



Date: 07.05.2024

To,
Gujarat Pollution Control Board,
Paryavaran Bhavan, Sector – 10 A,
Gandhinagar – 382010.

Sub: Submission of ENVIRONMENTAL STATEMENT for the year 2023-24 for Aditya Birla Insulators (Unit of Grasim Industries Limited) P.O. Maghasar, Taluka- Halol, Distt- Panchmahal, Gujarat-389350.

Ref: Consent Order No. AWH-97611 issued wide letter No. GPCB/CCA-PN-83(5)/ID-18831/490415, dated 04/01/2019, valid up to 19/10/2025.

XGN ID No.: 18831

Dear Ma'am/Sir,

With reference to above subject, please find herewith the **Environmental Statement (Form-V)** for the **financial year 2023-24** in respect of **Aditya Birla Insulators** at Meghasar, Tal- Halol, Distt- Panchmahal (Gujarat).

This is for your kind information and record, please.

Thanking you,

Yours faithfully,
For Grasim Industries Limited
(Unit: Aditya Birla Insulators-Halol)


Dr. Gobinda Pahari
(Site Head)


Encl.:

1. Form – V
2. Effluent analysis report
3. Ambient air monitoring report
4. Stack monitoring report



Cc to: Regional Office, Gujarat Pollution Control Board, Plot No. 1403, Opp. GIDC Office, Halol - 389350.


ADITYA BIRLA INSULATORS
Grasim Industries Limited
Unit - Aditya Birla Insulators

Halol Works : P.O. : Meghasar, Taluka : Halol, Dist. Panchmahal (Gujarat) Pin : 389350, India
Tel. : 91 2676, Board : 221002 | Fax : 91 2676 223375
Website: www.adityabirlainsulators.com / www.grasim.com | CIN No. : L17124MP1947PLC000410
Regd. Office : Birlagram (P.O.), Nagda (M.P.) Pin : 456 331, India.

FORM – V
(Rule 14 of Environment Protection Rules-1986)

Environmental Statement for the financial year ending on the 31st March, 2024

PART – A

- (i) Name & Address of the owner/occupier : Mr. H. K. Agarwal
Of the Industry operation or process : M/s. Grasim Industries Limited
(Unit- Aditya Birla Insulators)
A wing, Flat No. 802, Chaitanya CHS,
Appasaheb Marathe Marg, Prabhadevi,
Mumbai – 400025.
- (ii) Industry category : **Orange Category**
- (iii) Production Capacity – Units : Porcelain Insulator: 1866 MT/Month
(Actual – **935.38 MT/Month**)
Composite Insulator: 100000 Nos. /Month
(Actual – **7928.42 Nos. /Month**)
- (iv) Year of establishment : 01/08/1981
- (v) Date of the last environmental statement : 27/06/2023

PART – B

Water and Raw Material Consumption

(I) Water Consumption m³/day

Process : 615.44 M³/day
Cooling : 22.01 M³/day
Domestic : 101.46 M³/day

Name of Product		Process water consumption per unit of product output	
		During the previous financial year (2022-2023)	During the current financial year (2023-2024)
1.	Porcelain Insulator	20.95 kL/MT	20.72 kL/MT
2.	Composite Insulator (Polymer)	Nil	Nil

Raw Material Consumption

For Porcelain Insulators Preparation:

No.	Name of Raw Materials	UOM	Consumption of raw material per unit of output (MT/MT)	
			During the previous financial year (2022-2023)	During the current financial year (2023-2024)
1	Ball Clay	MT	0.64	0.64
2	Quartz	MT	0.17	0.15
3	Feldspar	MT	0.29	0.29
4	Alumina	MT	0.37	0.37
5	Metal Part (SGI)	No's	0.01	0.05

For Composite Insulators (Polymer) Preparation:

No.	Name of Raw Materials	UOM	Consumption of raw material per unit of output	
			During the previous financial year (2022-2023)	During the current financial year (2023-2024)
1	Silicon Rubber	KG	3.99	6.06
2	FRP Road	No's	1.43	1.02
3	Metal Parts	No's	2.10	2.38

PART – C

Pollution Discharged to environment / unit of output.
(Parameter as specified in the consent issued)

Pollutants		Unit	Result	GPCB Standards	Percentage of variation from prescribed standards with reason
(a) Wastewater	BOD	(mg/l)	9.54	30	Within Permissible Limit
	COD	(mg/l)	31.8	100	Within Permissible Limit
	TSS	(mg/l)	11.8	100	Within Permissible Limit
(b) Air (D.G set)	PM	mg/Nm ³	47.00	150	Within Permissible Limit
	SO ₂	PPM	26.87	100	Within Permissible Limit
	NO _x	PPM	15.08	50	Within Permissible Limit

PART – D

HAZARDOUS WASTE

As specified under Hazardous Wastes (Management and Handling Rules, 2016)

Hazardous Waste	Total Quantity	
	During the previous financial year (2022-2023)	During the current financial year (2023-2024)
a) From Process I. Used Oil (Cat. 5.1) II. Discarded containers/Barrels (33.1)	4.18 kL 230 Nos.	7.32 kL 246 Nos.
b) From pollution control facility (ETP Sludge)	8.93 MT	9.41 MT

PART – E

SOLID WASTE

Solid Wastes	Total Quantity	
	During the previous FY 22-23	During the current FY 23-24
(a) From process	0	0
(b) From pollution control facility (Effluent Treatment Plant)	8.93 MT	9.41 MT
(c) (i) Quantity recycle or re-utilized	8.93 MT	9.41 MT
(ii) Sold to authorized recycler	230 Nos. Discarded containers/Barrels	246 Nos. Discarded containers/Barrels
(iii) Disposed to TDSF	Nil	Nil

PART – F

PLEASE SPECIFY THE CHARACTERIZATION (IN TERMS OF COMPOSITION AND QUANTUM) OF HAZARDOUS AS WELL AS SOLID WASTES AND INDICATE DISPOSAL PRACTICE ADOPTED FOR BOTH THE CATEGORIES OF WASTES:

SOLID WASTE:

- Storage Practices: Hazardous waste is collected and stored in scrap storage yard on impervious concrete flooring within the premises.
- Disposal Practices: Hazardous waste is handed over to authorized recyclers as per the norms.
- Road & Paved areas regularly cleaning with safe manners.
- Generated sludge from the ETP also reused in our process.
- Organic waste converted in Vermi compost and used as nutrient-rich organic fertilizer for green belt development within plant & colony premises.

HAZARDOUS WASTE:

Complying with the provisions made under Hazardous & Other waste (Management & Trans-Boundary Movement) Rule, 2016.

The Used oil (Cat. 5.1), Discarded empty drums/containers (Cat. 33.1), ETP sludge (35.3) is generated as hazardous waste from plant machineries/equipment and waste water treatment. The Hazardous waste is being stored in M.S. drums on concreted floor under covered in roof shed and is being sold out to authorized recycler as per disposal method.

- During FY 2023-24, 11.09 MT Recyclable hazardous waste i.e. Used oil, discarded containers etc. is sold out to GPCB authorized recyclers (i.e., M/s Shibl Lubricant [GPCB ID-36958] & M/s Honest Enterprise [GPCB ID-80781].
- During FY 2023-24, 9.410 MT generated ETP sludge reused in our process.
- Total Hazardous Waste Balance Stock as on 31.03.2024 is 0.00 MT.

OTHER HAZARDOUS WASTE:

- Complying with the provisions made in Batteries (Management & Handling) Rules, 2001 & Amendment Rules, 2010. As a Bulk Consumer, the half year return regarding purchase & disposal of lead acid batteries is submitted regularly to GPCB in prescribed FORM No. VIII accordance to prescribed schedule.
- Complying with the provisions made in E-waste (Management) Rules, 2016. As a Bulk Consumer, the Annual return regarding disposal of e-waste is submitted regularly to GPCB in prescribed FORM No. 3 with their manifest copy accordance to prescribed schedule.

During FY 2023-24, approx. 5.25 MT E-waste sold to authorized E-waste recycler M/s Electro Waste Solution (60812) at Halol, GIDC, Plot No. 631, Dist: Panchmahal, Gujarat-379350 & M/s Galaxy recycling (46259) at bharudi, Tal: Gondal, Dist: Rajkot-360311 (Gujarat).

The Annual return for the unit has been submitted to GPCB Regional office and Head office for the period from April'23 to March'24 dated 05/04/2024.

E-waste generated from the unit is being sold out only to authorized e-waste recyclers.

- Complying with the provisions made under Bio Medical Waste Management Rules, 2016. The Consent & authorization has been obtained from GPCB under Water Act and Bio Medical Waste Management Rules, 2016 for the generation, segregation & storage of Bio medical waste for Medical Centre vide Authorization No. BMW-346515 and valid up to 31/12/2075.

During the calendar year 2023 total 3.59 Kg Bio Medical waste generated of different categories i.e. Yellow/Red/White & Blue sent to authorized CBWTF i.e. M/s Samvedna BMW Incinerator-Halol for final disposal as per BMW rule'2016.

The Annual report in FORM- IV for the year 2023 (from 1st January to 31st December) regarding details of generation & disposal of bio medical waste has been submitted to GPCB online in XGN as well as in hard copy dated 27/02/2024.

The Bio Medical waste is being collected/stored in colored bins prescribed as per rules at Medical Centre. The collection of Bio Medical waste from the Medical Centre is being done by authorized CBWTF i.e. M/s Samvedna BMW Incinerator-Halol in its own vehicle for transportation of Bio Medical waste to its site for final treatment/disposal.

PART – G

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

- **Pollution control measures adopted to control the pollution are as given below:**
 - Regular monitoring of stack emissions & ambient air quality conducted by GPCB approved environment labs
 - ETP treated water is reused 100 % in gardening, toilets, fire hydrant and process.
 - Treated sewage water is used in green belt development.
 - ETP sludge is recycled 100% into the process.
- **The impact of these measures on conservation of natural resources:**
 - Reduction in ETP waste generation.
 - Emission levels are within GPCB permissible limits.

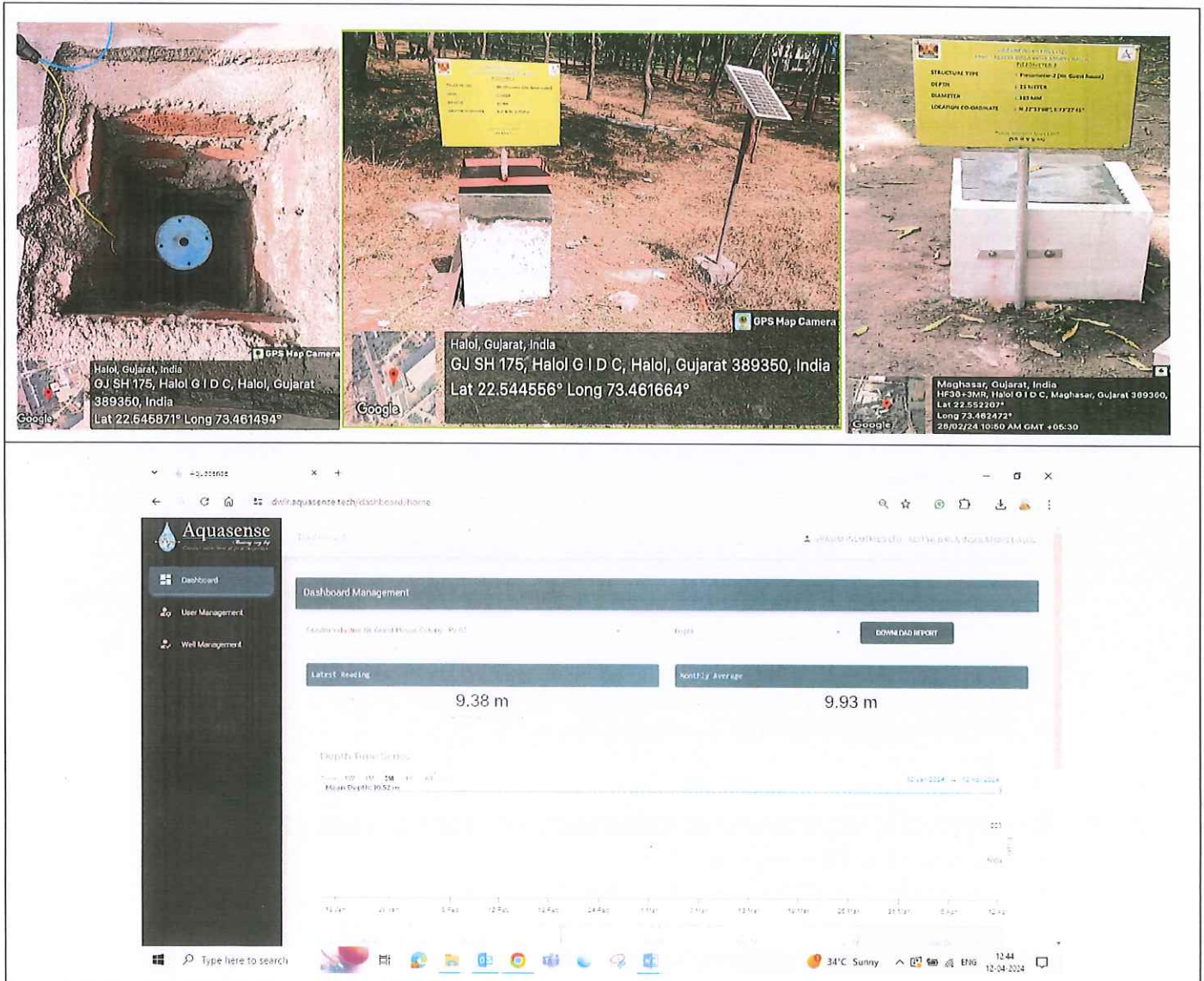
PART – H

Additional measures / investment proposals for environmental protection including abatement of prevention of pollution

Unit is committed for sustainable plant operation as a responsible manner in and around the industrial premises viz. plantation programme at its premises and colony, rural development programme, regular environment emission monitoring programme from the external approved agencies etc. Thus, the control measures provided for abatement and control of pollution, as following:

- Rooftop Rainwater drains to be connected to recharge-wells.
- Increase Vermi-Composting for biodegradable waste management.
- Provided covered shed for raw material storage as well as plant process areas.
- Developed & maintained massive greenbelt area inside plant & colony premises.
- Acoustic structures provided at all standby D.G sets for noise reduction.
- Regularly maintenance & services for optimization of ETP operation.
- 10 No's artificial recharge well-constructed for ground water recharge.
- 02 No's of DWLR piezometers installed for continuous monitoring of ground water level.

DWLR Piezometers



Recharge wells



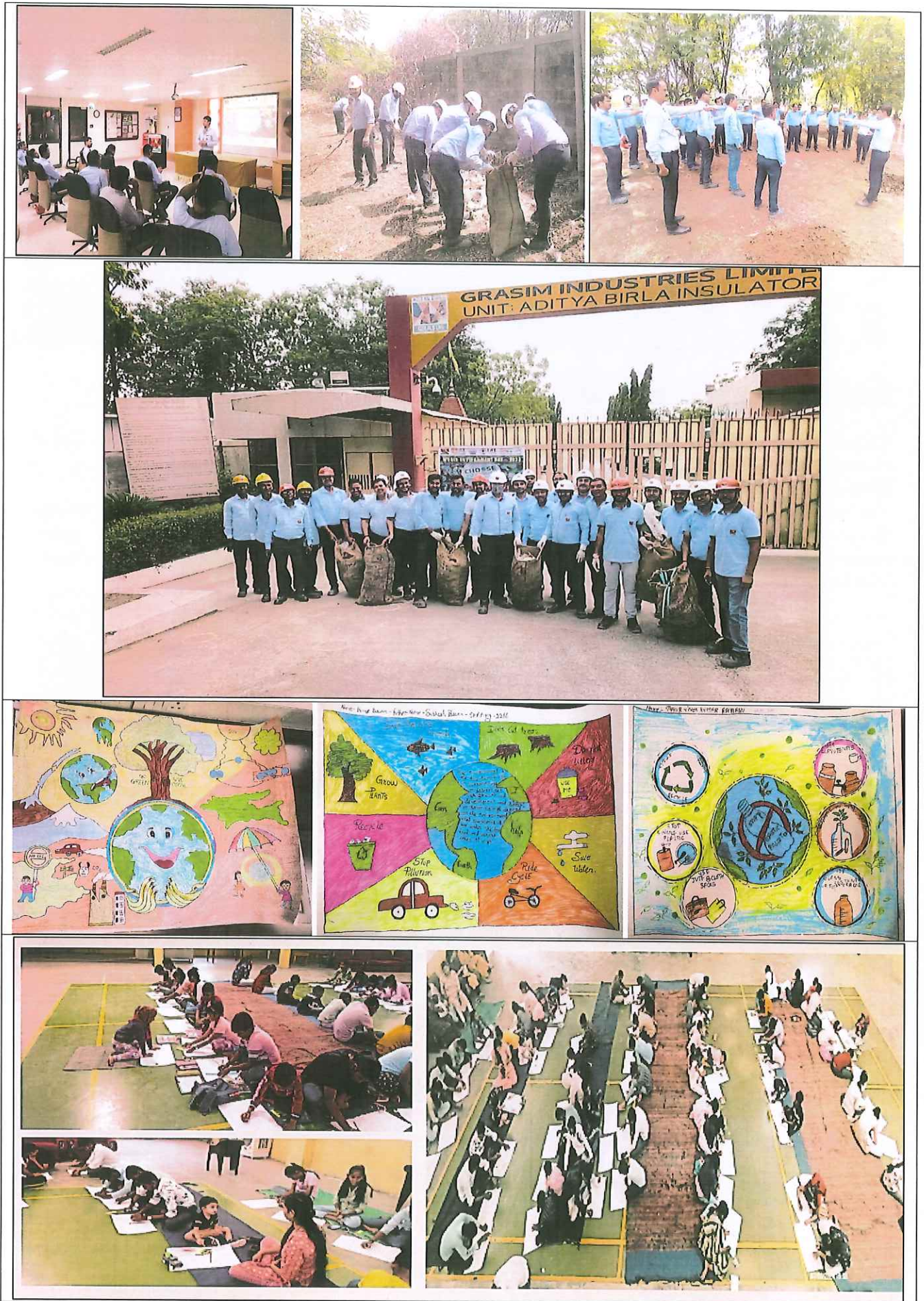
Celebration of World Environment Day-2023

Regular Environment Awareness program is being conducted at Unit to spread awareness for conservation of environment and natural resources. The Environment Awareness program being celebrated at unit for environment awareness is as under:

Various events like plantation program, short movie clips & competition like stage plays, poems, Quiz, Slogan & Poster competition etc. are being organized for awareness and to promote environment conservation activities among the colony residents, school children and employees and worker men. World Environment Day (2023) celebrated on the theme of “Beat Plastic Pollution”.

Glimpses of celebration WED-2023





PART - I

Any other particulars for improving the quality of the environment:

- 580 No's saplings to be planted this year (FY'24) in company and nearby villages.
- We provide medical assistance, provide educational awareness and distribute tree saplings in village school to promote environmental conservation.
- Being a corporate social citizen, we ensure to support is required for making our efforts and initiatives successful by implementing various activities spanning from health, education, women livelihood, espousing social causes, infrastructural work as well for Environment. We provide necessary support whatever required making social program successful by implementing various activities as per the need of villagers & our focus areas.

Glimpses of Green belt developed



GLIMPSES OF COMMUNITY WELFARE AND ECO-DEVELOPMENT ACTIVITIES



The enrollment (Shala Pravesh) : program was organized at Sathrota Govt. School in the presence of the deputy collector of Halol.



Rural Education Infrastructure School facilities and fixtures provided class furniture like Benches, Tables, Chairs, fitting of wall cupboards, painting, etc. in khodiyar nagar govt. school.



*Hydraulic Obstetric Delivery Tables for the labor room at Government Referral Hospital, Halol Under CSR Activity
Every month they perform more than 100 institutional deliveries at the hospital. A good infrastructure in the Delivery room of the hospital will provide a safe and hygienic environment for both mothers and babies.*

3. Cattle Development Centre in collaboration with BAIF: Our collaboration with BAIF Development Research Foundation resulted in the inauguration of the Cattle Development Centre. This initiative aims to enhance the productivity and well-being of cattle farmers in



the region. The center will provide training and resources to farmers, enabling



them to adopt modern practices for cattle rearing. By promoting sustainable livestock management, we contribute to the economic upliftment of the rural community.





Sustainable Livelihoods- Cattle Development project



Infrastructure development with renovation of Aanganwadi at Saiyedpura village



Signature : *Gobinda*

Name : Dr. Gobinda Pahari

Designation : Site Head

Date : 07/05/2024

DR. GOBINDA PAHARI
SITE HEAD
GRASIM INDUSTRIES LTD.
Unit: Aditya Birla Insulators
P.O. Wagholkar, Taluka. Halol,
Dist.: Panchmahal, Gujarat-389302.



Report No.: WECCO/LAB/02-2024/WW-81		Date: 20/02/2024	
TEST REPORT			
Name & Address of Customer	Grasim Industries Ltd. (Unit- Aditya Birla Insulators), S.No.-333/1, Vill: Magasar, Tal: Halol, Dist: Panchmahal.		
Sampling Date	: 14/02/2024	Inward ID	: WECCO/2024/WW-81
Sample Collected by	: WECCO Team	Sampling Protocol	: IS: 3025 (Part-1)
Type of Sampling	: Grab	Sample Type	: Wastewater
Sampling Location	: ETP	Sample Description	: Outlet of ETP
Sample Quantity Received	: 5 Lit.	Sample Receipt Date	: 16/02/2024
Sample Collected In	: Plastic Carboy	Analysis Start Date	: 16/02/2024
Sample Condition	: Acceptable	Analysis Completion Date	: 20/02/2024
Environmental Conditions during Testing		: 25±2°C & <50% RH	

Sr. No	Parameter	Result	Unit	Test Method
1	pH	8.06	--	APHA, 23 rd Edition 2017/4500 H ⁺ B
2	Temperature	28	°C	APHA, 23 rd Edition 2017/2550 B
3	Total Suspended Solids	11.8	mg/L	APHA, 23 rd Edition 2017/ 2540 D
4	Total Dissolved Solids	1674	mg/L	APHA, 23 rd Edition 2017/ 2540 C
5	Ammonical Nitrogen	2.0	mg/L	APHA, 23 rd Edition 2017/4500 NH ₃ B&C
6	Oil & Grease	BDL	mg/L	APHA, 23 rd Edition 2017/5520 B
7	BOD (3 Days at 27°C)	9.54	mg/L	IS 3025 : Part 44 : 2023
8	Chemical Oxygen Demand	31.8	mg/L	IS 3025 : Part 58 : 2023

Information provided by the Customer: N.A.

Remarks:



Pranav Pandya

AUTHORIZED SIGNATORY
PRANAV PANDYA

****END OF REPORT****

This Report is issued under the following terms & Condition:

1. This report shall not be reproduced in part or full without prior permission of "Watair Envisol Consultancy CO. (Laboratory Division)"
2. The results listed herewith are only for the item.
3. Sample shall be disposed after 15 days from the date of issue of the report unless agreed with the customer.
4. In case when laboratory is not involved in sampling, the results apply to the sample are received.
5. This report should not be used for publicity or litigation.
6. Tests performed by External Provider shall be identified/marked by "***" sign.
7. Any additions to, deviations, or exclusions from the method shall be identified by "*" sign.

WATAIR ENVISOL CONSULTANCY CO.

- Corporate House & Laboratory: NK House, 8, Dutt Society,
Near Ramji Mandir, Bhattha, Paldi, Ahmedabad - 380007
- +91 942 661 1055, +91 749 005 0972, +91 079 266 31031
- watairgroup@gmail.com www.watairgroup.com



ISO 9001:2015
ISO 14001:2015
ISO 45001:2018



Report No.: WECCO/LAB/02-2024/A-36		Date: 20/02/2024	
TEST REPORT			
Name & Address of Customer	Grasim Industries Ltd. (Unit- Aditya Birla Insulators), S.No.-333/1, Vill: Magasar, Tal: Halol, Dist: Panchmahal.		
Sampling Date	: 14/02/2024	Inward ID	: WECCO/2024/A-36
Sample Collected by	: WECCO Team	Sampling Protocol	: IS 5182
Sampling Location	: Near Main Gate	Sample Receipt Date	: 16/02/2024
Sample Description	: Ambient Air	Analysis Start Date	: 16/02/2024
Duration of Sampling	: 8 hours	Analysis Completion Date	: 20/02/2024
Environmental Conditions during Testing		: 25±2 °C and < 50 % RH	

GENERAL INFORMATION	
Instrument code	: WECCO/RDS/01 and WECCO/ FDS/01
Instrument calibration status	: OK
Climate condition during sampling	: Clear Sky
Wind Direction	: NNE
Wind Speed km/hr	: 10
Humidity RH%	: 49
Ambient Temperature °C	: Min. 28 Max. 32

Sr. No.	Parameter	Result	Unit	Test Method	Norms
1.	Particulate Matter PM ₁₀	59.12	µg/m ³	IS 5182(Part-23):2006 (Reaffirmed-2022)	100
2.	Particulate Matter PM _{2.5}	30.25	µg/m ³	IS 5182 (Part-24):2019	60
3.	Sulfur Dioxide as SO ₂	11.08	µg/m ³	IS 5182(Part-2):2001 (Reaffirmed-2022)	80
4.	Oxides of Nitrogen as NO ₂	26.49	µg/m ³	IS 5182(Part-6):2006 (Reaffirmed-2022)	80

Information provided by the Customer: NA
Remarks:



Pranav Pandya

AUTHORIZED SIGNATORY
PRANAV PANDYA

****END OF REPORT****

This Report is issued under the following terms & Condition:

1. This report shall not be reproduced in part or full without prior permission of "Watair Envisol Consultancy CO (Laboratory Division)"
2. The results listed herewith are only for the item.
3. Sample shall be disposed after 15 days from the date of issue of the report unless agreed with the customer.
4. In case when laboratory is not involved in sampling, the results apply to the sample as received.
5. This report should not be used for publicity or litigation.
6. Tests performed by External Provider shall be identified/ marked by "***" sign.
7. Any additions to, deviations, or exclusions from the method shall be identified by "*" sign.

WATAIR ENVISOL CONSULTANCY CO.

- Corporate House & Laboratory: NK House, 8, Dutt Society,
Near Ramji Mandir, Bhattha, Paldi, Ahmedabad - 380007
- +91 942 661 1055, +91 749 005 0972, +91 079 266 31031
- watairgroup@gmail.com www.watairgroup.com



ISO 9001:2015
ISO 14001:2015
ISO 45001:2018



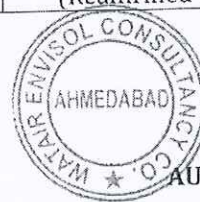
Report No.: WECCO/LAB/02-2024/S-196		Date: 20/02/2024	
TEST REPORT			
Name & Address of Customer	Grasim Industries Ltd. (Unit- Aditya Birla Insulators), S.No.-333/1, Vill: Magasar, Tal: Halol, Dist: Panchmahal.		
Sampling Date	: 14/02/2024	Inward ID	: WECCO/2024/S-196
Sample Collected by	: WECCO Team	Sampling Protocol	: IS :11255 (Part-1)
Sampling Location	: D.G. Set No-5	Sample Receipt Date	: 16/02/2024
Sample Description	: Stationary Source Emission	Analysis Start Date	: 16/02/2024
Duration of Sampling	: 1 Hour	Analysis Completion Date	: 20/02/2024
Environmental Conditions during Testing		: 25±2°C & <50% RH	

GENERAL INFORMATION	
Instrument code	: WECCO/SS/01
Instrument calibration status	: OK
Type of Sampling	: Iso Kinetic
Ambient Temperature (°C)	: 30
Stack Temperature (°C)	: 143
Velocity of Stack Gases (m/s)	: 8.02
Volumetric Flow rate in (m³)	: 0.531
Type of fuel	: Diesel
Air Pollution Control Measures	: --

Sr. No.	Parameter	Result	Unit	Test Method	Norms
1	Particulate Matter as PM	47.00	mg/Nm³	IS 11255(Part-1):1985 (Reaffirmed-2019)	150
2	Sulphur Dioxide as SO₂	26.87	ppm	IS 11255(Part-2):1985 (Reaffirmed-2019)	100
3	Oxide of Nitrogen as NOx	15.08	ppm	IS 11255(Part-7):2005 (Reaffirmed-2017)	50

Information provided by the Customer: _____ NA

Remarks:



Pranav Pandya

**AUTHORIZED SIGNATORY
PRANAV PANDYA**

****END OF REPORT****

This Report is issued under the following terms & Condition:

1. This report shall not be reproduced in part or full without prior permission of "Watair Envisol Consultancy CO. (Laboratory Division)"
2. The results listed herewith are only for the item.
3. Sample shall be disposed after 15 days from the date of issue of the report unless agreed with the customer.
4. In case when laboratory is not involved in sampling, the results apply to the sample are received.
5. This report should not be used for publicity or litigation.
6. Tests performed by External Provider shall be identified/marked by "***"sign.
7. Any additions to, deviations, or exclusions from the method shall be identified by "***"sign.

WATAIR ENVISOL CONSULTANCY CO.

- Corporate House & Laboratory: NK House, 8, Dutt Society, Near Ramji Mandir, Bhattha, Paldi, Ahmedabad - 380007
- +91 942 661 1055, +91 749 005 0972, +91 079 266 31031
- watairgroup@gmail.com www.watairgroup.com



ISO 9001:2015
ISO 14001:2015
ISO 45001:2018