated the 16thJanuary, 2020 providing flexibility in change in product-mix; change in quantities within products or number of products in the same category including resultant increase in the production with a cap of 50 per cent for which environmental clearance has been granted; change in configuration of the plant from the environmental clearance conditions during execution of the project;

AND WHEREAS, the Ministry of Environment, Forest and Climate Change is in receipt of requests from processing, production and manufacturing sector for permitting increase in production capacity without having to go through entire environmental clearance process again as long as there is no increase in pollution load;

AND WHEREAS, based on the experience in implementation of the EIA notification as amended by aforesaid notification number S.O. 3518(E), dated the 23rd November, 2016, the Central Government deems it necessary to permit increase in production capacity in respect of processing, production and manufacturing sector with or without any change in raw material-mix or product-mix or change in quantities within products or number of products or any change in configuration of the plant or operations in areas contiguous to the existing area, for which prior environmental clearance has been granted, without the requirement of Prior Environmental Clearance provided that there is no increase in pollution load;

AND WHEREAS, for the purpose of Ethanol Blending Programme with Petrol, a special dispensation was provided for expansion of sugar manufacturing or distillery units, intended for production of Ethanol vide notification number S.O. 345(E), dated the 17th January, 2019 and notification number S.O. 750(E), dated the 17th February, 2020. In view of the Government's commitment to achieve 20% blending of ethanol in petrol by the year 2025, it has been decided to continue further with this dispensation;

Now, therefore, in exercise of powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government, hereby makes following further amendments in the notification of the Government of India, in the erstwhile Ministry of Environment and Forests, published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) vide number S.O. 1533 (E), dated the 14thSeptember, 2006, namely:-

In the said notification, -

1. in paragraph 2, for clauses (ii) and (iii), the following clause shall be substituted, namely:-

"(ii) Expansion, modernisation or any change in the product mix or raw material mix in existing projects or activities, listed in the Schedule to this notification, resulting in capacity beyond the threshold limits specified for the concerned sector in the said Schedule, subject to conditions and procedure provided in the sub-paragraph (ii) of paragraph 7";

2. in paragraph 7,-

A. in the heading, the words "*for New Projects*" shall be omitted;

B. in the sub-paragraph (i), the words "***For new projects or activities listed in the Schedule to this notification***:" shall be inserted as heading to the sub-paragraph;

C. in the sub-paragraph (ii),-

(I) in the clause (a), after the words "*application shall be appraised accordingly for grant of environmental clearance*", the following words shall be inserted, namely:-

"*in respect of projects or activities other than falling in clause (b) and (c)*";

(II) for clauses (b) and (c), the following clauses shall be substituted, namely:-

'*(b)* ***Existing projects (having Prior Environmental Clearance) with no increase in pollution load:*** *Any increase in production capacity in respect of processing or production or manufacturing sectors (listed against item numbers 2,3, 4 and 5 in the Schedule to this notification) with or without any change in (i) raw material-mix or (ii) product-mix or (ii) quantities within products or (ii) number of products including new products falling in the same category or (iv) configuration of the plant or process or operations in existing area or in areas contiguous to the existing area (for which prior environmental clearance has been granted) shall be exempt from the requirement of Prior Environmental Clearance provided that there is no increase in pollution load (derived on the basis of such Prior Environmental Clearance):*

Provided that such exemption shall be applicable only consequent to -

A. the project proponent furnishing information regarding such changes along with no increase in pollution load certificate, from the environmental auditor or reputed institutions empanelled by the State Pollution Control Board or Union Territory Pollution Control Committee or Central Pollution Control Board or Ministry of Environment, Forest and Climate Change, as per the procedure laid down in Appendix-XIII, on PARIVESH portal as well as to the concerned State Pollution Control Board or Union Territory Pollution Control Committee.

Note: If on verification, the State Pollution Control Board or Union Territory Pollution Control Committee, as the case may be, after giving the project proponent the opportunity of being heard, holds that such change or expansion or modernisation results in increase in pollution load, the exemption claimed under this clause shall not be valid and it shall be deemed that the project proponent was always liable to obtain prior environmental clearance, in respect of such change or expansion or modernisation, as per the clause (a) and the provisions of Environment (Protection) Act, 1986 shall apply accordingly;

B. installation and implementation of Online Continuous Monitoring System (OCMS) with at least 95% uptime, connected to the servers of the Central Pollution Control Board and State Pollution Control Board or Union Territory Pollution Control Committee concerned to report the quantity and quality, of emission and discharges:

Provided further that the provisions of this clause shall not be applicable if such change or increase results in change in category of project or activity from Category-'B2' to either Category-'A' or Category 'B1'.

(c) Any change in configuration of the plant or activity from the environmental clearance conditions during execution of the project after detailed engineering, in respect of projects or activities, falling in any item of the Schedule to this notification, shall not require prior environmental clearance, if there is no change in production capacity and there is no increase in pollution load subject to furnishing particulars of such changes on PARIVESH portal in the format as may be provided by the Government from time to time, before implementing such changes whereupon a system generated acknowledgement will be issued by the concerned Regulatory Authority.

***Explanation:-** For the purpose of this sub-paragraph, "Pollution load" shall be determined on the basis of multiplication of quantity and concentration of different components and parameters (as provided or referred in the Prior Environment Clearance or the Environment Impact Assessment Report (EIA) and Environment Management Plan based on which such Prior Environment Clearance has been granted), in respect of emissions, effluents or discharge, solid, industrial hazardous waste and such other parameters notified under the Environment (Protection) Rules, 1986 as amended from time to time.*'

3. in the Schedule, against item 5(g), after the entry in column (5), the following entry shall be inserted, namely:-

"*Note: Expansion of sugar manufacturing units or distilleries, having Prior Environment Clearance and for production of ethanol, to be used as fuel for blending only as certified by the competent authority, shall be appraised as Category 'B2' projects*.";

4. for Appendix-XIII, the following Appendix shall be substituted, namely:-

"***Appendix-XIII***

Verification of No Increase in Pollution Load

The instant amendment in EIA Notification exempts the requirement of Prior Environmental Clearance for any increase in production capacity in respect of processing or production or manufacturing sectors (listed against item numbers 2,3, 4 and 5 in the Schedule to this notification) with or without any change in (i) raw material-mix or (ii) product-mix or (ii) quantities within products or (ii) number of products including new products falling in the same category or (iv) configuration of the plant or process or operations in existing area or in areas contiguous to the existing area specified in the environmental clearance of the project. This facility is available to those units which have obtained prior environmental clearance under EIA Notification, 1994 and EIA Notification, 2006. To claim exemption from obtaining Prior Environment Clearance in respect of such cases, the project proponent shall follow the following process:-

1. *The project proponent is required to obtain a certificate of 'no increase in the pollution load' from the environmental auditors or reputed institutions, to be empanelled by the State Pollution Control Board or Central Pollution Control Board or Ministry of Environment, Forest and Climate Change (hereinafter referred to as the Ministry).*

2. *A copy of 'no increase in pollution load' certificate and intimation, as provided by the Ministry from time to time on PARIVESH portal, shall be uploaded by the unit for which system generated acknowledgement shall be issued online;*

3. *The unit shall inform the State Pollution Control Board or Union Territory Pollution Control Committee, as the case may be, in specified format along with-*

   i. *'no increase in pollution load' certificate from the Environmental Auditor or reputed institutions empanelled by the State Pollution Control Board or Pollution Control Committee or Central Pollution Control Board or Ministry;*

   ii. *last Consent to Operate certificate for the project or activity; and*

   iii. *online system generated acknowledgement of uploading of intimation and 'no increase in pollution load' certificate on PARIVESH Portal;*

4. *The information so received shall be examined by the State Pollution Control Board or Union Territory Pollution Control Committee, as the case may be, who shall take decision on such information, received from the project proponent.*

5. *If on verification the State Pollution Control Board or Union Territory Pollution Control Committee, as the case may be, holds that the change or expansion or modernisation will result or has resulted in increase in pollution load, the exemption claimed under this clause shall not be valid and it shall be deemed that the project proponent was liable to obtain Prior Environmental Clearance before under taking such changes or increase, as per the clause (a) of sub-paragraph (ii) of paragraph 7 of this notification and the provisions of Environment (Protection) Act, 1986 shall apply accordingly.*

Note: *For removal of doubts, it is clarified that it shall be the responsibility of the project proponent to satisfy itself about 'no increase in pollution load' as a result of changes, expansion or modernisation, as the case may be, before under taking such changes or increase, and the project proponent shall be liable for action under the provisions of the Environment (Protection) Act, 1986 if on verification of facts or claim it is found that such change or expansion or modernisation involves increase in pollution load.".*

[F. No. 22-33/2019-IA.III]

GEETA MENON, Jt.Secy.

Note : The principal notification was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) vide number S.O. 1533 (E), dated the 14th September, 2006 and was last amended vide the notification number S.O.221(E) , dated the 18th January, 2021.

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ALOK KUMAR Digitally signed by ALOK KUMAR Date: 2021.03.02 23:16:47 +05'30'

SPEED POST

B-29016/04/06/PCI-I/ 5401 February 05, 2014

To

The Chairman
All SPCBs/PCCs (as per list enclosed)

SUB: DIRECTIONS UNDER SECTION 18(1)(b) OF THE WATER (PREVENTION & CONTROL OF POLLUTION) ACT, 1974 and THE AIR (PREVENTION & CONTROL OF POLLUTION) ACT, 1981 IN THE MATTER OF POLLUTION CONTROL IN 17 CATEGORY OF HIGHLY POLLUTING INDUSTRIES , CETPs AND COMMON HAZRDOUS WASTE & BIOMEDICAL WASTE INCINERATORS- REGARDING SELF MONITORING OF COMPLIANCE

WHEREAS, under Section 17 of the Water (Prevention & Control of Pollution) Act, 1974, and under Section 17 of the Air (Prevention & Control of Pollution) Act, 1981, one of the function of the State Pollution Control Boards(SPCBs)/Pollution Control Committees(PCCs) is to plan a comprehensive programme for the prevention, control or abatement of pollution of streams, wells and air pollution in the State/Union territory and to secure the execution thereof; and

WHEREAS, under section 16 of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 16 of the Air (Prevention & Control of Pollution) Act, 1981, one of the functions of the Central Pollution Control Board (CPCB), constituted under Water (Prevention and Control of Pollution) Act, 1974 is to coordinate activities of the State Pollution Control Boards and Pollution Control Committees and to provide technical assistance and guidance to SPCBs / PCCs; and

WHEREAS, the SPCBs and PCCs are empowered to stipulate standards for discharge of environmental pollutants for various categories of industries and common effluent treatment plants (CETPs) , Common Hazardous waste and Biomedical waste incinerators even more stringent than those notified by the Central Government, under the Environmental (Protection) Act, 1986 and rules framed there under; and

WHEREAS, Pharmaceuticals, Chlor Alkali, Fertilizers, Oil Refinery, Dye and dye intermediate, Pesticides, Petrochemical, Large Power plants, Cement, Aluminium, Zinc, Copper, Iron & steel, Large Pulp & paper, Distillery, Sugar and Tannery industries located in States/UTs have been discharging environmental pollutants directly or indirectly into the ambient air and water, which pose constant threat to cause adverse effect on the water and air quality ; and

WHEREAS, Common Hazardous waste and Biomedical waste incinerators and Common Effluent Treatment Plants(CETPs) located in States/UTs have been discharging environmental pollutants directly or indirectly into the ambient air and water; and

WHEREAS, the SPCBs and PCCs are also required to ensure installation and regular operation of the requisite pollution control facilities in the polluting industries; and

WHEREAS, there is need to inculcate habit of self monitoring mechanism within the industries for complying the prescribed standards and this can be achieved by the methods like installing online effluent and emission monitoring devices; and

WHEREAS, number of industries (as per list) under 17 category (Annexure-I) which are operating in the state/UT have been identified can be suitably directed for installation and commissioning of online monitoring systems (emission and or effluent); and

WHEREAS, number of Common Hazardous waste and Biomedical waste incinerators and CETPs operating in the state/UT (as per list) can also be considered for installation and commissioning of online monitoring systems (emission and or effluent);and

WHEREAS, for strengthening the monitoring and compliance through self regulatory mechanism ,online source and effluent monitoring systems need to be

installed and operated by the developers and the industries on 'polluter pays principle' ;and

WHEREAS, some of the SPCBs have already given specific conditions in consent to operate of 17 categories of highly polluting industries/ and Common Hazardous waste and Biomedical waste incinerators to install continuous emission and effluent monitoring systems; and

WHEREAS, it is envisaged in "National Environment Policy- 2006" that to strengthen the testing infrastructure and network for monitoring ambient environmental quality and progressively ensure real-time, and online availability of the monitoring data; and

WHEREAS, CPCB had earlier issued letter dated January 12,2011 to SPCBs /PCCs to direct all the 17 categories of highly polluting industries to install automatic air and water quality stations to monitor the ambient quality; and

WHEREAS ,it is becoming a need and necessity to regulate and minimize inspection of industries on routine basis and instead efforts need to be made to bring self discipline in the industries to exercise self monitoring & compliance and transmit data of effluent and emission compliance to SPCBs/PCCs and to CPCB on continuous basis; and

WHEREAS, there could be some time needed for getting such devices standardised and requiring confidence on data generated but needless to emphasize that efforts towards setting up to continuous monitoring devices is essential; and

WHEREAS, the ground truthing of the values indicated by the online devices need to be done before bringing them in public domain for proper interpretation and such measures need to be taken at the level of SPCBs/PCCs .And whereas for regulatory purposes and for purposes of actions to be taken against non complying industries /facilities, the existing methods of sampling,

analysis and related procedures under the existing statutes need to be continued; and

WHEREAS, SPCBs and PCCS have prescribed standards for various parameters as per the notified standards under Environment(Protection) Act,1986 and the State Boards may refer to the parameters which should be monitored by installing continuous effluent and emission monitoring devices(Annexure -II);and

Whereas, continuous effluent and emission monitoring devices can be installed in those industries which are continuously letting out effluents and emissions out of their premises: and

Now, therefore, in exercise of the powers conferred under Section 18 (1) (b) of the Water (Prevention & Control of Pollution) Act, 1974, and 18 (1) (b) of the Air (Prevention & Control of Pollution) Act, 1981 and keeping in view strengthening of the monitoring mechanism for effective compliance through self regulatory mechanism,you are directed to issue the following directions to all the industries under 17 categories of highly polluting industries, and CETPs, Common Hazardous waste and Biomedical waste incinerators:

a. To Install online continuous Stack Emission Monitoring Systems (CSEMS) in 17 categories of highly polluting industries and in Common Hazardous waste and Biomedical waste incinerators for the parameters(industry/sector specific parameter) mentioned in the consent to operate/authorisation not later than by March 31,2015;
b. To install online effluent quality monitoring system at the outlet of effluent treatment plants of the 17 category industries and in CETPs for the measurement of the parameters(industry/sector specific parameter) like flow, pH, COD, BOD, TSS and for other consented parameters as per the guidelines provided; not later than by March 31, 2015;
c. To connect and upload the online emission and effluent monitoring data at SPCBs/PCCs and CPCB server in a time bound manner but not later than by March 31,2015;

d. To ensure regular maintenance and operation of the online system with temper proof mechanism having facilities for online calibration;
e. To submit bank guarantee of 25 % of the cost of online monitoring systems (emission and effluent whichever applicable) for ensuring timely installation of online monitoring systems within 90 days from the date of receipt of directions issued by SPCBs/PCCs to the industries;

The SPCB shall install the necessary software and hardware in their headquarter for centralized data collection, analysis and corrective action .The action taken report along with time bound action plan for each industry under the 17 category of industry and CETPs, Common Hazardous waste and Biomedical waste incinerators for installation of online monitoring systems (emission and or effluent) shall be submitted to the Central Pollution Control Board within 120 days from the date of receipt of these directions.

(Susheel Kumar)
Chairman

Copy to:

1. The Advisor(CP Division)
   Ministry of Environment & Forests
   Paryavaran Bhawan
   CGO Complex, Lodi Road
   New Delhi - 110 003
2. I/C PCI-I,II,III and HWMD
3. All Zonal Officer ,CPCB
4. I/c IT Division, CPCB
5. I/c. ESS, CPCB

(Susheel Kumar)

(Department of Environment, Govt. of West Bengal)
Paribesh Bhawan, 10A, Block - LA, Sector-III
Bidhannagar, Kolkata-700 106, India
Tel : 2335 - 9088 / 7428 / 8211 / 6731 / 0261 / 8861 / 5868 / 1625
Fax : 2335 - 5868 / 2813
City Code : 33, Country Code : 91
Website: www.wbpcb.gov.in

Memo No: 31 **-2N-29/2019(E)-Pt. II** **Dated:** 19 **.01.2023**

To
M/s. Ramco Industries Limited
Dewanmaro Ayma, PO – Hariatara,
PS – Kharagpur (L), Dist – Paschim Medinipur,
West Bengal, PIN – 721 304.

Sub: **Application for obtaining 'No Increase in Pollution Load' certificate for proposed expansion of Fiber Cement Sheet manufacturing plant from 1,00,000 TPA to 1,40,000 TPA at Vill – Dewanmaro Ayma, PO – Hariatara, PS – Kharagpur (L), Dist Paschim Medinipur, West Bengal.**

Ref: **(1) Your letter under Ref. No. Nil dated 16.11.2022.**
(2) Your presentation before the West Bengal Pollution Control Board on 21.11.2022.

Sirs,

With reference to the above, this is to inform you that your above application for the proposed expansion of Fiber Cement Sheet manufacturing plant from 1,00,000 TPA to 1,40,000 TPA at Vill – Dewanmaro Ayma, PO – Hariatara, PS – Kharagpur (L), Dist Paschim Medinipur, West Bengal has been duly considered in the meeting held on 21.11.2022 and recommended by the West Bengal Pollution Control Board subject to the conditions :

1. The quantity of Asbestos Fiber in raw material mix shall not be increased from existing 8940 TPA.
2. The project proponent shall comply with the stipulated emission standards for fibre count and dust both for stack and work zone emission.

You are advised to apply to the Haldia Regional Office of the West Bengal Pollution Control Board along with the compliance status of the conditions mentioned in the Environmental Clearance & Consent to Operate for obtaining Consent to Establish / Consent to Operate for the above proposal.

Yours faithfully,

19.01.2023

Chief Engineer (EIM Cell)
West Bengal Pollution Control Board

Memo No: 31 (1-2) **-2N-29/2019(E)-Pt. II** **Dated:** 19 **.01.2023**

Copy to:-
1) Chief Engineer (O&E), WBPCB
2) In-charge, Haldia Regional Office, WBPCB

19.01.2023

ANDHRA PRADESH POLLUTION CONTROL BOARD
D. No. 33-26-14 D/2, Near Sunrise Hospital, Pushpa Hotel Centre,
Chalamalavari Street, Kasturibaipet, Vijayawada - 520 010
Website: www.pcb.ap.gov.in

CONSENT TO ESTABLISHMENT(EXPANSION)

Order No. 346/PCB/CTE/RO-VJA/HO/2014 **23/03/2023**

Sub: **APPCB** – CTE - **M/s. Ramco Industries Ltd., Ibrahimpatnam (V) & (M), NTR District – Consent to Establishment (Expansion)** of the Board under Sec.25 of Water (P & C of P) Act, 1974 and Under Sec.21 of Air (P&C of P) Act, 1981 - Issued - Reg.

Ref:
1. Environmental Clearance dt. 14.03.2014 for expansion issued by MoE&F, GOI.
2. CTE Order dt.27.10.2014
3. CTO order no. APPCB/VJA/VJA/930/HO/2016-, Dt.21.11.2016 (Existing & Expansion) valid upto 31.10.2021.
4. CTO Auto Renewal order no. APPCB/VJA/VJA/930/HO/2016-, Dt.28.07.2021, valid upto 31.10.2026.
5. Industry's CTE (Expansion) application received through OCMMS on 04.02.2023.
6. R.O's inspection report dt. 21.02.2023.
7. Industry's Lr. dt.28.02.2023.
8. CTE Committee meeting held on 28.02.2023.
9. T.O Lr. dt.05.03.2023.
10. Industry's representation dt.07.03.2023.
11. CTE Committee meeting held on 14.03.2023.

1. **M/s. Ramco Industries Ltd.,** vide reference 5th cited, submitted an application to the Board seeking Consent to Establishment (CTE) **for expansion** to enhance the production capacities as mentioned below, with an additional investment of Rs. 20 Lakhs (rupees twenty lakhs only)

S. No	Products / Line of Activity	Existing Consented capacity as per CTE order dt.27.10.2014	Proposed Quantity	After Expansion, Total Quantity
1	Asbestos fibre cement corrugated sheets and accessories (raw material – 100% Chrysolite (white) fibre).	1,08,000 TPA	32,000 TPA	1,40,000 TPA

Sl. No.	Name of the raw material and chemicals	Existing Quantity	Quantity After Expansion
1	Cement	45000 TPA	50400 TPA
2	Fly ash	30000 TPA	37800 TPA
3	Ground Granulated Blast Furnace Slag (GGBS)	--	12600 TPA
4	Pulp	525 TPA	2650 TPA
5	Synthetic Fibre	--	1500 TPA
6	Additives	--	700 TPA
7	Asbestos fibre	9000 TPA	9000 TPA

2. As per the application, the above expansion activity is to be located in the existing premises in an extent of 20 acres at Ibrahimpatnam (V) & (M), NTR District.

3. The above site was inspected by the Environmental Engineer, Regional office, Vijayawada, A.P Pollution Control Board on 20.02.2023 and observed that the site is surrounded by

North	**-**	Truck terminal.
South	**-**	Hillock.
East	**-**	Fly ash brick industries followed by hillock
West	**-**	Road to truck terminal

4. The Board, after careful scrutiny of the application and verification report of Regional Officer, hereby issues **CONSENT TO ESTABLISHMENT FOR EXPANSION** to your activity Under Section 25 of Water (Prevention & Control of Pollution) Act 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981 and the rules made there under. **This order is issued to manufacture the products as mentioned at para (1) only.**

5. This Consent Order now issued is subject to the conditions mentioned in Annexure.

6. This order is issued from pollution control point of view only. Zoning and other regulations are not considered.

Encl: Annexure

PRAVIN KUMAR IAS, MS(PK),
O/o MEMBER SECRETARY-APPCB

To,
M/s. Ramco Industries Ltd.,
Ibrahimpatnam (V) & (M),
NTR District.
Email: tgr@ril.co.in

Copy to: 1. The JCEE, Z.O., Vijayawada for information and necessary action.
2. The E.E., R.O, Vijayawada for information and necessary action.

Annexure

1. The proponent shall obtain Consent for Operation (CTO) from APPCB, as required Under Sec.25/26 of the Water (P&C of P) Act, 1974 and under sec. 21/22 of the Air (P&C of P) Act, 1981, before commencement of the trail runs.

2. The applicant shall provide separate energy meters for Effluent Treatment Plant (ETP) and Air pollution Control equipments to record energy consumed. An alternative electric power source sufficient to operate all pollution control systems shall be provided.

3. The industry shall construct separate storm water drains. No effluents shall be discharged in to the storm water drains.

Water:

4. The source of water is Bore well and the maximum permitted water consumption is as mentioned below:

Sl. No.	Purpose	Consented existing qty as per CTE order dt.27.10.2014	After CTE (Expansion) Quantity
1.	Process and washings	82 KLD	162 KLD
2.	Gardening	10 KLD	8 KLD
3.	Domestic	8 KLD	10 KLD
Total		**100 KLD**	**180 KLD**

Separate meters with necessary pipe-line shall be provided for assessing the quantity of water used for each of the purposes mentioned above.

5. The maximum waste water generation shall not exceed the following:

Sl. No.	Sources	Consented existing qty as per CTE order dt.27.10.2014	After CTE (Expansion) Quantity
1.	Domestic	6.4 KLD	6.4 KLD
Total		**6.4 KLD**	**6.4 KLD**

Details of ETP:

Source of effluent	Capacity of Treatment units	Mode of final disposal
Domestic	Septic tank followed by soak pit	

6. The industry shall reuse / recycle the entire trade effluent into the process and there shall not be any discharge of trade effluents. The industry shall maintain zero liquid discharge system.

7. Separate meters with necessary pipe-line shall be provided for assessing the quantity of water used for each of the purposes mentioned below:
   a. Industrial cooling.
   b. Domestic purposes.

c. Processing, whereby water gets polluted and pollutants are easily bio-degradable.
d. Processing, whereby water gets polluted and the pollutants are not easily bio-degradable

8. Under any circumstances, the industry shall not discharge any effluents on land or into any water bodies.

Air:

9. The Air pollution Control equipment shall be installed along with the commissioning of the activity and shall comply with the following for controlling air pollution after expansion:

Existing:

S. No.	Source of Pollution	Control equipment provided	Flow rate in m3/hr.	Stack height in Mts - above GL	Limiting Standard prescribed by Board	Board Monitoring Data
1.	Fibre mill – Asbestos fibre	Bag filters	--	20 m	115 mg/Nm3	--
2.	Slurry mixer (cement powder Cement silo & fly ash silo)	Bag filters	--	20 m	115 mg/Nm3	--
3.	750 KVA DG Set	Silencer and mufflers.	--	12 m	115 mg/Nm3	--

Expansion: No additional point sources of emissions proposed to be installed in the expansion project and there is no change in the existing Air pollution Control Equipment provided.

10. There shall not be any additional installation of Boiler / D.G. set / Incinerator / Thermic Fluid heater/ Furnace / Kiln or any other air pollution source resulting in from proposed acitivty. The existing air pollution control equipment shall be operated effectively to ensure compliance of stipulated emission standards.

11. A sampling port with removable dummy of not less than 15 cm diameter shall be provided in the stack at a distance of 8 times the diameter of the stack from the nearest constraint such as bends etc. A platform with suitable ladder shall be provided below 1 meter of sampling port to accommodate three persons with instruments. A 15 AMP 250 V plug point shall be provided on the platform.

12. There shall not be any manual handling / opening of asbestos fiber bags. The asbestos bag shall be opened in a bag opening machine which is fully covered and the fiber shall be transferred to milling machine through a closed conveyor system.

13. The industry shall comply with the following to maintain proper housekeeping:
a. All 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 conveyor shall be used instead of manual transportation of asbestos within the premises.

14. The industry shall take all necessary air pollution control measures to avoid fugitive emissions during loading, unloading and handling of raw materials.

15. The industry shall take following mitigation measures to control fugitive emissions during construction and operational state:
    - Vehicles shall be managed to avoid traffic congestions and shall provide parking facilities.
    - Mechanical water sprinkling shall be provided on roads and at dusty construction material storage areas, for suppression of dust. Mechanized handling equipment shall be used for loading & unloading operations.
    - Vehicles shall comply with emission standards shall have valid PUC certification.
    - Procurement of machinery / construction equipment in accordance to the specifications confirming to source noise levels of 85 dB(A).
    - The raw materials shall be transported in the covered trucks.

16. The proponent shall ensure compliance of the National Ambient Air quality standards notified by MOE&F,GOI vide notification No. GSR 826(E), dated. 16.11.2009 during construction and regular operational phase of the project.

17. The industry shall install and commission continuous online Ambient air monitoring stations (AAQM) within the plant as per the specifications prescribed by CPCB for online monitoring of SO2, NOx, $PM_{2.5}$, PM_{10} and others. At any stage these levels are found to exceed the prescribed limits, necessary control measures shall be taken immediately at source.

18. The industry shall comply with standards stipulated in Environment (Protection) Rules, 1986, as amended till date with regard to Asbestos fiber. In the stack emissions, Asbestos fibre shall not exceed the emission limit of 0.2fibre/cc. The industry shall comply with the Asbestos fibre count of 0.1 fibre/cc in the work zone area.

19. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with the concerned Regional Officer, APPCB. Periodic reports shall be submitted to the concerned Regional Officer, APPCB.

20. The ambient noise level shall not exceed 75 dB(A) during day time and 70 dB(A) during night time.

Solid Waste:

21. The proponent shall comply with the following after expansion.

Hazardous waste with disposal option :

Sl. No.	Name of the Hazardous Waste	Stream	Quantity		Method of disposal
			Existing	Expansion	
1.	Asbestos cement sheet trimmings	15.2 of Schedule-I	12 TPA	--	Shall be recycled within the process / or disposed to TSDF.
2.	Asbestos dust collected through bag filters	15.3 of Schedule – I	6.0 TPA	--	

Hazardous waste with recycling option :

Sl. No.	Name of the Hazardous Waste	Stream	Quantity		Method of disposal
			Existing	Expansion	
1.	Rejected materials in the form of AC sheets pieces	--	300 TPA	--	Shall be recycled into the process
2.	Used / Waste lubricating oil / spent oil	5.1 of Schedule–I	300 LPA	--	Shall be used for lubrication within the plant premises or disposed to authorized recyclers.

22. The following rules and regulations notified by the MoEF&CC, GoI shall be implemented.

a) Regulation of Persistent Organic Pollutants Rules, 2018.
b) Hazardous waste and other wastes (Management and Transboundary Movement) Rules, 2016.
c) Plastic Waste Management Rules, 2016.
d) Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989
e) Fly Ash Notification, 2016.
f) Batteries (Management & Handling) Rules, 2010.
g) E-Waste (Management) Rules, 2016.
h) Construction and Demolition waste Management Rules, 2016.
i) Solid Waste Management Rules, 2016.

Other Conditions:

23. As per the EIA Amendment Notification dt. 02.03.2021, Any increase in production capacity in respect of processing of production or manufacturing sectors (listed against item number 2,3,4 and 5 in Schedule of this notification) with or without any change in (i) raw material-mix or (ii) product-mix or (ii) quantities within products or (ii) number of products including new products falling in the same category or (iv) configuration of the plant or process or operations in existing area or in areas contiguous to the existing area (for which prior environmental clearance has been granted) shall be exempt from the requirement of Prior Environmental Clearance provided that there is no increase in pollution load (derived on the basis of such Prior Environmental Clearance).

The industry has furnished the No Increase in Pollution Load (NIPL) Certificate issued by NABET Accredited EIA Consultant.

The representatives of the industry has informed that the additives are pulverized powder dry broken rejected AC Sheets and have the composition of the product only and submitted the characteristics of synthetic fiber, stated that it is non-hazardous and non toxic. They informed that conveying of materials carries out pneumatically and no emission generates. As per the guidelines, it does not attract Environmental Clearance under No increase in pollution load certified by authorized agency. Further they informed that the enhancement of production is proposed to be carried out by increasing the operating hours and hence there would be no increase in pollution load.

The CTE committee opined that the industry obtained first EC in the year 2003 for production of 72,000 TPA of Asbestos Cement sheets and accessories. Subsequently, the industry obtained EC for expansion from 72,000 TPA to 1,08,000 TPA submitting that the additional production will be achieved by optimum utilization of the existing machineries and facilities without any additional cost investment for plant and machineries. The raw materials required for proposed enhancement as recorded in the EC order is 15,000 MTA of Cement, 10,000 MTA of Fly ash, 3,000 MTA of asbestos fibre and 175 KL per annum of Wood pulp. Now, the industry came up for expansion from 1,08,000 TPA to 1,40,000 TPA without increase in pollution load by increasing the raw materials like Cement, Fly ash, Wood pulp and also with new materials of Ground granulated Blast Furnace Slag(GGBS), Synthetic fibre and additives with meagre capital cost of Rs.20 Lakhs. This is deviation from EC order dt.14.03.2014 wherein the quantities of raw materials are specified. This is an expansion of almost 100% production capacity of EC quantity without change in configuration. The storage of new raw materials i.e., GGBS (12,600 TPA- i.e. around 40 TPD) and synthetic fibre (1500 TPA- i.e., 5 TPD) require storage facilities and the handling of GGBS either in silos or open stacking would generate fugitive emissions thereby increasing the air pollution load. Also, the handling of increased quantities of Cement and Fly ash would increase the emissions for which the industry would utilize the existing air pollution control equipment but the increased emissions either fugitive or stack are not accounted in the application. The industry has also not detailed out the characteristics of synthetic fibre, how it is handled and emission/ effluent quantities generated and respective air pollution control equipment/ ETP. However, the industry submitted acknowledgment of MoEF&CC, New Delhi, GoI under NIPL.

In the above circumstances, the committee opined that the applicability of NIPL has to be critically examined duly considering the claim of the industry that there is no increase in asbestos consumption.

24. The Board would address the MoEF & CC, GoI, New Delhi on the requirement of Environmental Clearance for enhancing the production capacity (expansion) under NIPL by industry. The industry shall abide by the decision of the MoEF & CC, GoI, New Delhi regarding applicability of EC to the project.

25. Only Chrysotile white asbestos fibre shall be used. Blue asbestos shall not be utilized as raw material in the manufacturing process.

26. Existing Green belt shall not be disturbed in the proposed expansion activity.

27. The proponent shall ensure that there shall not be any change in the process technology, source & composition of raw materials and scope of working without prior approval from the Board.

28. The industry shall prepare a safety report and carry out an independent safety audit report of the respective industrial activities including chemical storages / isolated storages by an expert not associated with such industrial activity as required under Rule 10 of MSIHC Rules, 1989 and get it approved by the Factories Dept., and submit the compliance along with copy of the safety report, safety audit report and safety certificate at concerned Regional Office, APPCB.

29. The industry shall ensure to have valid NOC issued by the Andhra Pradesh State Disaster Response and Fire Service Dept., (APSDRFSD) and clearance from PESO

at concerned Regional Office, APPCB.

30. The industry update the risk assessment report covering worst scenario regularly describing impact within the industry premises and outside the industry premises and emergency response system and submit at concerned Regional Office, APPCB.

31. The industry shall inventorize the storage quantities of hazardous chemicals (raw materials), products, as per the hazard nature of reactivity / toxicity / flammability / explosive stored/handling in the premises as defined in the Management of Storage, Import of Hazardous Chemicals (MSIHC) Rules, 1989 and the details shall be furnished to the Factories Department and to the Regional Office, APPCB on monthly basis duly certifying the same.

32. The industry shall identify major accident hazard chemicals & list out the hazardous chemicals endangered to human health & environment and the details shall be furnished to the Factories Department and to the Regional Office, APPCB time to time duly certifying the same by the industry. Further the industry shall extend training to the working personnels while handling hazardous chemicals for prevention of accidents and necessary antidotes to ensure the safety, as per the MSIHC Rules, 1989.

33. The industry shall carryout calibration of safety equipments and leak detection systems at regular intervals and shall certify the same with the Factories Department. That certified copy shall be submitted to the APPCB, Regional Office. The industry shall install fluorescent Wind Vane at the highest point in the industry premises.

34. **The industry shall comply with the Technical suggestions at Chapter No. 7.3 & 7.4 for Hazardous Chemical handling industries by High Power Committee (HPC) of Govt. of Andhra Pradesh. The HPC report is available at www.ap.gov.in.**

35. Existing green belt shall not be disturbed due to the proposed activity. Thick green belt shall be maintained all along the boundary & vacant spaces with tall growing trees with good canopy and it shall not be less than 33% of the total area.

36. The industry shall submit the information regarding usage of Ozone Depleting Substance once in six months to the Regional Office and Zonal Office of the Board.

37. The proponent shall ensure that there shall not be any change in the process technology, source of raw material and scope of working without prior approval from the Board.

38. The proponent shall comply with all the directions issued by the Board from time to time.

39. **The industry shall submit compliance to the conditions stipulated in the EC and CTE orders to the concerned Regional Officer of APPCB every six months and shall upload the same at APPCB website viz.,** https://pcb.ap.gov.in/UI/Submission_Compliance_of__EC_CTE_CFO_Direction.aspx.

40. The Board reserves its right to modify above conditions or stipulate any additional

conditions in the interest of environment protection.

41. Concealing the factual data or submission of false information / fabricated data and failure to comply with any of the conditions mentioned in this order attracts action under the provisions of relevant pollution control Acts.

42. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules,1982, to such authority (hereinafter referred to as the Appellate Authority) constituted under Section 28 of Water (Prevention and Control of Pollution)Act,1974 and Section 31 of the Air (Prevention and Control of Pollution) Act, 1981.

PRAVIN KUMAR IAS, MS(PK),
O/o MEMBER SECRETARY-APPCB

To,
M/s. Ramco Industries Ltd.,
Ibrahimpatnam (V) & (M),
NTR District.
Email: tgr@ril.co.in

TAMIL NADU POLLUTION CONTROL BOARD

From
Thiru R.Kannan, M.Tech.,
Member Secretary,
Tamil Nadu Pollution Control Board
76, Mount Salai, Guindy
Chennai – 600 032.

To
The Chief Executive Officer,
M/s. RAMCO INDUSTRIES LIMITED,
Plot No. A-12, SIPCOT Industrial Growth Centre,
Gangaikondan, Tirunelveli District
Pin: 627352

Letter No. TNPCB/T1/F.012106/TNV/2023, dated: 22.04.2024

Sir,

Sub: TNPCB- Industries - M/s. Ramco Industries Limited, S.F.No. 1597, 1598 Part, 1616 Part,1617 Part,1618,1619 Part,1624 Part &1625, Plot No. A12, SIPCOT Industrial Growth Centre, Gangaikondan, Pirancheri Village, Manur Taluk and Tirunelveli District - Application for "No Increase in Pollution Load Certificate" - Decision of Pollution Load Assessment Committee meeting held on 21.03.2024 - Communicated – Reg.

Ref: 1.Environmental Clearance issued by MOEF vide F. No. J-11011/949/ 2008-IA II (I) dated 17.03.2009.
2.Your application submitted for requesting "No increase in Pollution Load Certificate" dated 25.05.2023 and additional details furnished vide letter dated 12.09.2023, 25.10.2023, 12.02.2024, 21.03.2024 and 21.03.2024.
3.Minutes of PLAC meeting held on 21.03.2024 (Item No. PLAC/12-01/2024).

****

Your kind attention is invited to the reference 2nd cited, wherein the unit of M/s. Ramco Industries Limited, S.F.No. 1597, 1598 Part, 1616 Part,1617 Part, 1618, 1619 Part,1624 Part &1625, Plot No. A12, SIPCOT Industrial Growth Centre, Gangaikondan, Pirancheri Village, Manur Taluk and Tirunelveli District has applied for "No Increase in Pollution Load Certificate" for change in product mix to manufacture 1,50,000 MT/A of "Asbestos& Non-Asbestos Cement Roofing sheets" by changing/increasing the Raw material to achieve the proposed product.

1. **Products:**

Sl. No.	Name of the Product and Quantity (Existing)	Name of the Product and Quantity (Proposed Now)
1.	Asbestos Cement Roofing Sheets - 1,20,000 T/A	Asbestos & Non-Asbestos Cement Roofing Sheets – 1,50,000 T/A

2. **Raw materials (Product – wise)**

Sl. No	Name of the Products	Qty (T/A)	Name of the Raw Materials (Product Wise)	Qty (T/A)
Existing	Asbestos Cement Roofing Sheets	1,20,000 T/A	Asbestos	10200 T/A
			Cement	54600 T/A
			Fly Ash	31800 T/A
			Additives	600 T/A
			Water	29930 T/A
Proposed	Asbestos & Non-Asbestos Cement Roofing Sheets	1,50,000 T/Day	Asbestos	10200 T/A
			Cement	62000 T/A
			Fly Ash	37000 T/A
			Pulp	2600 T/A
			Additives	2620 T/A
			GGBS	9700 T/A
			PVA	500 T/A
			Water	49500 T/A

3. **SEWAGE:**

	Existing 6.4 KLD				Proposed 6.4 KLD (No change)			
Details	Pollution Load before treatment		Pollution Load after treatment		Pollution Load before treatment		Pollution Load after treatment	
	mg/lit	Kg/day	mg/lit	Kg/day	mg/lit	Kg/day	mg/lit	Kg/day
BOD	The unit has provided Septic tank and Dispersion trench for disposal (On industry's own land).Hence not applicable							
COD								
TSS								
TDS								
Chlorides								
Sulphates								
Oil and Grease								
pH								
Other Key Parameters **								

**Other key parameters industry specific. (Cr, Zn, etc.)

4. Trade effluent

A. Concentration of Pollution for Specific Production (for all manufacturing processes and utilities)

Details	Existing (82 KLD) Quantity of Effluent in KLD		Proposed (69 KLD) Quantity of Effluent in KLD	
	Pollution Concentration before treatment (mg/L)	Pollution Concentration after treatment (mg/L)	Pollution Concentration before treatment (mg/L)	Pollution Concentration after treatment (mg/L)
BOD	The trade effluent generated is stored in a closed tank. Then, it is reused for the process. Since, the whole recycling process is a closed process, the parameters cannot be analysed.			
COD				
TS				
TSS				
TDS				
Chlorides				
Sulphates				
Oil and Grease				
Other key parameters**				

**Other key parameters industry specific. (Cr, Zn, etc.)

B. Total Pollution Load (kg/day) (for all manufacturing processes and utilities)

	Existing			Proposed		
	Qty of Effluent in KLD:82			Qty of Effluent in KLD:69		
Details	Pollution Load before treatment (kg/day)	Pollution Load after treatment (kg/day)	Performance Efficiency. (%) [(2-3)/2X100]	Pollution Load before treatment (kg/day)	Pollution Load after treatment (kg/day)	Performance Efficiency. (%) [(5-6)/5X100]
1	2	3	4	5	6	7
BOD	Not applicable, since completely recycled in the process.					
COD						
TSS						
TDS						
Chlorides						
Sulphates						
Oil and Grease						
Other key Parameter**						

**Other key parameters industry specific. (Cr, Zn, etc.)

5. AIR POLLUTION

I. Details of existing emission sources

S.No	Source of emission	Fuel Consumption (T/day)	Stack dia (m)	Stack height (m)	Stack Velocity m/s	Pollutant Conc, mg/m^3			
						SPM	SO_2	NOx	Other key parameters
Process Emission Load									
1	Edge Mill Runner	-	0.4	30	8	2	-	-	-
2	Cement Silo	-	0.4	27	9	50	-	-	-
3	Pulverizer	-	0.15	15	8	2	-	-	-
Flue Gas Load									
1	Diesel Dryer	0.7	0.2	6	8	150	261	93.5	-
2	DG Set – 750 KVA I	0.7	0.15	9	10	150	261	93.5	-
3	DG Set – 380 KVA II	0.7	0.15	9	10	150	261	93.5	-

II. Pollution Load – Existing

Sl.No	Source	Pollution load before treatment (Kg/day)				Pollution load After treatment (Kg/day)			
		PM	SO_2	NOx	Other key parameters	PM	SO_2	NOx	Other key parameters
1.	Edge Mill Runner	1.51	-	-	-	0.15	-	-	-
2.	Cement Silo	42.6	-	-	-	4.26	-	-	-
3.	Pulverizer	0.21	-	-	-	0.02	-	-	-

III. Details of proposed* emission sources

S. No	Source of emission	Fuel Consumption (T/day)	Stack dia (m)	Stack height (m)	Stack Velocity m/s	Pollutant Cone, mg/m³			
						SPM	SO_2	NOx	Other key parameters
Process Emission Load									
1	Edge Mill Runner	-	0.4	30	8	2	-	-	-
2	Cement Silo	-	0.4	27	9	50	-	-	-
3	Pulverizer	-	0.15	15	8	2	-	-	-
Flue Gas Load									
1	Diesel Dryer	0.7	0.2	6	8	150	261	93.5	-
2	DG Set – 750 KVA I	0.7	0.15	9	10	150	261	93.5	-
3	DG Set – 380 KVA II	0.7	0.15	9	10	150	261	93.5	-

IV. Pollution Load – Proposed

Sl. No	Source	Pollution load before treatment (Kg/day)				Pollution load After treatment (Kg/day)			
		PM	SO2	NOX	Other key parameters	PM	SO_2	NO_X	Other key parameters
1.	Edge Mill Runner	1.51	-	-	-	0.15	-	-	-
2.	Cement Silo	42.6	-	-	-	4.26	-	-	-
3.	Pulverizer	0.21	-	-	-	0.02	-	-	-

6.Hazardous waste generation:

Quantity of Hazardous waste generation			
Details of Waste Category wise	**Existing (T/Annum)**	**Proposed (T/Annum)**	**Remarks if any**
15.1 – Asbestos Containing Residue	0.24	0.24	Recovered and Recycled back in the process
15.2 – Asbestos Broken Sheet	960	960	
5.1 – Used Oil	3.6	3.6	Selling to Authorized Resellers

This subject was discussed in detail in the PLAC meeting held on 21.03.2024. During the meeting, the unit has briefed their presentation.

During the presentation, the committee observed that the proposed expansion is possible without addition of any plant and machinery as the unit has changed to automation of Raw material preparation, increased the speed of sheet forming by Variable Frequency Drive and eliminating the idle time of corrugation, stripping and changing time of trolley units.

In view of the following facts presented by the industry for NIPL to achieve the proposed enhanced production, the committee opined that the NIPL can be validated & accepted:

- The capacity expansion is to be achieved by reducing the sheeting machine idle time and by increasing the speed of the equipment with the help of variable frequency derive (VFD)
- The raw material asbestos fibre usage will be reduced from 8.5% to 6.8% per ton of product. Additional requirement of cement will be met by adding GGBS (Ground granulated blast furnace slag) and Fly ash. GGBS and Flyash waste which will be sourced from iron and steel industry/Power plants.

- There is no change in the pollution load for the existing and proposed expansion with respect to Air.
- Effluent water will be completely recycled and hence there is no pollution load with respect to water.
- Hazardous waste like discarded fibre cement products like broken sheets and rejected material are being pulverized and taken back to the mixer to reuse in the manufacturing process. Dust from dust collectors is also sent back to process for reuse.

After detailed deliberation and discussion with the Industry, the committee decided to certify that there is no increase in pollution load due to proposed increase in production from 1,20,000 T/A (Asbestos Cement Roofing Sheets) to 1,50,000 T/A (Asbestos & Non-Asbestos Cement Roofing Sheets) and hence the request of the unit to issue "No increase in pollution load certificate" can be considered by TNPCB subject to the following conditions:

1. The quantity of Asbestos fiber in Raw material mix shall not exceed the existing quantity i.e.10200 T/A .
2. The unit shall comply with the stipulated emission standards for fibre count and dust both for stack emission and work place emission.
3. The unit shall comply with all the conditions imposed in the Environmental Clearance issued by MOEF vide F. No. J-11011/949/ 2008-IA II (I) dated 17.03.2009.
4. The unit shall comply with all existing norms of discharge and emission as well as changes if any made by Authorities like MoEF& CC, CPCB and TNPCB from time to time.
5. The certificate shall not be construed as CTE/CTO of expansion and the unit shall not establish/ commence the expansion activities without consent of the Board.

6. The unit shall periodically analyse the discharge and emission levels and report to TNPCB, so as to monitor the unit and confirm the real time pollution load after operation.
7. Ambient Air Quality and stack emission to be monitored by external agency once in 3 months and the reports to be submitted to TNPCB on regular basis.
8. Hazardous wastes to be segregated and stored in designated areas and properly disposed in accordance with Hazardous and Other Wastes (M&TM) Rules, 2016.
9. The unit shall furnish Environmental Management Plan and 3rd party Audit report through any approved competence agency.
10. The unit shall ensure that there shall not be any increase in pollution load due to proposed increase of production from 1,20,000 T/A(Asbestos Cement Roofing Sheets) to1,50,000 T/A(Asbestos & Non-Asbestos Cement Roofing Sheets) .
11. The unit shall enhance the Green Belt development in the premises in consultation with the DFO for native species.
12. As per EIA notification, if on verification the TNPCB holds that the change or expansion or modernization will result or has resulted in increase in pollution load, the exemption claimed under this clause shall not be valid and it shall be deemed that the project proponent was liable to obtain prior Environmental clearance before undertaking such changes or increase , as per the clause (a) of sub para (ii) of para 7 of EIA notification and the provisions of Environment (Protection) Act, 1986 shall apply accordingly
13. It shall be the responsibility of the project proponent to satisfy itself about "no increase in pollution load as a result of changes, expansion or modernization, as the case may be, before under taking such changes or increase, and the project proponent shall be liable for action under the provisions of the Environment (Protection) Act, 1986 if on verification of facts or claim it is found that such change or expansion or modernization involves increase in pollution load.

14. The unit shall comply with the consent order conditions, various directions issued by TNPCB/CPCB/NGT etc., from time to time.

The Tamil Nadu Pollution Control Board accepts the recommendation of the Pollution Load Assessment Committee (PLAC) and hereby issues "No Increase in Pollution Load" certificate for increase in production from 1,20,000 T/A(Asbestos Cement Roofing Sheets) to 1,50,000 T/A (Asbestos & Non-Asbestos Cement Roofing Sheets) subject to the above conditions recommended by the PLAC along with the additional condition that the unit shall file application and obtain the CTE for the above said expansion activity before commencing the establishment activity.

This certificate is issued only based on the 'No increase in Pollution load' for proposed activity issued by the consultant accredited by the MoEF&CC and NABET. If any deviation in the said certificates, it will be considered null and void and would attract penal provision under Environmental Protection Act, 1986 against the unit of M/s. Ramco Industries Limited and the authorized consultant who have issued the certificate.

Receipt of this letter shall be acknowledged

23/4/2024

For Member Secretary

23/4/24

Copy to:

1. The Joint Chief Environmental Engineer (M),
   Tamil Nadu Pollution Control Board,
   Tirunelveli
2. The District Environmental Engineer,
   Tamil Nadu Pollution Control Board,
   Tirunelveli
3. The Member Secretary,
   Ministry of Environment, Forest & Climate Change, Government of India,
   Parivesh Bhawan, East Arjun Nagar, Delhi – 110 032.