

ADITYA BIRLA



GRASIM

Date: 27.09.2017

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,

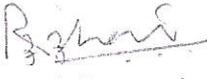
**Sub: Submission of Environmental Statement for the year ending March 2017**

Please find enclosed the Environmental Statement (Form V) for the financial year ending 31<sup>st</sup> March 2017.

Hope you find the same in order.

Thanking you,

Yours faithfully,  
For HARIHAR POLYFIBERS

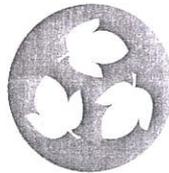
  
Umesh Duggani  
Sr. Vice President (Technical)

Encl.: a.a.

Cc: The Member Secretary  
Karnataka State Pollution Control Board,  
No. 49, Parisara Bhavan,  
4<sup>th</sup> & 5<sup>th</sup> Floors, Church Street,  
BANGALORE – 560 001

ಪ.ಅ, ಕರಾವಳಿಪುರ,  
ದಾವಣಗೆರೆ.  
ಸಂಖ್ಯೆ: 2819  
ದಿನಾಂಕ:  
ಇವರಿಗೆ:

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**Birla Cellulose**  
Fibres from Nature

Grasim Industries Limited  
Unit : Harihar Polyfibers

Kumarapatnam 581123, 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.)

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**FORM – V**

(See Rule 14)

**Environmental Statement for the Financial Year ending the 31<sup>st</sup> March 2017****PART – A**

- i) Name and address of the owner / occupier:  
of the industry, operation or process : K. Suresh  
President  
Harihar Polyfibers  
Kumarapatnam – 581 123  
Dist: Haveri
- ii) Industry category Primary (STC code) : -  
Secondary (SIC code) : -
- iii) Production capacity : 6800 Tons/Month (Installed Capacity)
- iv) Year of Establishment : 1972
- v) Date of the last environmental statement : 24.09.2016  
submitted

**PART – B****Water and Raw Materials Consumption:****1. Water Consumption:**Process : 30840 m<sup>3</sup> / dayCooling : 300 m<sup>3</sup> / dayDomestic: 900 m<sup>3</sup> / day

Name of products	Process water consumption per unit of product output (m <sup>3</sup> /ton)	
	During the previous financial year	During the current financial year
	2015-2016	2016-2017
Rayon Grade Pulp	165.0	160.0

## 2. Raw Material Consumption

Name of Raw Materials	Name of Products	Consumption of Raw Material per unit of output kg / t	
		During the Previous Financial year	During the current Financial year
		(2015 - 2016)	(2016-2017)
Wood	Rayon Grade Pulp	3069	3069
Caustic Soda	"	32.0	31.0
Sodium Sulphate	"	23.0	22.0
Chlorine	"	35.0	36.0
Hydrochloric acid	"	17.0	18.0
Sodium chlorate	"	6.1	6.3
Sea Shell	"	30.0	29.0
Oil	"	30.0	30.0
Oxygen	"	7.6	7.8

## PART C

## Pollution Discharged to Environment / Unit of output

(Parameters as specified in the consent issued)

## (a) Water

Pollutants	Unit	Tolerance limit specified by KSPCB (Mass/Vol)	Concentrations of pollutants in mixed discharges (Mass/Vol)	Quantity of pollutants discharged (T/day) [Mass/day]	Percentage of variation from prescribed standards with reasons
1. Colour & Odour	--	*			 All the parameters are maintained within the prescribed standards 
2. Suspended Solids	mg/l Max	100	70	2.94	
3. Dissolved Solids (Inorganic)	mg/l Max	2100	1720	72.24	
4. Temperature	Deg. C	***	30.0	-	
5. pH	--	6.0 – 8.5	7.5	-	
6. Oils & Grease	mg/l Max	10	0.35	0.015	
7. Total residual Chlorine	"	1.0	ND	-	
8. Ammonical Nitrogen (as N)	"	50	1.4	0.06	
9. Total Kjeldhal Nitrogen (as N)	"	100	1.9	0.08	
10. Free Ammonia (as NH <sub>3</sub> )	"	5.0	1.5	0.063	
11. Biochemical Oxygen Demand (3 days at 27 Deg.C)	"	30	20	0.84	
12. Chemical Oxygen Demand	"	250	194	8.15	
13. Arsenic (as As)	"	0.2	ND	-	
14. Mercury (as Hg)	"	0.01	ND	-	
15. Hexavalent Chromium (as Cr <sup>+6</sup> )	"	0.1	ND	-	
16. Total Chromium (as Cr)	"	2.0	ND	-	
17. Boron (as B)	"	2.0	ND	-	
18. Chloride (as Cl)	"	1000	272	11.42	
19. Flouride (as F)	"	2.0	ND	-	
20. Dissolved Phosphates (as P)	"	5.0	0.65	0.027	
21. Sulphate (as SO <sub>4</sub> )	"	1000	735	30.87	
22. Sulphide (as S)	"	2.0	0.37	0.016	
23. Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	"	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	m <sup>3</sup> / day Max	48120	42000		

\* 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

Portion of the treated effluent was also used for greenery development in the non-rainy period on company's own land. Totally 11,31,800 m<sup>3</sup> of treated effluent has been used for greenery development in the last fiscal period. Volume of treated effluent for greenery development in every month during this period has been submitted to Board along with monthly treated effluent analysis report.

**(b) AIR**

Pollutants	Tolerance Limit Specified by KSPCB (Max)		Concentrations of pollutants in discharges		Quantity of pollutants discharged (ton/day)	Percentage of variation from prescribed standards with reasons
	Vol (Nm <sup>3</sup> /Hr)	SPM (mg/Nm <sup>3</sup> )	Volume (Nm <sup>3</sup> /Hr)	SPM (mg / Nm <sup>3</sup> )		
<u>Particulates</u>						
(a) Chimney attached to Recovery Boiler	106000	150	71565	46.0	0.080	Discharge level Maintained within prescribed standards
(b) Chimney attached to Lime Kiln	18000	150	11790	44.0	0.013	
(c) Package Boiler in Chipper House	-	350	-	-	-	*

\* Saw dust is used in CFBC Boiler & hence Package boiler has not been used

**PART - D****HAZARDOUS WASTE**

(as specified under Hazardous Wastes Management and Handling Rules 1989)

Hazardous Waste		Total Quantity (kg)	
		During the Previous financial Year 2015-16	During the Current financial Year 2016 – 2017
(a) From Process	Used oil generated from industrial operations using lubricants	3800	3800
(b) From pollution control facility			

**PART - E****SOLID WASTE**

Source		Total Quantity (Tons)		Quantity sold / recycled / reutilized within the unit
		During the Previous financial Year 2015-16	During the Current financial Year 2016 – 2017	
a) From Process	1. Pulp from Centri-Cleaner Rejects (ADT)	351.0	335.0	Sold to Card-board Manufacturers
	2. Lime Sludge from Causticising (as such)	44869	41745	100% recycled within the unit
b) From pollution control facility	Pulp from Primary Clarifier underflow (ADT)	169	214	Used in CFBC Boiler
	Saw dust	2400	2289	Used in CFBC boiler

**PART - F**

Characteristics (in terms of composition & quantum) of hazardous as well as solid wastes, disposal practice.

**1. Hazardous Wastes :**

Source	Composition	Quantity kg / day	Disposal Practice
Used oil generated from industrial operations using oil as lubricants in hydraulic systems or other applications	Lubricating oil	9.0 – 9.5	Sold to Authorized recycler (M/s Special Oils, S. No. 202 / 2, Kalghatgi, Dharwad)

**2. Solid Wastes :**

Source	Composition	Quantity (Tons / day)	Disposal Practice
(a) Pulp from Centricleaner rejects (AD tons)	Cellulose Fibers	0.85 – 1.0	Sold to Cardboard Manufacturers
(b) Pulp from primary clarifier underflow (Ad tons)	Cellulose Fibers	0.50 – 0.60	Burnt in CFBC Boiler
(c) Saw dust	Wood dust	0.8 – 1.0	Used as fuel in CFBC boiler
(d) Lime sludge from lime kiln	Calcium carbonate	135 - 140 (as such)	Reused in Lime Kiln to produce Lime

**PART - G**

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production : **Refer Annexure – I**

**PART – H**

Additional measures/investments proposals for environmental protection including abatement of pollution, prevention of pollution: **Refer Annexure – II**

**PART – I**

Other Particulars for improving the quality of environment : **Refer Annexure – III**

Other Information : **Refer Annexure – IV**

## **IMPACTS OF POLLUTION ABATEMENT MEASURES TAKEN ON CONSERVATION OF NATURAL RESOURCES AND ON THE COST OF PRODUCTION**

Harihar Polyfibers, a unit of Grasim Industries Limited is engaged in the production of Rayon Grade Pulp from wood. Ever since its inception the unit is upgrading its production processes and effluent treatment facilities in order to protect the environment and cut down the cost of production. It is evident from the unit's experience that conservation of resources and pollution control go hand in hand. With a clear emphasis on control of pollution at source, Harihar Polyfibers has been proactive in its approach towards implementation of several in-plant measures on pollution abatement. Identification of opportunities for improvements is done by providing various platforms to exploit the innovative abilities of the human resource thus ensuring involvement of entire workforce in the improvement of environmental and in turn business performances. Innovations and continuous improvements (*KAIZEN*) are encouraged through recognition and rewards. The projects thus identified are implemented after assessing their technical as well as economic feasibility. Table – 1 gives some of such projects implemented.

The continuation of implementation of these systematically engineered projects as 'ongoing exercise' has resulted in considerable reduction in the requirement of input chemicals and energy on one hand and corresponding reduction in influent load on the other, making effluent treatment economic and effective.

The abundance of greenery and paves in and around the plant and of fish in treated effluent today stand testimony to this effort and achievement.

Graphs – 1 and 2 describe the above achievement. Graph – 1 shows the progressive reduction in the consumption of 'Chemical' and 'Energy' per ton of pulp production. Graph – 2 shows the progressive reduction in influent load. The final effluent BOD load today is well within specified limits and mere 4% of what it was earlier.

The treated effluent quality as against the stipulated limits by KSPCB is given in Table - 2. The treated effluents meet all the parameters. In addition, the treated effluents have more than 4.0 mg/l DO and the industry successfully conducts continuous on-line bio monitoring. Continuous online effluent quality monitoring device is installed on the combined treated effluent stream. The parameters such as COD, BOD, TSS, pH, Temp & flow are recorded online as per CPCB guidelines and the data are made available on CPCB server.

**Table-1**

**List of Cleaner Technologies Implemented**

- Modernisation of chip-mill with state-of-the-art technology resulting in lesser generation of dust and reduced power consumption. The dust is efficiently burnt in a fluidised bed boiler which is first of its kind for saw dust application and the steam generated is used in process.
- Closed compact pressure knotter in brown stock washing improved washing efficiency and reduced alkali carry over. In addition there has been total elimination of black liquor spillage and odour improving the work environment.
- The industry is the first pulp mill to introduce oxygen bleaching in its conventional bleaching sequence. This has reduced chlorine consumption, pollution load on the effluent treatment plant and treated effluent colour. Further the industry introduced two-stage oxygen bleaching to reduce effluent colour and chlorine.
- Lime sludge generated is fully recycled with modified two-stage lime mud washing system in causticizing, thus eliminating solid waste.
- First mill to automate batch digester, washing and bleaching process reducing steam and chemical consumption.
- First mill to introduce high dry solids firing system and crystallizer technology reducing sulphurous emissions and improving thermal efficiency of evaporator and recovery boilers cutting down make up chemicals and energy requirement.
- Introduced for the first time slow motion slaker in causticizing reducing the grits generation, soil pollution, dust carry over, steam, and furnace oil and sodium sulphate consumption.
- Electro static precipitators with microprocessor based control system to collect sodium salt/dust from flue gases and recycling of the same to the process in both recovery boilers and limekiln.
- Advanced process controls incorporated for chemical recovery boilers. This has optimized the recovery boiler operation through reliable & precise controls and reduced purchase coal steam.
- Medium consistency pumping system with inline mixer installed for hypo stage reduced hypo consumption.
- New blow tank with modified heat recovery system installed. This has improved the process efficiency and environment.
- Incorporation of Energy efficient devices & drives for fans, pumps, air compressors, vacuum filters & screw press and energy efficient motors & pumps has reduced the energy consumption and conserved natural resource coal.

- Steam & Power conservation in evaporator by effective utilization of flash vapour and modifying the condensate pumping system.
- Conservation of treatment chemicals by optimization of water quality, installation of pH analyzer in alkali bleaching stage, installation of mass flow meter for sulphuric acid and chlorate flow in ClO<sub>2</sub> plant and installation of online turbidity meter for river water.
- Electrical energy conservation by fixing variable frequency drives for induced and forced draft fan in fluidized bed boiler and degasser pumps at DM water plant, separate lighting transformer to optimize the lighting voltage at 380 – 390 volts and energy efficient fluorescent lamps in place of conventional plants
- Biogas plant operations improved by installing the 3<sup>rd</sup> reactor of higher capacity to treat more volume of PH liquor.
- Process improvement to reduce environmental impact through installation of mass flow meter in evaporator plant, control valve for hot water line causticizing plant and installation of temperature transmitter & control valves in evaporator section.
- Non condensable gas (NCG) burning system implemented to reduce odour in and around the factory premises.
- Installation of new recovery boiler in place of old boilers. This will reduce dependency on steam from coal fired boilers and hence will reduce coal consumption. The advanced ESP will reduce SPM emission also.
- Installation of Amiad filtration system at Chipper House to filter the wood log wash water. This helped to reduce around 600 m<sup>3</sup> of filter water consumption per day.
- Installation of lime kiln bearing cooling water recirculation system. This helped to reduce around 600 m<sup>3</sup> of filter water consumption per day.
- Industry has installed Actiflo system for colour reduction in the effluent at source.
- Enhanced the biogas generation capacity by fine tuning the operating parameters.
- Achieved 55% Furnace Oil replacement in Lime Kiln using the biogas thereby reducing the carbon emission substantially.
- Biogas is being used in industrial canteen to replace 28 Nos of commercial LPG cylinders every month.
- Installed online continuous ambient air quality monitoring devices at three locations and online continuous stack monitoring devices for recovery boiler stack and lime kiln stack.
- Installed the new recovery boiler and standardized the operation to reduce the coal steam and also reduced SPM concentration substantially by installing the latest ESPs with EPIC-III controls.
- Installed continuous online effluent parameters monitoring system at ETP outlet as per CPCB guidelines.
- Both air & water monitoring output i.e. results are connected to CPCB websites.

**TABLE –2**  
**TREATED EFFLUENT QUALITY VIS-À-VIS KSPCB LIMITS**

Sl. No.	Parameters	Units	Standards set by KSPCB	Achieved
1	Colour & Odour	--	*	
2	TSS	mg/l (max)	100	70
3	TDS	"	2100	1720
4	Temperature	Deg. C	***	30.0
5	pH	--	6.0 – 8.5	7.5
6	Oils & Grease	mg/l (max)	10	0.35
7	Res. Chlorine	"	1.0	ND
8	Amm. Nitrogen	"	50	1.4
9	Kjeldhal Nitrogen	"	100	1.9
10	Free Ammonia	"	5.0	1.5
11	BOD <sub>3</sub> at 27 Deg. C	"	30	20
12	COD	"	250	194
13	Arsenic	"	0.2	ND
14	Mercury	"	0.01	ND
15	Hexa. Chromium (as Cr+6)	"	0.1	ND
16	Total Chromium (Cr)	"	2.0	ND
17	Boron (as B)	"	2.0	ND
18	Chloride (as Cl)	"	1000	272
19	Fluoride	"	2.0	ND
20	Dissolved Phosphate	"	5.0	0.65
21	Sulphate (as SO <sub>4</sub> )	"	1000	735
22	Sulphide (as S)	"	2.0	0.37
23	Phenolic Compound (C <sub>6</sub> H <sub>5</sub> OH)	"	1.0	ND
24	Bioassay	% Survival	Not less than 90% of test animals shall survive in 96 hours	100%

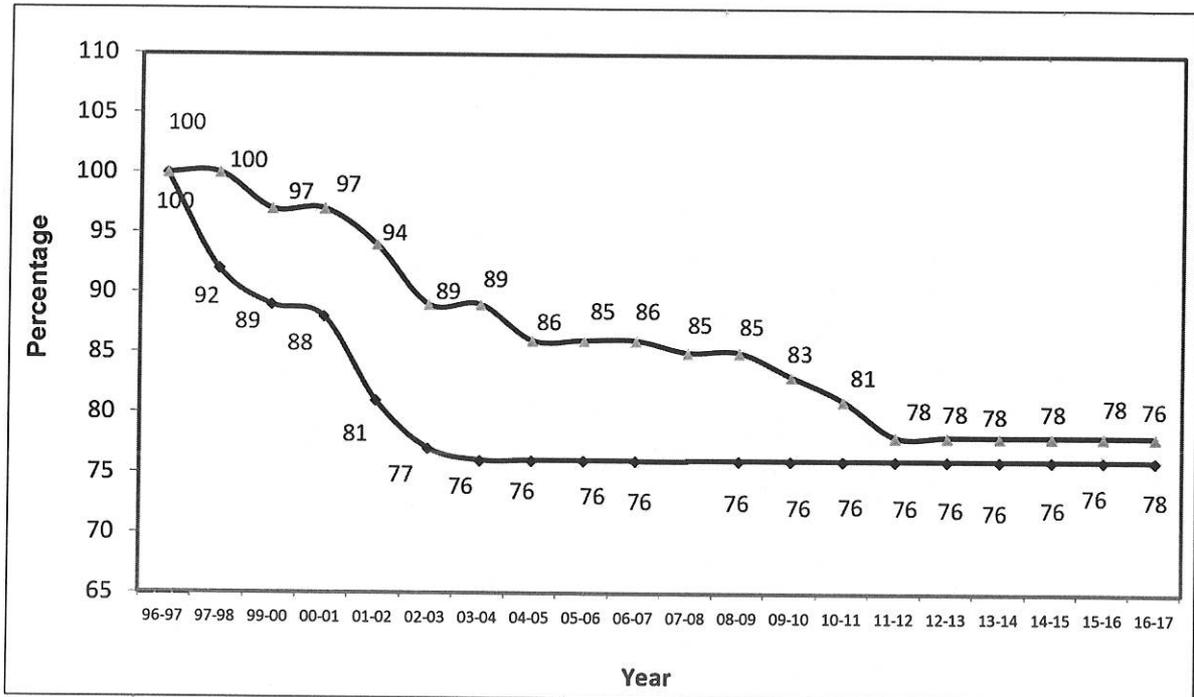
\* All efforts should be made to remove colour & unpleasant odour as far as possible.

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

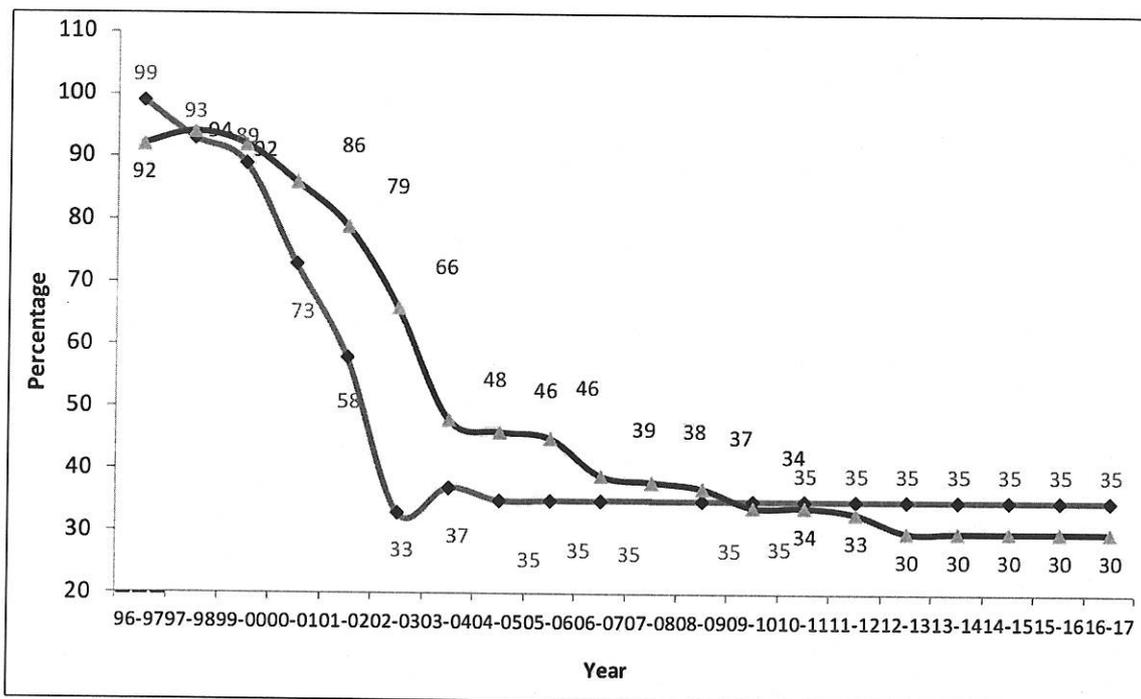
\*\*\* Shall not exceed 5°C above the receiving water temperature.

ND – Not Detectable

### Reduction in Pollution Load - Pulp Plant



### Reduction in Energy & Input Chemicals - Pulp Plant



GRASIM  
PULP DIVISION : HARIHAR

**Environment/Safety Improvement & Energy Saving Projects Implemented  
during Year 2016 - 17**

<b>S.No</b>	<b>Description</b>
<b>Environment Improvement Projects</b>	
1	Plate & Frame filter press for activated sludge in ETP - Implemented
2	Strengthening of bund between biogas sludge lagoon and cooling pond- Implemented
3	Dust extraction system in chipper house - Implemented
4	Low concentration high volume odorous gas collection system - Implemented
<b>Energy Saving Projects</b>	
1	Indirect black liquor heater for recovery boiler to save steam
2	Energy efficient UBHD pump No.2 to save power
3	Energy efficient Blow tank dilution pump No.1 to save power
4	Energy efficient WBL supply pump to evaporator - 2 No. - to save power
5	Energy efficient WBL supply pump to mixing tank - 2 No. - to save power

**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 17 Nos. surface aerators of 25 HP each.

The effluent is finally clarified in two secondary clarifiers. The treated effluent is discharged to the river meeting all the stipulated standards.

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 supply the stand by resumes automatically for the ETP. A similar arrangement is provided for air pollution control equipments.
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 equipments.
5. All equipments 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 wasteful practices that would result in emission to air or discharge to environment is eliminated.
8. Industry has made several experiments on lab scale & pilot scale for effluent colour removal. Industry has also implemented NCG burning technology to reduce the odour from the process. Refer the Annexure 1 & 2 attached for colour removal efforts and NCG burning technology respectively.

### Other Particulars for Improving the Quality of Environment

1. The unit has aligned itself with Environmental Management Systems and Occupational Health and Safety Management System in accordance with ISO 14001 and OHSAS 18000 Standards respectively.
2. The unit is continuing adoption of 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.
3. World Class Manufacturing practices are being adopted and 6-Sigma quality concept is being propagated for better process control and better quality of environment.
4. 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.
5. Staff and workmen are exposed environmental awareness training by in-house faculty and external agencies.
6. 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.
7. Industry has strengthened the guard pond, PH Liquor lagoon bunds as a part continuous upgradation of ETP facilities.
8. Methane capturing and replacement of fuel by methane is given more importance as a step towards reducing green house gases.
9. 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 under "Operation Green Project" planting around 150000 Nos. of different tree species.
  - This year around 10 acres of the land have been used for greenery development using treated effluent. Around 5000 Nos. of tree species have been planted. Total volume of treated effluent used for greenery development in the non-rainy period of the last fiscal period is 1131800 m<sup>3</sup>. Effluent generation was low due to plant stoppage due water crisis.
10. Various varieties of birds and flower species in & around factory premises have been photographed to appreciate their presence, beauty and to protect these species as eco indicators. Lots of peacocks are found in the premises and special care is taken to protect them.
11. In this financial year company has grown sugar cane plantation on additional 3 acres land using the treated effluent.

**OTHER INFORMATION  
Awards & Certificates**

<b>Year</b>	<b>Award issued by</b>	<b>Achievement</b>
1974	Indian Chemical Manufacturer's Association	The Sir.P.C.Ray Award for development of Indigenous technology for producing Rayon Grade Pulp from hybrid Eucalyptus.
1991	Indian Chemical Manufacturer's Association	Award for Environmental Control strategies and safety in chemical plants.
1994	Indian Merchants Chamber, Mumbai.	Award for outstanding contribution towards prompting savings, conferred on Grasim Social Service Society, Kumarpatnam.
1994	ISO 9002 : 1987 certificate conferred by RWTUV (Germany)	Certificate conferred on the unit for implementing the Quality system in accordance with ISO 9002 standards.
1995	ISO 9002 : 1994 certificate conferred by RWTUV (Germany)	Certificate conferred on the unit for implementing the Quality system in accordance with ISO 9002, Revised standards.
1995	Indian Merchants Chamber, Mumbai	Award for outstanding contribution in the field of Industrial & Labour relations.
1998	ISO 14001 : 1996 certificate conferred by RWTUV (Germany)	Certificate conferred on the unit for implementing Environmental Management System (EMS) in accordance with ISO 14001 standards.
2000	Chairman, Aditya Birla Group	Chairman's Award for Manufacturing Excellence - BRONZE AWARD
2001	ISO 9001 : 2000 certificate conferred by RWTUV (Germany)	Certificate conferred on the unit for implementing Quality Management system in accordance with ISO 9001 Revised standards.
2001	OHSAS 18001:1999 certificate conferred by RWTUV (Germany)	Certificate conferred on the unit for implementing Occupational Health & Safety Management system in accordance with OHSAS:1999 standards.
2001	Indian Chemical Manufacturer's Association	Certificate of Merit for Obtaining ISO 9001 certification
2002	TERI Corporate Environmental Awards 2001	Ranked II in category III (Companies with an annual Turnover of more than Rs.500 Crores) for adopting cleaner technology.
2002	Greentech Foundation New Delhi.	Greentech Industrial Safety Gold Award for the Year 2001-2002 for outstanding achievement in the field of Industrial Safety.
2003	TERI Corporate Environmental Award 2001 - 02	Ranked 1 <sup>st</sup> in category III (companies with an annual turnover of more than Rs. 500 crore).for adopting cleaner technology.
2003	Institute of Directors & world Environmental Foundation, New Delhi	Winner Golden Peacock Environment Management Award – 2003

## Awards:

- 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 fibre sourcing for striving towards raw material self-sufficiency by promoting farm and social forestry – Certificate enclosed.
- Unit's achievement of attaining the global distinction of high chemical recovery efficiency was appreciated and the technical paper presented in this regard during IPPTA Seminar was adjudged as the best and awarded the first prize.
- Unit was awarded 2nd prize amongst large industries in the State of Karnataka for Safety from Dept. of Factories & Boilers.
- Unit received "Unnatha Suraksha Puraskara" from the National Safety Council, for the year 2005, in recognition of outstanding safety performance and management system in paper and pulp category of industries during 2003 – 05.
- Technical paper titled "Two stage oxygen for Bleaching Dissolving Grade Pulp" presented during IPPTA Seminar was adjudged as one of the best Technical paper
- IMC Ramakrishna Bajaj National Quality Special Award for Performance Excellence – 2007 in the manufacturing category.
- Aditya Birla Group's Chairman's Platinum Award for Manufacturing Excellence in 2009.
- Harihar Polyfibers has received the Gold Award from Green Tech Foundation in 2010 for Outstanding Achievement in Environmental Performance.
- Harihar Polyfibers has won the "**Most Innovative Environmental Project**" award at the CII Environmental Best Practices Award 2011 organised by CII – Godrej Green Business Centre on 28 & 29 January 2011 at CII – Sohrabji Godrej Green Business Centre, Hyderabad.
- Unnatha Suraksha Puskar 2013 by National Safety Council, Karnataka Chapter.