

25th Sept, 2024

To,
The Environmental Officer,
Karnataka State Pollution Control Board,
"C" Block, Plot No. 501, Near Income Tax Office,
Devraj Urs Layout,
Davangere – 577 006.

Dear Sir,

Sub: Submission of Environmental Statement Report (Form-V) (April, 2023 to March, 2024) for Harihar Polyfibers, at Kumarapatnam – 581 123, Dist: Haveri Karnataka by M/s. Grasim Industries Ltd.

With reference to the aforesaid subject, we are herewith submitting the Environmental Statement Report (Form-V) for Harihar Polyfibers, at Kumarapatnam – 581 123, Dist: Haveri Karnataka for financial year April, 2023 to March, 2024.

Thanking you with Regards,

(Soumya Kanta Mohanty) President and Unit Head Harihar Polyfibers & Grasilene Division (Unit of Grasim Industries Ltd.,)

Encl: as above

Cc:

- The Member Secretary
   Karnataka State Pollution Control Board,
   "Parisara Bhavan", #49, 4th & 5th Floor,
   Church Street, Bangalore-560001
- The Regional Office, MoEF & CC, Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, Bangalore – 560034 (copy through e-mail only).



Birla Cellulose Fibres from Nature

Grasim Industries Limited

Units : Harihar Polyfibers & Grasilene Division

Kumarapatnam 581 123, Dist. Haveri, Karnataka.

T : +91 836 2482000 / +91 8373 242171 To 75 / +91 8192 247550 To 54 | F : +91 8373 242875 / +91 8192 247555

W : www.grasim.com | E : grasimharihar@adityabirla.com | CIN : L17124MP1947PLC000410

Regd. Office : P.O. Birlagram, Nagda 456 331 (M.P.)

## ENVIRONMENTAL STATEMENT REPORT

# FORM-V (See Rule 14)

Environmental Statement for the financial year ending with 31st March 2024.

#### **PART-A**

(i)	Name and address of th	he	Mr. Soumya Kanta Mol	nanty	
	owner/occupier of th	he	President and Unit Hea	d	
	industry operation	or	M/s. Harihar Polyfibers	8,	
	process.		(Unit of Grasim Industr	ies)	
			Kumarapatnam – 581 123,		
			Tq- Ranebennur, Dist: Haveri		
			Karnataka		
(ii)	Industry category Primary		Large Red		
(iii)	Production capacity		Consented Quantity	Actual quantity of	
				production	
	Rayon Grade Pulp		85350 TPA	69095.27 TPA	
(iv)	Year of establishment		1972		
(v)	Date of the last environment	tal	30.09.2023		
. ,	statement submitted				

## Note:

- 1. The industry has obtained EC for Expansion of Fibre Plant from 87,600 to 1,75,200 TPA, Pulp Plant from 74,400 to 1,48,800 TPA, Captive Power Plant from 20 to 50 MW and setting up Excel Fibre Plant of capacity 36,500 TPA vide EC LETTER NO. IA-J-11011/371/2006-IA II(I) DATED 13.08.2019 and we are submitting the half yearly compliance report once in six months.
- As per the EC LETTER NO. IA-J-11011/371/2006-IA II(I) DATED 13.08.2019, we have obtained the CFO for manufacture of Rayon Grade Pulp of capacity 85,350 vide CFO order No. AW-327349 Dtd: 07.10.2021

## **PART-B**

## Water and Raw Material Consumption

(i) Water consumption: - 23173.96 m3/day

Process	21299.48 m³ / day
Process Loss	507.46 m3/ day
Domestic	151.18 m³ / day
Gardening & Misc (Cooling)	311.84 m3 / day
Boiler Water (DM Water)	904 m3/day

Name of Products	Process Water Consumption per Unit of product Output (m³/ton)			
	During the previous financial year (2022-2023)	During the current financial year (2023-2024)		
Rayon Grade Pulp	119.5	118.23		

# (ii) Raw Material Consumption

Name of	Name of	Unit	Consumption of raw material per unit of output (kg/t)		
raw materials	materials products		During the previous financial year (2022-2023)	During the current financial year (2023-2024)	
Wood		T/T	3.104	3.214	
Caustic Soda		Kg/T	28.626	33.355	
Sodium Sulphate		Kg/T	17.906	20.370	
Chlorine		Kg/T	12.771	18.985	
Hydrochloric acid	Rayon	Kg/T	11.937	15.445	
Hydrogen peroxide	Grade Pulp	Kg/T	19.607	22.606	
Oxygen	Tup	Kg/T	20.404	21.138	
Sulphuric Acid		Kg/T	41.253	40.713	
Sodium chlorate		Kg/T	24.754	24.134	
Sea Shell		Kg/T	36.198	39.447	
Oil		Kg/T	61.402	75.204	

# PART-C

# Pollution discharged to environment/unit of output

(Parameters specified in the consent issued)

# a. Air

Pollutants (Particulates	Tolerand Specified I (M	by KSPCB	Concentrations of pollutants in discharges		Quantity of pollutants discharged	Percentage of variation from prescribed
Emission)	Vol (Nm³/Hr)	SPM (mg/Nm³)	Volume (Nm³/Hr)	SPM (mg/Nm³)	(ton/day)	standards with reasons
(a) Chimney attached to Recovery Boiler	106000	150	44110.43	54.32	0.057	D: 1 1 D
(b) Chimney attached to Lime Kiln	18000	150	11543.08	40.94	0.011	Discharge level  Maintained  within  prescribed
(c) Package Boiler in Chipper House	-	350	-	_	-	standards /

<sup>\*</sup> Sawdust is used in CFBC Boiler & hence Package boiler has not been used

# b. Water

S. no.	Pollutants	Unit	Tolerance limit specified by KSPCB (Mass/Vol)	Concentrati ons of pollutants in mixed discharges (Mass/Vol)	Quantity of pollutants discharged (T/day) [Mass/day]	Percenta ge of variatio n from prescrib ed standar ds with reasons
1.	Colour & Odour		*			
2.	Total Suspended Solids	mg/l Max	100	51.14	1.49	<b> </b>
3.	Dissolved Solids (Inorganic)	mg/l Max	2100	1783.49	27.44	
4.	Temperature	Deg. C	***	30	-	
5.	рН		6.0 - 8.5	7.32	-	
6.	Oils & Grease	mg/l Max	10	1.69	0.049	
7.	Total residual Chlorine	"	1.0	0.38	0.011	] '
8.	Ammonical Nitrogen (as N)	"	50	2.16	0.063	All the
9.	Total Kjeldhal Nitrogen (as N)	"	100	2.50	0.073	paramet
10.	Free Ammonia (as NH <sub>3</sub> )	"	5.0	0.65	0.019	ers are
11.	Biochemical Oxygen Demand (3 days at 27 Deg.C)	"	30	15.84	0.46	maintain ed
12.	Chemical Oxygen Demand	"	250	146.49	4.29	within
13.	Arsenic (as As)	"	0.2	ND	-	the
14.	Mercury (as Hg)	"	0.01	ND	-	prescrib
15.	Hexavalent Chromium (as Cr+6)	"	0.1	ND	-	ed standard
16.	Total Chromium (as Cr)	"	2.0	ND	-	Staridard
17.	Boron (as B)	"	2.0	ND	-	3
18.	Chloride (as Cl)	"	1000	386.32	11.32	
19.	Flouride (as F)	"	2.0	ND	-	
20.	Dissolved Phosphates (as P)	"	5.0	0.58	0.016	
21.	Sulphate (as SO <sub>4</sub> )	"	1000	847.33	24.82	
22.	Sulphide (as S)	"	2.0	1.60	0.046	
23.	Phenolic Compounds (as $C_6H_5OH$ )	"	1.0	ND	-	
24.	Bioassay – as per IS-6582: 1971	% survival	Not less than 90% of test animals shall survive in 96 hours	100%	-	
25.	Total Volume of Mixed effluent	m³ / day Max	49840	29303.12		

<sup>\*</sup> All efforts should be made to remove colour & unpleasant odour as far as possible.

\*\* All efforts are made to remove colour & odour at source as far as possible.

\*\*\* Shall not exceed 5°C above the receiving water temperature

ND- Not Detectable

 $\textbf{Note: 1)} \ \textit{Treated effluent used for greenery development and formers for irrigation purpose is 2877.18 \, \text{m}3/\,\text{day} \ .$ 

# PART-D HAZARDOUS WASTES

(As specified under Hazardous & Other wastes/Management & Transboundary movement Rules, 2016)

Hazardous Waste	Total Quantity (Kg)	
	During the previous financial year (2022-23)	During the current financial year (2023 – 2024)
(a) *From process		
Used Oil	1230	2700
Waste Residues containing oil	413	300
Empty barrels/containers/liner s contaminated with hazardous chemicals/wastes barrels/containers/liners contaminated with hazardous chemicals/wastes	13920	16860
Spent ion exchange resin containing toxic metals	1600	1245
(b) *From Pollution Control facilities		

Industry has received renewal Authorization under HWM Rules on 22.02.2022.

## PART-E SOLID WASTE

So	urce		Total Quantity (Tons)		
			During the Previous financial Year 2022-23	During the Current financial Year 2023 - 2024	
a)	From Process	Pulp from Centri- Cleaner Rejects	182.5	144	
		Lime Sludge from Causticizing (as such)	38613	42762	
b)	From pollution control	Organic sludge (Biomass & Lignin).	945.4	1622.3	
	facility	Saw dust	2539.1	3042.8	

# **PART-F**

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

# 1. Hazardous Wastes

	Composition	Method of disposal
Hazardous Waste		
a. From Process		
Used Oil	Lubricating oil	Provided designated area for collection and storage of waste oil and timely disposal to KSPCB authorized recycling unit i.e. M/s. Balaji Industries.
Waste Residues containing oil	Cotton waste contaminated with lubricating oil	Used in Boiler along with Coal as per the KSPCB Authorization.
Empty barrels/containers/liners contaminated with hazardous chemicals/waste barrels /containers/liner s contaminated with hazardous chemicals /wastes	Contaminated with oil, paint, chemicals	Disposed to KSPCB authorized unit.
Spent ion exchange resin containing toxic metals	Methacrylic acid, sulfonated styrene, and divinylbenzene (DVB).	Used in Boiler along with Coal as per the KSPCB Authorization.
b. From pollution control facility	Nil	

# 1. Solid Wastes

Source		Source	Composition	Method of Disposal
a)	From Process	Pulp from Centri- Cleaner Rejects	Cellulose fibers	Used in CFBC Boiler as a fuel
		Lime Sludge from Causticizing	Calcium Carbonate	100% recycled within the unit (Burnt in lime kiln)
b)	From pollutio n control	Pulp from Primary Clarifier underflow	Cellulose fibers	Used in CFBC Boiler as a fuel
	facility	Organic sludge	Bio mass Sludge and sludge generated due to Lignin	Quantity of sludge is used for vermi composting remaining is used in CFBC Boiler as a fuel
		Saw dust	Wood dust	Used in CFBC boiler as a fuel

#### **PART-G**

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

# The Following activity completed in FY 24.

- ✓ Rain water harvesting by diverting runoff and roof water to old reservoir through storm drain.
- ✓ Installed flue gas Sox & NOx analyzer for Lime Kiln Stack.
- ✓ Around 2.5 Hectares of greenbelt area has been developed with more oxygen releasing plants only. (Common for both Harihar Polyfibers & Grasilene Division).
- ✓ Around 1200 No's of multispecies planted nearby KHB as instructed by EO, KSPCB, Davangere.

## The Following activity completed and Sustained:

- ✓ Around 3000-4000 m3/day Pulp mill treated effluent is being used for agriculture purpose by neighboring farmers and our own gardening purpose except peak monsoon season. Hence, quantity of effluent discharge into Tungabhadra River will get reduced by 3000-4000m3/day during non-monsoon (The Average effluent utilized in FY 24 is 2877.18 m3/day and this is common for both HPF &GRD)
- ✓ Industry has adopted new Oxygen De Lignification (ODL) Technology to reduce water consumption up to 25% and also reduce the effluent generation from Pulp Mill.
- ✓ Unit has adopted Elemental Chlorine Free (ECF) bleaching thereby minimizing the consumption of Chlorine.
- ✓ At Recovery Section Lime kiln bearing cooling water consumption around 600m3/day is completely reusing and thereby reducing the same quantity of effluent generation.
- ✓ Biogas plant operation improved by installing 4<sup>th</sup> reactor of higher capacity to treat more volume of PH liquor which result in;
  - Increased generation of Green Energy as a Biogas
  - ➤ Reducing up to 55% of furnace oil consumption in Lime Kiln Operation.
  - Minimized emission of SOx and NOx.
  - > Reduction of COD load on ETP.
- ✓ The industry has constructed new Water reservoir with built-up area of 1,80,000 Sq.m
  to harvest and store the rain water and excess runoff water from Tungabhadra River
  during monsoon season, thereby facilitating groundwater recharge. (Common for both
  Harihar Polyfibers & Grasilene Division).

- ✓ Industry has enhanced the ClO2 plant and thereby minimizing the consumption of elemental chlorine at the bleaching section and also improved ambient air quality and treated effluent discharge quality.
- ✓ Around 200 m drain constructed as a part of rainwater harvesting at surrounding to ED Fibre storage building.
- ✓ VFD installed for UB pumps in Pulp mill which will be saving power 2 KW per ton of Pulp.
- ✓ Installed Bio gas plant @ Grasim staff colony with the capacity to produce the biogas 7 Kg/day with Methane content around 70 % by utilizing the generated food & Kitchen waste quantity approx. 150kg per day within the Resident colony and generated biogas being used in Guesthouse Kitchen which reduced the around 70% fossil fuel consumption and also resulting in effective utilization of solid waste.
- ✓ Industry has installed vermicompost production facility in house by utilizing the lignin sludge generated by the operation of Tertiary Clarifier, which results in effective sludge handling and reuse of waste as resource.
- ✓ Conduit pipe drain laid for discharging the treated Combined effluent from ETP to River to meet environment regulations.
- ✓ Industry has started using liquid PAC in effluent treatment plant instead of powdered PAC which results in;
- Accurate dosing of PAC for better consistency in final effluent colour.
- Ease of Operation / Handling
- Controlled ergonomics
- Reducing the fugitive emissions.
- Reducing the generation of sludge
- Restricted the entry of approx. 4T of plastic in to the premises (Plastic bags were used for packing of Powdered PAC).
- Reduces the operation cost of the treatment facility.
- Replacement of Pressure washer propeller pump with new CF pumps.
- Around 2.5 Hectares of greenbelt area has been developed with more oxygen releasing plants only. (Common for both Harihar Polyfibers & Grasilene Division).

## **Online Monitoring Details:**

✓ As per the directions of CPCB, the unit has installed online continuous monitoring system for Treated effluent, stack emission and also for Ambient Air. The details are as follows;

# **➤** For Treated Effluent:

Sl. No	Location	Parameters	Analyzer Model	Make	Service Provider	Online connectivit
•						y
1	Mixed Treated	pH, BOD,	CarboVis	WTW (A	M/s.	CPCB
	Effluent	COD, TSS	70xIQTS	Xylem brand)	Nevco	Server
	sampling point	and			Engineerin	
	- 01	Temperature			g Ltd.	
		Flow	136ULT	SBEM Pvt.		
		(Harihar		LTD.		
		Polyfibers)				

# > For Stack Emission:

Sl. No.	Location	Parameters	Analyzer Model	Make	Service Provider	Online connectivi ty
1	Recovery	Flow	HFM-200	Teledyne	Environment-SA	CPCB
	Boiler stack	PM, SOX, NOx	SPM-380	PCME (envea)	Environment-SA	Server
2	Lime Kiln Stack	Flow	HFM-200	Teledyne	Environment-SA	
		PM, SOX, NOx	SPM-380	PCME (envea)	Environment-SA	

# **▶** For AAQM:

Sl.	Location	Parameters	Analyzer	Make	Service
No.			Model		Provider
1	Intake well	PM2.5 and PM10	MP101M	Environment-SA	Environment-SA
		CS <sub>2</sub> , H <sub>2</sub> S, SO <sub>2</sub> ,	AF22M		
		NO <sub>X</sub> ,	AC32M		
2	ETP	PM2.5 and PM10	MP101M	Environment-SA	Environment-SA
		CS <sub>2</sub> , H <sub>2</sub> S, SO <sub>2</sub> ,	AF22M		
		NO <sub>X</sub> ,	AC32M		
3	Guest House	PM2.5 and PM10	MP101M	Environment-SA	Environment-SA
		CS <sub>2</sub> , H <sub>2</sub> S, SO <sub>2</sub> ,	AF22M		
		NO <sub>X</sub> ,	AC32M		

# ✓ The details of Environmental improvement Projects completed in the FY-2023-24 with Expenditure cost are as follows;

S1 No.	Name of the Project and its impact.	Expenditure Cost Rs. (Lakhs)
1	Rain water harvesting by diverting	48.40
	runoff and roof water to old reservoir	
	through storm drain	

2	Lime kiln & Recovery boiler stack flue gas Sox & NOx analyzer.	52.57
3	Around 2.5 Hectares of greenbelt area has been developed with more oxygen releasing plants only.	10.00
	Total Expenses	110.97

#### PART-H

# Additional measures/investment proposal for environmental protection including abatement of pollution

#### Proposed projects for the financial year 2024-25

Project Name	Approx. Cost Rs. (Lakhs)		
Upgradation of Sewage Treatment Plant at Residential colony awaiting for CFE of the KSPCB to start the construction activity.	90.00		
Adopting the pumping system to collect and treat the runoff water at ETP area	47.00		
Total	137.00		

# Strategies & techniques applied for continuous monitoring of environment and feedback mechanism for correcting / preventing any run-away operations for achieving stable operations.

Effluent from pulping section consists of wood matter & residual chemicals from washing & bleaching stages. It is subjected to primary clarification in two primary clarifiers and the overflow is mixed with bleach drain. The effluent from recovery plant is also subjected to primary clarification in settling pond, overflow of which joins the combined effluent of primary clarifier overflow and bleach drain. The entire mill effluents are then treated in anaerobic digester. The overflow is subjected to aerobic treatment in biological reactor. Biological reactor is designed on the basis of Extended Aeration Activated Sludge Process and consists of 09 Nos. surface aerators of 25 HP each and diffuser aeration with four blowers of 60HP each.

The effluent from Biological Reactor taken in to secondary clarifiers (2 No's) and finally overflow of both secondary clarifiers taken into the tertiary clarifier, where color removal takes place up to 80 %. Finally treated effluent discharged in to River after meeting all the stipulated standards. The comparison between the qualities indicating parameters of the treated effluent from the ETP i.e. before and after the installation of Tertiary clarifier are as follows;

Parameter of Treated Wastewater	Unit	KSPCB target	Before Tertiary Treatment	After Tertiary Treatment	% of Reduction
COD	ppm	250	230	160	30.4

BOD	ppm	30	26	17	34.6
TSS	ppm	100	85	35	59
Inlet/Outlet Colour	PtCo	NA	900	180	80

The treated effluents are passed through an aquarium containing fish obtained from the receiving water body i.e. the river. The property of aquatic life to be highly sensitive to the surrounding environment is made use of as an early warning signal to notice any variation in the quality of effluents. Fish behavior is monitored round the clock and it serves as feedback mechanism to initiate corrective action much before the operations reach run-away stage. This is a unique approach addressing all the control parameters of significance.

In addition to the aforesaid foolproof arrangement the following in-plant measures help to control the operations for consistent quality of effluents and emissions -

- 1. Alternative power supply is provided to Effluent Treatment Plant (ETP) so that in case of failure of one supplies the stand by resumes automatically for the ETP. A similar arrangement is provided for air pollution control equipment's.
- 2. Sensitive effluent streams are monitored round the clock at influent stage itself by providing simple visual monitoring aids for easy and quick qualitative monitoring for taking timely corrective action.
- 3. Biogas plant efficiency has been improved by modifying the internals to treat higher quantity of PH liquor thereby reducing load on ETP.
- 4. Stand by arrangements have been provided for all critical air and water pollution control equipment's.
- 5. All equipment's critical to environment are identified & subjected to preventive maintenance and condition based monitoring as per a pre-drawn schedule to prevent unforeseen stoppages.
- 6. All process operating personnel have been trained to notice and inform any untoward incident that could lead to 'out of control' situation, to the operatives at the ETP so that the relevant stream can be diverted to a 'guard pond' which has a capacity to hold a day's effluents.
- 7. All input chemicals and raw materials are carefully and closely monitored daily against preset norms per unit weight of product so that all inefficient practices that would result in emission to air or discharge to environment is eliminated.
- 8. Industry has implemented NCG burning technology to reduce the odour from the process.
- 9. Operation cost of the ETP and Air Pollution control measures per day is as follows;

## **HPF ETP Operation Cost**

S. No	Particulars	Unit cost (INR/Kg)	UoM	Daily consumption	Total cost (INR)/day		
1	Chemicals						
a	Hydrated Lime	8.5	Kg	280	2380		
b	Urea	39	Kg	100	3900		
С	DAP	92	Kg	100	9200		
d	Liquid PAC	16.5	Kg	9000	148500		
e	Defoamer	173	Kg	10	1730		
f	Flocculant	228	Kg	70	15960		
g	Cow dung	5	Kg	270	1350		
2	Power Requireme	ent					
a	Electricity	7	No's	12500	87500		
3	Service & Repair						
a	Capex		Rs.	10958	10958		
4	Sludge handling		Rs.	3500	3500		
5	Biogas operation		Rs.	100293	100293		
4	Salary & Wages						
2	Staff and		Rs.	12,126	12126		
a	workmen salary		NS.	12,120	12120		
	Contract						
b	workmen for		Rs.	4616	4616		
	ETP						
5	AMC charges for						
	online stack &		Rs.	_	3561.6		
	AAQMS						
	maintenance						
6	Electricity		D-				
	consumption for ESP installed at	7	Rs.	1403.60	9825.25		
		/		1403.60	9825.25		
	Recovery Boiler & Lime kiln						
	& Line Kint						
	Total ETP treatment cost per day				415399.85		

PART-I
Any other particular for improving the quality of the environment

- ✓ The unit has aligned itself with Environmental Management Systems ISO 14001:2015
  and Occupational Health and Safety Management System in accordance with ISO
  45001:2018.
- ✓ The unit is continuously adopting cleaner technologies as an ongoing exercise with several projects under formulation and implementation to further enhance its environmental performance by avoiding human errors, improving work environment & controlling pollution at source.
- ✓ Staff and workmen are exposed to environmental awareness training by in-house faculty and external agencies.
- ✓ High noise level equipment are identified and covered with shed to minimize the noise level.
- ✓ All activities in the mill, which have an interaction with the environment, have been identified. Aspects and impacts related to these activities are listed out. Based on this data environmental objectives and targets have been set against the significant environmental impacts. Aspects and impacts are being reviewed & updated periodically.
- ✓ Industry has strengthened the guard pond, PH Liquor lagoon bunds as a part of continuous up gradation of ETP facilities.
- ✓ Methane capturing and replacement of fuel by methane is given more importance as a step towards reducing greenhouse gases and fossil fuel usage.
- ✓ As a step towards afforestation, green coverage is extended to degraded lands with free distribution of seedlings and post plantation services to ensure maximum survival rate. Following plantation activities have been taken up under 'Operation Green' campaign. This activity will be a continuous exercise to improve the greenery in and around the industry:
  - Industry has already developed 245 acres of own land (by considering total plant area includes HPF and Grasilene) under "Operation Green Project" planting around 340000 Nos. of different tree species. (Around 4000 plantation done in FY 24)
- ✓ Various varieties of birds and flower species in & around factory premises are found due to availability of greenery in the premises and they were protected by industry. Lots of peacocks are found in the premises and special care is taken to protect them.

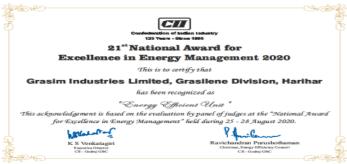
#### **Awards**

- Grasim Industries Limited, Harihar won the "Golden Peacock Gold Award" in the category of Occupational Health & Safety, Aug, 2022.
- Unit has own Platinum Award for Occupational Health and Safety by Grow Care India,
   Delhi in 2021.
- Unit has own National Award for Energy Efficient unit from CII in 2020.
- Unit has own CII-ITC Sustainability awards for commendation of significant achievement in Environment Management in 2020.
- Unit has own "Best Skill Development Award-2020" from Bangalore chamber of Industry & Commerce.
- Unit has emerged as one of the Top Performers at the National Level getting an award of
  three leaves in the Green Rating Award by Centre, New Delhi for Science and
  Environment. Also the unit is recognized with a special award for the best performance in
  fiber sourcing for striving towards raw material self-sufficiency by promoting farm and
  social forestry Certificate.
- Unit's achievements of attaining the global distinction of high chemical recovery efficiency
  was appreciated and the technical paper presented in this regard during IPPTA Seminal
  was adjusted as the best and awarded the first prize.
- Unit was awarded 2<sup>nd</sup> prize amongst large industries in the State of Karnataka for Safety from Dept. of Factories & Boilers.
- Technical paper titled "Two stage oxygen for Bleaching Dissolving Grade Pulp" presented during IPPTA Seminar was adjusted as one of the best Technical paper.
- Unit has awarded 4 star ratings for the Commitment to EHS practices in the CII-SR ESH Excellence awards in 2018.
- Unit has own "Golden Peacock Award" for Environmental management by Institute of Directors and world Environmental Foundation, New Delhi in 2018.



- Unit was awarded 1st prize for installation of "Color Removal Plant" in Project Project Recognition Program conducted by "Frost and Sullivan" at Mumbai in 2019.
- Unit has own the CII-ITC Sustainability award -2019 for "Excellence in Environment Management"





Unit has own Golden Peacock Gold Award "in the category of Occupational Health & Safety, on Aug, 2022.



- Gold award in CSR from Grow Care India, Delhi in 2022.
- "Platinum Award" under Apex India Green Leaf Awards 2023 for Sustainability category in Textile Sector in 2023.