

**ENVIRONMENTAL STATEMENT
FOR THE FINANCIAL YEAR
2020-2021**



**M/s. VENKATESHWARA POWER
PROJECT LTD**

PREARED BY

**M/s. VENKATESHWARA POWER PROJECT LTD
(SUGAR FACTORY& CO-GENERATION PLANT),
A/P BEDKIHAL, TALUK CHIKKODI,
DISTRICT BELGAUM-591 214**

Environmental Audit- An Overview

Like financial auditing this is conducted every year to have an accountability of the financial inflows and outflows, profit etc. Environmental auditing is a concept, which would give the accountability of the issues related to the Environment. This would help in comparing the data gathered regarding raw material consumption, water consumption etc and would help in reducing the same to the best possible extent.

Environmental audit is an exercise of self-assessment to minimize the generation of wastes and pollution potential.

Environmental audit is a technique being introduced for integrating the interest of the industry and the environment, so that these could be mutually supportive. This technique is basically a part of industries internal procedures in meeting their responsibilities towards a better environment. Also the policy statement for abatement of pollution by the Government of India provides for submission of Environment Audit Report by all concerned industries, which would subsequently evolve into an environmental audit.

Objectives

The Environmental Audit helps in pollution control, improved production, safety and health and conservation of natural resources and hence its overall objectives can be stated as achievement of sustainable development.

The Objectives of an Environmental Audit in an Industry are:

To determine the mass balance of various materials used and the performance of various process equipment so as to identify usage of materials in excess than required.

To review the conversion efficiency of process equipment and accordingly fix up norms for equipment/operation performance and minimization of wastes.

- To identify the areas of water usage and wastewater generation and to determine the characteristics of wastewater.
- To determine the solid wastes and Hazardous wastes generated, their sources, quantities and characteristics.
- To determine the possibility of wastes minimization, recovery and recycling of wastes.
- To identify the possibility of waste minimization, recovery and recycling of wastes.
- To determine the performance of the existing waste treatment/control system so as to modify or install additional or alternative control equipment accordingly.

FORM- V

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING 31ST MARCH 2021

PART- A

1	Name and Address of the owner occupier of the industry in operation or process	Mr. Swaroop. M. Mahadik Managing Director M/s. Venkateshwara Power Project Ltd (Sugar Factory& Co-Generation Plant), A/P Bedkihal, Taluk . Chikkodi, Dist Belgaum-591 214 Karnataka State, India.
2	Industrial Category	Large - Red
3	Production Capacity	❖ 3500 TCD Sugar ❖ 30 MW Co-Gen Plant
4	Year Of Commencement	Dec 2000 - 2001
5	Date of Last Environmental Statement Submitted	2020
6	No. of Employees	463

PART-B

Water and Raw Material Consumption

I) a. Water Consumption in m³/day

Source	Water Consumption in m ³ /d	
	During the Previous Financial Year 2019-2020	During the Current Financial Year 2020-2021
a) Industrial Process	510	490
b) Domestic	35	35

b. Water consumption per unit of output

Name of the Products	Water consumption per unit of product (m ³ /MT of product)	
	During the Previous Financial Year 2019-2020	During the Current Financial Year 2020-2021
Sugar	0.060	0.060

Note: The water consumption per unit of product is calculated based on daily average sugar produced. For the details of the seasonal working of the factory. The average water consumption reduced considerably due to higher output of sugar and better manufacturing discipline.

Water consumption for co-gen unit M3/Day

Source	During the Previous Financial Year 2019-2020	During the Current Financial Year 2020-2021
a) cooling	100	110
b) Boiler feed water make up	110	115
C) D. M. Plant	280	300

II) Raw Material Consumption

Sl. No	Name of Raw Material	Name of Products	Consumption of Raw material per unit output (MT/MT)	
			During the Previous Financial Year 2019-2020	During the Current Financial Year 2020-2021
1	Sugar Cane	Sugar	835276.659	981268.758
2	Lime		1169	1220
3	Sulphur		354	400

PART-C

Pollution Generated (Parameters as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged per mass/ day(Kg/day)	Concentration of Pollutants discharged mass/ volume (mg/Nm ³)	Percentage of variations from prescribed standards with reasons
1. Water	<ul style="list-style-type: none">▪ The water will be used for domestic, process, cooling and for boiler feeding.▪ The waste water generated from the process and from the washings is treated in ETP.▪ Monitoring of characteristics of effluent treated & untreated will be outsourced to KSPCB empanelled laboratories. <p>Analysis of ETP treated & untreated monitoring is attached.</p>		
2. Air			
<ul style="list-style-type: none">▪ Pollutants Emission within the KSPCB norms is achieved through providing Effective Stack Heights along with State of the art APC equipments to all the air pollution sources. Hence the ambient air quality is maintained as per the KSPCB standards.▪ Note: Analysis report of Ambient & Stack monitoring is attached.			

PART-D

Hazardous Waste

(As specified under the Hazardous Waste/ Management and Handling Rules, 2016)

Hazardous Waste	Total Quantity (Kg)	
	During the Previous Financial Year 2019-2020	During the Current Financial Year 2020-2021
a) From Process Used Spent Oil	1.2	0.2 KL/A
Oil Soaked Cotton waste	---	0.05 MT/A
Empty Discarded containers	---	1 MT/A
b) From Pollution Control facilities	---	---

PART-E
Solid Wastes

Particulars	Total Quantity (MT/month)	
	During the Previous Financial Year 2019-2020	During the Current Financial Year 2020-2021
A) From Process		
i) Bagasse	237996.659	281033.758
ii) Press mud	30604.00	30604.00
iii) Molasses	35772.00	42850.00
iv) Boiler ash	39550	40551
II) From Pollution Control facility		
i) ETP Sludge	250	250
III) Quantity recycled or reutilized within the unit		
1) Bagasse as boiler fuel	181595.767	221547.730
Sold		
i) Bagasse	51282.85	57358.015
ii) Press mud	30604.00	35187.450
iii) Molasses	35772.00	42850.00
iv) Boiler bottom ash	453	500

PART-F

Please specify the characterization (in terms of Composition and quantum) of Hazardous as well as Solid wastes indicate disposal adopted for both these categories of wastes.

Hazardous Waste

- ❖ The generated hazardous waste is collected manually and disposed to authorized recyclers as per the HWM consent mechanism. Generation of hazardous waste is from DG set and is in the form of used oil.
- ❖ This was stored securely in sealed, labeled barrels in the industrial premises and later disposed to CPCB registered & KSPCB authorized re-processors like that only the generated Oil Soaked cotton waste is disposed to CPCB registered & KSPCB authorized recyclers.

Solid Waste

- Major by products (solid wastes) from the unit are Press mud, Bagasse, Boiler ash & Molasses.
- All the molasses produced is sold to the distilleries as a raw material for manufacturing rectified spirit and potable alcohol.
- Other by-products viz. Press mud, boiler ash are mixed with ETP sludge. This mixture is rich in nutrients and contains Nitrogen, Phosphorous and Potassium and can be used as organic fertilizer. This mixture is given to the farmers at subsidized rates. Because of its rich nutrient value, manure acts as a soil conditioner and helps in a better yield of sugar cane.
- Bagasse is used as boiler fuel. Refer Annexure II, III and IV for the characteristics of bagasse, press mud and molasses respectively.

PART-G

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

I) Effective dispersion of stack emissions:

The company has installed chimneys of adequate heights and air pollution control measures as per the pollution control board guidelines for all the air pollution sources from the unit.

Electro static Precipitator provided for boiler is ensuring the ambient air quality in and around the factor premises by removing the SPM from the flue gas. All these measures have resulted in maintain the ambient air quality in the industrial premises.

II) Recycling of Solid Waste:

All the solid waste produced during the manufacturing process is recycled back within the unit thereby keeping with the principal that "Waste is a misplaced resource".

III) Conservation of Raw Material:

The company has made elaborate arrangements for fool proof system to avoid rejections. Control plans are implemented to ensure quality control at every stage. All these constant action plans ensure that non-conformity is not carried to the next stage. This means less scrap and hence lesser raw material consumption per unit of product.

IV) Reduced Water Consumption:

Recirculation of water (i.e. water from sulphur house, air compressor, vacuum filter, boiler blow down cooling tower blow down) has resulted in reduced water consumption. Prevention of leakages adoption of dry scrapping techniques and avoiding flushing of spillage has resulted in reduced water consumption. The industry is recycling the excess condensate available from the cane in its own CPU unit.

PART-H

Additional measures/investment proposal for Environmental protection including the pollutants abatement of pollution, prevention of pollution.

- ❖ Environmental protection and pollution control has been the priority for the industry. Operations are conducted in a manner that protects the environment, conserve energy and natural resources.
- ❖ The company has trained its employees in housekeeping, preventive maintenance etc., so that they can apply the policy of continuous improvement in their daily work.
- ❖ The company is adopting quality management systems step by step. Proper production planning, excellent housekeeping measures and preventive maintenance have resulted in reduced consumption of raw material per unit of product output.

PART - I

Any other particulars in respect of Environmental Protection and Abatement of pollution.

- ❖ Environment protection and pollution control has been the priority for the industry. The industry has ensured that it is not using any prohibited and avoidable substances in the industrial process of manufacturing.
- ❖ The company is maintaining long term environment plans which shall be continuously adapted to developments, new discoveries and experiences related to the environment.
- ❖ The industry has ensured that, it is not using any prohibited and avoidable substances in the manufacturing process.

ANNEXURE- I

Seasonal Working of the Factory

Sl. No.	Particular	During the Previous Financial Year 2019-2020	During the Current Financial Year 2020-2021
1.	Actual Crushing days for the season	110	128
2.	Total Sugarcane crushed during the season (MT)	835276.659	981268.758
3.	Total Sugar produced (QTS)	1021060	1206970
4	Total electricity production units (kwh)	50989283	59448900

ANNEXURE- B1

CHARACTERISTICS OF BAGASSE

Sl. No.	Parameter	Concentration in % except pH
1.	pH	7.4 to 7.7
2.	Nitrogen (%)	0.1 to 0.3
3.	Phosphorous (%)	0.2 to 0.3
4.	Potassium (%)	0.05 to 0.017
5.	Organic Carbon (%)	35 to 45

ANNEXURE- C1

CHARACTERISTICS OF PRESS MUD

Sl. No.	Parameter	Concentration in % except pH
1.	pH	6.5 to 7.0
2.	Available Nitrogen (N)	1.05 to 1.50
3.	Potassium	0.50 to 0.85
4.	Phosphorous (P ₂ O ₅)	2.20 to 3.00

ANNEXURE- D1

CHARACTERISTICS OF MOLASSES

Sl. No.	Parameter	Concentration in mg/l except pH and Colour
1.	pH	1.5 to 4.1
2.	Colour	Dark Brown
3.	TDS	2,70,000
4.	BOD	4,32,000
5.	COD	9,58,000
6.	Chlorides	30,000
7.	Sulphates	14,600