

Ref: BPCL/COT/GPCB

Date: 09<sup>th</sup> May 2023

To

The Member Secretary  
Gujarat Pollution Control Board  
Sector 10 A  
Paryavaran Bhavan  
Gandhinagar

**Subject: - Submission of Environment Statement (Form V) for the FY ending 31<sup>st</sup> March 2022**

Ref: - Our GPCB ID:-13301

Dear Sir,

With reference to above subject matter, please find herewith enclosed the Environment Statement report for the financial year from April 2022 to March 2023 under Air, Water and Hazardous Waste Matters rules.

The copy of the same is also uploaded in 000.pdf file for your online reference.

Thanking you,

Yours Faithfully,  
For Bharat Petroleum Corporation Limited



Sunil Prasad  
Chief Manager - COT

Encl: Environment Statement 2022-23.

**SUNIL PRASAD**  
Chief Manager  
Bharat Petroleum Corporation Limited  
Crude Oil Terminal Vadinar



**FORM V**

**ENVIRONMENTAL STATEMENT for the financial year ending March 31, 2022**

**PART-A**

- (i) Name and Address: Sunil Prasad  
Chief Manager - COT  
Bharat Petroleum Corporation Limited,  
Crude Oil Terminal,  
Singach Char Rasta,  
Village Singach  
Dist. Jamnagar (Gujarat), India
- (ii) Industry Category: Crude Oil Terminal
- (iii) Production Capacity: 0.5 MMTPM (Our production capacity is .65MMTPM ,  
however in our consent it is mentioned .5MMTPM,  
issue has been taken up with GPCB)
- (iv) Year of Establishment: Commissioned in 2011
- (v) Date of last Environmental Statement: 25<sup>th</sup> April 2022  
Report submitted

**PART – B**

**WATER AND RAW MATERIAL CONSUMPTION**

**(i) Water Consumption**

Sr. No	Water Consumption	2021-22 (m <sup>3</sup> / day)	2022-23 (m <sup>3</sup> / day)
1	Process	-	-
2	Cooling	-	-
3	Domestic	195.34	194.86

Sr. No	Name of Products	Process water consumption in m <sup>3</sup> /ton of crude processed	
		2021-22	2022-23
1	Crude Oil Terminal *	NA	NA

\* The facility is for storage of crude oil and pumping to Vadinar Bina Pipeline

**(ii) Raw Material Consumption**

Name of Raw Materials	Name of Products	Consumption of raw material per unit of output	
		2021-22	2022-23
Crude Oil	Crude Oil	0.62 MMT/Month	0.65 MMT/Month



**PART-C**

**Pollution discharged to environment/unit of output  
(Parameters as specified in the consent issued)**

**WATER**

**a) Treated Industrial Effluent:**

Sr. No	Pollutants	Quantity of pollution discharged (Kg/day)		Concentrations of pollutants discharges (mg/Liter) except pH		Percentage of variation from prescribed standards with reasons
		Actual	GPCB Limit	Actual	GPCB Limit	
1	pH	-	-	7.29	6.5-8.5	100% Compliance
2	Temperature	-	-	28.1	40	
3	Colour	-	-	5	100	
4	Total Dissolved solid	-	-	2000	2100	
5	Suspended solids	-	-	32	100	
6	COD	-	-	90	100	
7	BOD <sub>3</sub> at 27 <sup>0</sup>	-	-	26	30	
8	Oil & Gas	-	-	<1.0	10	
9	Ammonical Nitrogen	-	-	4.2	50	
10	Chlorides	-	-	576	600	
11	Sulphates	-	-	148	1000	
12	% of Sodium	-	-	52	60	

**Stack Emissions:**

S. No	Pollutants	Avg. Concentrations of pollutants in discharges (mg/NM <sup>3</sup> )		Percentage of variation from prescribed standards with reasons
		Actual	Limit (Avg.)	
1	Oxides of Sulfur (SO <sub>2</sub> )	8.4	80	100% Compliance
2	Oxides of Nitrogen (NO <sub>x</sub> )	7.6	80	
3	Particulate Matter (PM)	70	100	

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*SUNIL PRASAD*  
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 Chief Manager  
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**PART-D**  
**Hazardous Wastes**

[as specified under Hazardous Wastes (Management, Handling and Tranboundary Movement) Rules, 2008] Hazardous Wastes	Total Quantity (KG)	
	2021-22	2022-23
a) From Process		
b) From Pollution Control Facilities	Transformer Oil Recycled =1200L**	Nil

Note:

\*\*1200 L Transformer Oil Generated which is recycled with process after proper testing and found parameter within limit.

**PART-E**  
**Solid Wastes**

Solid Wastes	Total Quantity (kg)	
	2021-22	2022-23
a) From Process	Nil	Nil
b) From Pollution Control Facilities	Nil	Nil
c) 1. Quantity recycled or re-utilized within the unit	Nil	Nil
2. Sold	Nil	Nil
3. Disposed	Nil	Nil

7



Signature

**SUNIL PRASAD**  
Chief Manager  
Bharat Petroleum Corporation Limited  
Crude Oil Terminal Vadinar



**PART-F**

**Please specify the characteristics (in terms of composition of quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.**

1200 L Transformer Oil Generated during the year 21-22 which is recycled with process after proper testing and found parameter within limit.

**PART-G**

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

State of art technologies incorporated in the Crude Oil Terminal design from the project conception itself. Adequate funds are earmarked in the capital expenditure for implementation of environmental protection measures. Most of these have been incurred out of this total planned capital investment apart from operational & maintenance expenditure of these facilities. Some salient features of these measures are as follows:

- World Environment Day has been celebrated at COT vadinar and all the employees along with service providers have planted 50 Nos. of Trees and also imparted awareness program on environment to all servicer provider
- A modern Effluent Treatment Plant has been installed in the crude oil terminal. Advanced treatment in ETP ensures all effluents are suitably treated.
- Floating roof tanks including crude oil tanks are provided with primary and secondary seal to reduce fugitive emissions.
- Green belt development of 50-meter width around the Crude oil terminal boundary for attenuation of fugitive emissions.
- Average width of green belt is 50 Meter and length is around 6.2 KM along the boundary wall at COT, Vadinar. The total area for Green Belt is 36 Hectare.
- Land scape is developed in front of following three buildings: -
  - Fire Station Building
  - Administrative Building
  - Main Control Room
- Fruit garden has been developed near Main gate different varieties of trees. In this fruit garden Mango, Gauva, Chikoo and Lemon trees have been planted.



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**PART-H****Additional measures/investment proposal for environmental protection including abatement of pollution, prevention of pollution**

- Installation of Pop up irrigation system in Land scape of Main control room.
- Mangroves plantation being done in 50 Ha for protection of coastal environment.
- Total Green belt developed is covered with drip irrigation system.
- 03 nos. of high capacity pumps are installed for Drip irrigation system for green belt.

**PART-I****Any other particulars for improving the quality of the environment**

- Ambient Air Monitoring for all the 12 parameters is being done on quarterly basis through third party agency.
- Maintenance of the greenbelt is being regularly done for all trees in the green belt area.
- As an effort to improve greenery in the COT premises, Coconut trees and Bogunvelia trees are planted along the main road of around 1.5 KM.
- Maintenance of Land scape in all the locations as well as the trees planted along road side is being regularly done.
- Being an organization that has always been committed to the cause of a better environment in the global perspective, the World Environment Day was celebrated with huge participation from all direct, indirect employees. In line with the theme, the focus was mainly on tree plantation drive in an effort to green the premises.
- Apart from tree plantation, many other awareness programs were conducted, like badge distribution, slogan, quiz & painting competitions are launched in the on the eve of World Environment Day 2022, with fixing of posters with tips to spread awareness as per the theme among surrounding area.



  
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