

**ENVIRONMENTAL STATEMENT
REPORT FOR THE YEAR
2018-19**



SUBMITTED BY



**E.I.D.PARRY INDIA LIMITED,
HULLATTI VILLAGE,
TQ. HALIYAL
DIST. UTTAR KANNADA.**

FORM-V

**ENVIRONMENTAL STATEMENT FOR
THE FINANCIAL YEAR ENDING 31ST MARCH 2019.**

PART – A

- (i) **Name and Address of the Owner/
Occupier of the industry operation** : **SHRI. S.V. Suresh
Managing Director
Dare House New No: 234
NSC Bose Road,
Chennai-600001**
- (ii) **Industry category primary**
(a) **Primary (STC code)** : **Large Red 17 Category**
(b) **Secondary (SIC code)** : **(Sugar, Cogen & Distillery Plant)**
- (iii) **Production capacity**
Sugar: : **6000 TCD**
Co- Gen: : **34 MW**
Distillery: : **50 KLPD**
- (iv) **Year of establishment** : **March 2009**
- (v) **Date of the Last Environmental
Statement Submitted** : **29.09.2018.**

PART – B

Water and Raw Material Consumption

- (i) **Sugar & Cogen Water Consumption m3/day**

Source	During the previous year 2017-2018	During the current year 2018-2019
(a) Process	234.26	304.15
(b) Cooling	621.75	453.21
(c) Domestic	24.44	23.96
TOTAL	*880.45	781.32

***It excludes 1200 m3/day second and third body condensate water is cooled and treated by ACF, MGF used for cooling tower makeup.**

(ii) Distillery Water Consumption m³/day

Source	During the previous year 2017-2018	During the current year 2018-2019
1. Process	360.33	375.91
2. Cooling	114.02	115.01
3. Domestic	8.3	8.7
TOTAL	482.66	499.62

(a) Sugar & Cogen Water consumption per unit of output:

Name of product	Process water consumption per unit of product in m ³ /MT	
	During the previous year 2017-2018	During the current year 2018-2019
Sugar	1.33	1.58

(b) Distillery Water consumption per unit of output:

Name of product	Process water consumption per unit of product in m ³ /KL	
	During the previous year 2017-2018	During the current year 2018-2019
RS/ENA/IS	10.007	10.56

(a) Raw Material Consumption for sugar:

Name of raw materials	Name of products	Consumption of raw material per unit of output in MT/MT	
		During the previous year 2017-2018	During the current year 2018-2019
(a) Sugar cane	Sugar	8.90	8.85
(b) Lime	Sugar	0.011	0.01
(c) Sulphur	Sugar	0.0026	Nil

(b) Raw Material Consumption for Distillery:

Name of raw materials	Name of products	Consumption of raw material per unit of output in MT/MT	
		During the previous year 2017-2018	During the current year 2018-2019
Molasses	RS/ENA/IS	3.592	3.62
TRO	RS/ENA/IS	0.00092	0.00084
Urea	RS/ENA/IS	0.00041	--
DAP	RS/ENA/IS		--

PART – C

Pollution Generated (parameters as specified in the consent issued)

See Annexure II (a), II (b) &II (c)

PART – D

Hazardous Wastes

[As specified under Hazardous Wastes (Management and Handling Rules, 1989) Amended Rules, 2003]

Hazardous Wastes	Total Quantity in litres	
	During the previous year 2017-18	During the Current year 2018-19
(a) From Process	Nil	Nil
(b) From pollution Control facilities	Nil	Nil
(c) Used oil from DG Sets Cat. No. 5.1	78litre	98litre

PART – E
(a) Solid Wastes

Wastes	Total Quantity (MT)	
	During previous year 2017-18	During current year 2018-19
a) From Process (By products)		
1) Bagasse	225243.72	162931.7MT
2) Press mud	Nil	Nil
3) Molasses	43117	35658
4) Boiler ash	3829.14	2869.72 MT
b) From pollution control facility (ETP sludge)	46	52
c) Quantity recycled or reutilized within the unit		
1) Bagasse as boiler fuel	215543.72	162931.7MT
2) Sold Wastes		
i) Bagasse	9700	Nil
ii) Press mud	Nil	Nil
iii) Molasses	43000	35520
iv) Boiler ash	3829.14MT	2869.72MT
3) Disposed	Nil	Nil

(b) Distillery Solid Wastes

Wastes	Total Quantity (MT)	
	During previous year 2017-18	During current year 2018-19
1) Boiler ash (Bottom Ash & Boiler Ash)	4461	3397
2) Raw Spent Wash.	124355	114908
3) Yeast sludge	614.00	568
a) Quantity recycled or reutilized within the unit		
Concentrated SW.	26274	23217
1) Sold Boiler ash	4461	3397
2) Disposed	Nil	Nil

PART –F

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

There is no generation of hazardous waste either from the process or from pollution control facilities. Hazardous waste generation is from DG sets in the form of used oil. This is classified under category 5.1 as per hazardous waste rules (Management & handling) Amendments 2003. This is stored in the premises in sealed barrels & used for lubrication of belt conveyors, cane carrier chains etc.

Major by products are bagasse, boiler ash and molasses. All the molasses produced is used in our own distillery in the premises as a raw material for manufacturing of rectified spirit and anhydrous alcohol.

Other by products viz. ETP sludge is used as manure in our Rand D cane farm and boiler ash are used as organic manure. This ash is rich in nutrients and contains Nitrogen, Phosphorous, potassium and carbon and can be used as organic fertilizer. This mixture is given to the member farmers as fertilizers at subsidized rates due to its rich nutrient value and also acts as a soil conditioner. Some quantity of Boiler ash sold to Brick manufacturers also.

All the bagasse is used as boiler fuel in the Co-gen plant in our own premises.

Boiler ash is packed in 50 Kg Bag and sold as fertilizer as K ash. The Yeast sludge generated from fermenter is incinerated in boiler.

All the concentrated SW is used as boiler fuel in our own premises.

Kindly refer to **Annexure III, IV and II (d)** for the characteristics of molasses respectively.

PART – G

In respect of pollution abatement Measures taken up on Conservation of Natural Resources and on the cost of production.

- ❖ It increases the cost of production in terms of electricity consumed on various Pollution control equipment's such as aerators, Clarifiers, Water and Sludge Pumps etc.
- ❖ For maintaining the ETP Laboratory.
- ❖ For Chemicals used in Effluent Treatment Plant.
- ❖ We have a sugar cane farm of 40 acres. The treated effluent is used for irrigation in our Cane farms. This cane farm is used for R & D purpose for raising special cane varieties & distributed to our cane growers.
- ❖ Electrostatic Precipitators in our Co-Generation plant boilers are working Satisfactorily and result are within KSPCB norms.
- ❖ The spent wash is evaporated in Flubex Quintuple effect evaporator from 15° brix to 60° brix. After concentration it is burnt in a fluidized combustion bed boiler as fuel.
- ❖ Bag Filter is installed to control the Air Pollution in Spent Wash Incineration Boiler.
- ❖ The evaporator condensate water is treated in our effluent treatment plant & the treated water is used for Irrigation
- ❖ Ambient Air Quality and Ground water Quality monitoring are carried out periodically in order to protect the environment.
- ❖ Juice collection pits are provided to collect the leakage and overflows and the same was recycled to Process which reduce pollution Load to ETP.

PART – H MISCELLANEOUS

Any other particulars in respect of Environmental, protection and abatement of pollution.

The raw water consumption for sugar and co-gen plant is reduced from 3157 KLPD to 2000 KLPD by implementing the following measures.

(A) Sugar process excess condensate water treatment

The excess condensate water from sugar process is separate Collection tank and cooled in cooling tower to reduce the temperature up to 35°C to 38°C and

filtered with MGF and ACF. The Filtered water is reused for cooling and process in place of raw water in sugar and distillery plant.

**(B) Corporate Responsibility for Environment Protection (CREP)
implementation**

- ❖ The raw water consumption for sugar plant is reduced in line with CREP norms. As per CREP norms the waste water generation from the sugar plant is reduced to 100 litres per ton of cane crushing by implementing the following measures.
- ❖ Sugar and Co-generation plants are fully automated with DCS and PLC system. The raw material and water is being utilized efficiently.
- ❖ Evaporator operations are automated to reduce the frequent tube cleaning.
- ❖ Evaporator and Pan body hydraulic checking water is recycled to service water tank.
- ❖ Dry cleaning is adopted instead of water washing where ever possible.
- ❖ Good housekeeping at workplace reduces pollution load to ETP
- ❖ Co-generation boiler blow-down water is re-used for gardening.
- ❖ Rain water harvesting system implemented to reduce the raw water consumption.
- ❖ Advance direct contact heaters are provided for heating the juice instead of tubular heater to avoid pollution load to ETP.

PART – I

Additional measurers / Investment proposal for environmental protection including abatement of pollution / prevention of pollution.

The company is adopting quality management systems on continuous basis. Proper production planning, excellent housekeeping measurers and preventive maintenance have resulted in reduced consumption of raw material per unit of output.

The industry has taken up village wise meeting to educate the farmers about trash farming, using of organic fertilizers, better water management practices to get a better yield of sugarcane. Industry has done awareness program for eco-friendly celebration of Ganesh festival and arranged for water tank for immersion of Ganesh Idols in the premises. This water is

used for gardening purpose. The industry actively take part in the plantation of trees in and around factory and educating all employees for not using plastic bags .

ANNEXURE – I

(a) Sugar plant Seasonal working of the factory

SL NO.	Particulars	For previous year 2017-18	For Current year 2018-19
01	Total Crushing days for the season	131	118
02	Total sugar cane crushed during the season (MT)	805806.445	662257.315
03	Total sugar produced (MT)	90644.131	74835.09
04	Daily average of cane Crushed (MT)	6195.86	5643.737
05	Daily average of sugar produced (MT)	690.45	734.65

(b) Distillery plant Seasonal working of the factory

SL NO.	Particulars	For previous year 2017-18	For Current year 2018-19
01	Total R.S./ENA/IS Production (KL)	14877.80	14703.04
02	Total molasses consumed (MT)	53450	53179
03	Total working days.	307.5	309.7
04	Daily average of molasses consumed (MT)	173.82	171.71
05	Daily average R.S./ENA/IS Production (MT)	48.38	47.46

ANNEXURE – II (a)

Waste Water Analysis Report

SL No.	Parameters	Values in mg/L except colour & pH	
		Untreated	Treated
01	Colour	Black	Colour less & odourless
02	Suspended Solids	24	72
03	pH Value	3.46	7.22
05	Oil & Grease	BDL	BDL
06	3 days BOD at 20°C	1931	96

Note: The results are for the season 2018-19. The testing is carried out every month. The above values show variation in the results.

ANNEXURE - II (B)

Ambient Air Monitoring Reports

SL NO.	Sampling Stations	PM 10 ug/Nm3	PM 2.5 ug/Nm3	S02 ug/ Nm3	NO2 ug/ Nm3
01	Near canteen	93.79	47.67	4.56	10.08
02	Near distillery gate	93.91	51.38	4.63	9.73
03	Main Gate	91.28	49.58	9.81	4.43

Note: The above results are for the crushing season 2018-19. The Ambient Air Quality monitoring is done every month by NABL Approved laboratory.

ANNEXURE – II (c)

Stack Monitoring Report

SL No.	Parameters	Results		
		120 TPH	45 TPH	15TPH
01	Fuel used	Bagasse	Bagasse	Coal & Conc.SW
02	Temperature (°C)	148	110	126
03	Flue gas velocity (m/sec)	7.58	7.29	7.65
04	Suspended Particulate Matter (mg/Nm³)	58.86	50.35	52.24

Note: The above results are for the crushing season 2018-19. The Stack monitoring is done every month by NABL Approved laboratory.

ANNEXURE – III

Characteristics of Bagasse

SL NO.	Parameters	Concentration
01	pH	7.4 to 7.7
02	Nitrogen (%)	0.1 to 0.3
03	Phosphorus (%)	0.2 to 0.3
04	Potassium (%)	0.05 to 0.07
05	Organic carbon (%)	35 to 45

ANNEXURE – IV

Characteristics of Molasses

SL NO.	Parameters	Concentration in mg/L Except pH & Colour
01	pH	4.40 to 5.7
02	Colour	Dark Brown
03	TDS	195471
04	BOD	93456
05	COD	201457
06	Chlorides	13697
07	Sulphates	6274

PART – J

Any other Particulars in Respect of Environmental Protection and abatement of pollution.

1. The industry has planted different varieties 2800 no's planted for the financial year like Badam, Turmeric, Acacia, Neem, Mango, Rain tree etc... in the factory premises at a cost of Rs 0.29 Lakhs.
2. The Industry has renewed the bags of bag filters of the 15 TPH boiler at the cost of Rs 8 lakhs.
3. The Industry has involved in corporate social responsibility by providing a Mobile Medical Vehicle in our Haliyal command area in collaboration with AMM foundation and Wockhardt Hospitals, covering 13 villages (2 villages/day) in and around Haliyal. For the financial year 42643 people have got benefitted out of this facility.
4. Providing Mid-day Meal for Balawadi School children (Around 59 children are getting benefitted) at Haliyal, most of them are children of laborers out of which 15 children are of our Sugar Bagging, Loading & Unloading contractors. And also extending the help for salary payment of 2 teachers' and 1 helper of Balawadi – Cost of the Services / year: Rs.1.48 Lacks.
5. Extending education reimbursement to the Land Sellers' children – 18 (one child / Land Seller) in Haliyal, this as per the agreement of GMR with Land Sellers'. Cost of the Services (2018-19) : Rs.4.12 Lacks.
6. All these roads are having perfect storm water drains which are maintained properly.
7. We are regularly monitoring and maintaining online monitoring system for both emission and effluent with annual maintenance cost of 6.0 lakhs per annum. (CPCB DATA UPDATION).
8. We are regularly monitoring and maintaining the norms fixed by PCB for environment parameters through third party. Total amount spent for monitoring environment parameters is around Rs. 3.2lakhs
9. PCB has regularly monitored our performance of maintaining environment parameters. Total analysis charges paid to PCB is around Rs. 1.6lakhs

Yours faithfully,

E.I.D.-Parry (India) Limited,

Venkatarao J

Sr. AVP- Works & Projects