ENVIRONMENTAL STATEMENT REPORT FOR THE YEAR

2021-22



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 2022.

	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)
(111)	Sugar: Co- Gen: Distillery:	: 11500 TCD : 54 MW : 90 KLPD
(iv) (v)	Year of establishment Date of the Last Environmental	: March 2009
	Statement Submitted	: 29.07.21

PART – B

Water and Raw Material Consumption

(i) Sugar & Cogen Water Consumption m3/day

Source	During the previous year	During the current year
	2020-2021	2021-2022
(a) Process	267.71	* 106.47
(b) Cooling	845.47	813.12
(c) Domestic	22.62	23.26
TOTAL	1135.8	942.85

It excludes consumption of 1800m3/day of excess condensate by cooling and treating through MGF & ACF and using for process, cooling and condensing purpose.

(ii) Distillery Water Consumption m3/day

Source	During the previous	During the current
	year 2020-2021	year 2021-2022
1. Process	284.56	303.33
2. Cooling	141.51	151.71
3. Domestic	8.7	9.2
TOTAL	434.77	464.34

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

	Process water consumption per unit of product in m3/MT				
Name of					
	During the previous year 2020-	During the current year			
product	2021	2021-2022			
Sugar	1.64	1.20			
Ū					

(b) Distillery Water consumption per unit of output:

	Process water consumption per unit of product in m3/KL				
Name of	During the previous year 2020-	During the current year			
product	2021	2021-2022			
RS/ENA/IS	8.97	9.91			

(a) Raw Material Consumption for sugar:

Name of raw	Name of products	Consumption of raw material per unit of output in MT/MT		
materials		During the previous	During the current	
		year 2020-2021	year 2021-2022	
(a) Sugar cane	Sugar	7.8	9.08	
(b) Lime	Sugar	0.0066	0.0069	
(c) Sulphur	Sugar	Nil	Nil	

(b) Raw Material Consumption for Distillery:

Name of raw	Name of products	Consumption of raw material per unit of output in MT/MT		
materials		During the previous year	During the current	
		2020-2021	year 2021-2022	
Molasses	RS/ENA/IS	3.592	3.596 MT	
TRO	RS/ENA/IS	0.00091	0.00088	
Urea	RS/ENA/IS	0.0004	0.0003	
DAP	RS/ENA/IS	Nil	Nil	

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]

	Total Quantity in litres		
Hazardous Wastes	During the previous year 2020-2021	During the Current year 2021-2022	
(a) From Process	Nil	Nil	
(b)From pollution Control facilities	Nil	Nil	
(c)Used oil from DG Sets Cat. No. 5.1	46litre	42 litres	

	Total Quantity (MT)		
Wastes	During previous	During current	
	year 2020-2021	year 2021-2022	
a) From Process (By products)			
1) Bagasse	223128.221 MT	333697 MT	
2) Press mud	Nil	Nil	
3) Molasses	29615.177 MT	59215.316 MT	
4) Syrup to distillery	5854.500 MT	7213 MT	
5) BH to distillery	5524.177 MT	NIL	
b) From pollution control facility (ETP	48	56	
sludge)			
c) Quantity recycled or reutilized			
within the unit			
1) Bagasse as boiler fuel	214569.246MT	284704 MT	
2) Molasses as distillery feed	50,037.490 MT	41480.177 MT	
3) Syrup as distillery feed	5854.5 MT	7213 MT	
4) BH as distillery feed	NIL	NIL	
5) Sold Wastes			
i) Sold Boiler ash	6926 MT	8708 MT	
ii) Lime Grit	12MT	20MT	
(b) Distillery Soli	d Wastes		

PART – E (a) Sugar & Cogen Solid Wastes

(b) Distillery Solid Wastes				
	Total Quantity (MT)	Total Quantity (MT)		
Wastes	During previous year	During current year		
	2020-2021	2021-2022		
1) Boiler ash (Bottom Ash &	5679	7292 MT		
Boiler Ash)	100157	1022EQ MAT		
2) Raw Spent Wash.	100157	103230 1411		
3) Yeast sludge	576	608 MT		
a) Quantity recycled or				
reutilized within the unit	24272	24444 M3		
Concentrated SW.				
1) Sold Boiler ash	2576	254.37 MT		

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 is 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 and ethanol production.

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 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.

Distillery boiler ash is mixed with spent wash and produced as granules as potash rich manure and sold in 50 Kg Bag as fertilizer. The Yeast sludge generated from fermenter is utilised in incineration boiler along with concentrated spent wash.

All the concentrated spent wash 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 green belt and sugar cane farm of 95 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 verities & 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 distillery 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 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.
- Excess condensate is cooled and reused for cooling and process use

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 3491 KLPD to 1200 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.

During rainy season the rainwater is collected and used for cleaning and maintenance use in sugar plant and saved 5025m3.

(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 wastewater 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 wherever 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.

ENVIRONMENT CELL is taken up with all section owners to avoid the environment issues within the operation. **Environment cell Sponsor: S. Suresh-Managing Director-EID Parry(India)Ltd,**

Environment cell Mentor :VenkataRao-J- Sr.Associate Vice President-Operation & Project Karnataka Works

SI No	Name	EHS role	Experi ence	Designation	Educational Qualification	Contact Number
1	Mr. A. Ashok Kumar	EHS leader	25 years	DGM - Process	B. Sc. AVSI – Sugar Technology	7760988122
2	Mr. M.Ganesan	Co-Ordinator	14 years	Asst. Manager WTP/ETP	B.Tech Environmental Engineer.	9677699298
3	Mr.R.Senthil Kumar	Co-Ordinator	34 years	Sr. Manager – Engineer	DME Diploma Engineer	7022646411
4	Mr.Pavan Kumar	Co-Ordinator	15 years	Manager-Cogen	DME Diploma Engineer	8788198922
5	Mr.Sreenivasu Reddi	Co-Ordinator	22 years	AGM -Electrical	BTech Electrical & Electronics Eng	9885393839
5	Mr. Deepak Khandelwal	Co-Ordinator	17 years	Sr. Manager – Process	B. Sc ANSI-Sugar Technology	9569905026
6	Mr. Alamshah I Shikalgar	Co-Ordinator	22 years	Sr. Manager – Distillery	B.Sc., AVSI –Alcohol technology	7760988120
7	Mr Bharati P	Team Member	20 years	Dy. Manager R & D	B.Sc, Agri	9686192434
8	Mr. Leo Fernandez	Team Member	12 years	Asst. Manager	B.E. Mech	9620502838
9	Mr. Ajeet Kumar	Team Member	10 years	Dy. Manager	Diploma in Civil	9325486338
10	Mr.R.Durairaj	Team Member	12 years	Asst. Manager Engineer	B.E. Mech AVSI-Engineer	9994266072
11	Mr.Dharmend ra Pratap Singh	Team Member	10 years	Asst. Manager process	B. Sc. ANSI – Sugar Technology	9900916482
12	Mr. Praveen Kumar	Team Member	8 years	Sr-Executive – Instrument	BE Electronics Engineer	9986152400

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 mulching, using of organic fertilizers, better water management practices to get a better yield of sugarcane... The industry actively take part in the plantation of trees in and around factory and educating all employees for not using plastic bags .

SL	Particulars	During previous	During current
NO		year 2020-2021	year 2021-2022
01	Total Crushing days for the season	137	182
02	Total sugar cane crushed during the season (MT)	869944.32	1289592.498
03	Total sugar produced (MT)	111464.64	141938 .500
04	Daily average of cane Crushed (MT)	6350	7087
05	Daily average of sugar produced (MT)	710	779

ANNEXURE – I (a)Sugar plant Seasonal working of the factory

SL	Particulars	During previous	During current
NO.		year 2020-2021	year 2021-2022
01	Total R.S./ENA/IS Production (KL)	14045.311	13750.118
02	Total molasses consumed (MT)	50,037.490	41480.177
03	Total working days.	288.16	298.70
04	Daily average of molasses consumed (MT)	173.86	138.86
05	Daily average R.S./ENA/IS Production	48.74	46.03
	(MT)		

ANNEXURE – II (a) Waste Water Analysis Report

SL	Parameters	Values in mg/L except colour & pH		
No.		Untreated	Treated	
01	Colour	Brown	Colour less & odourless	
02	Suspended Solids	177	39	
03	pH Value	4.58	6.92	
05	Oil & Grease	BDL	BDL	
06	3 days BOD at 20°C	69.75	67.45	

Note: The results are for the season 2021-22. The testing is carried out every month.

ANNEXURE – II (B)

SL NO.	Sampling Stations	PM 10 ug/Nm3	PM 2.5 ug/Nm3	S02 ug/ Nm3	NO2 ug/ Nm3
01	Near canteen	68.25	19.61	6.05	10.02
02	Near distillery gate	74.58	20.65	6.28	10.95
03	Main Gate	79.92	25.09	6.99	11.25

Ambient Air Monitoring Reports

Note: The above results are for the crushing season 2021-22. The Ambient Air Quality monitoring is done every month by NABL Approved laboratory.

ANNEXURE – II (c)

Stack Monitoring Report

SL No.	Parameters		Results	sults	
		120 TPH	45 TPH	15TPH	
01	Fuel used	Bagasse	Bagasse	Coal & Conc.SW	
02	Temperature (°C)	129	131	117	
03	Flue gas velocity (m/sec)	7.45	8.27	8.12	
04	Suspended Particulate Matter (mg/Nm ³)	97.35	40.58	121.85	

Note: The above results are for the crushing season 2021-22. The Stack

monitoring is done every month by NABL Approved laboratory.

ANNEXURE – III

Characteristics of Bagasse

SL NO.	Parameters	Concentration
01	рН	7.2 to 7.5
02	Nitrogen (%)	0.11 to 0.32
03	Phosphorus (%)	0.24 to 0.35
04	Potassium (%)	0.054 to 0.078
05	Organic carbon (%)	36 to 47

ANNEXURE – IV

Characteristics of Molasses

SL	Parameters	Concentration in mg/L
NO.		Except pH & Colour
01	рН	4.40 to 5.7
02	Colour	Dark Brown
03	TDS	195879
04	BOD	97897
05	COD	195794
06	Chlorides	15784
07	Sulphates	6358

PART – J

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

- The industry has planted different varieties 1910 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 0.40 Lakhs.
- 2. The industry has renewed the bags of bag filters of the 15 TPH boiler at the cost of Rs 40 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 we have spent Rs. 35 lakhs for above purpose
- Providing Mid-day Meal for Balwadi School children (Around 15 children are getting benefitted) at Haliyal, most of them are children of laborers. And extending the help for salary payment of 2 teachers' and 1 helper of Balwadi – 7.2 lakhs for above purpose
- 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 (2021-22) - Cost of the Services / year: Rs.72 Lakhs.
- 6. We have donated ram mandir, School trust, and Rs. 10 lakhs to the nearby needy persons.
- 7. Total expenditure on CSR is Rs. 89.2 lakhs
- 8. Factory canteen road, main office road, cane yard road are modified to concreate road with a cost of 400 lakhs .
- Sugar condensate polishing unit (CPU) is under progress and we have allotted the budget around Rs:300 lakhs
- 10. We are regularly monitoring online monitoring system for both emission and effluent with annual maintenance cost of 6.0 lakhs per annum. (CPCB DATA UPDATION).
- 11. 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
- 12. . Total analysis charges paid to RCB is around Rs. 1.6lakhs.

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

Venkatarao. J Sr. AVP- Operation & Projects-Karnataka