karaikal port

ISO 9001
ISO 14001
ISO 45001
ISO 50001

Ref No: KPPL/ENV/PPCC/AES/2024/01 Date: 29.04.2024

To

The Member Secretary,

Puducherry Pollution Control Committee,

Department of Science, Technology & Environment,

Puducherry – 605 005.

Sub: Submission of Annual Environmental Statement in Form V for the Financial Year 2023-24

Respected Sir

Please find attached an Annual Environmental Statement in Form V for the financial year ending 31st March 2024.

Thanking you.

Yours Sincerely,

(Muralidhar.B)
Authorized Signatory

29/04/24
DESPATCHER
Puducherry Pollution Control Committee
469,PHB Building, Bharathiyar Road
Nehru Nagar, Karaikal - 609 605

Encl: Annual Environmental Statement Form V: 2023-24

Cc:

The Regional Officer, Integrated Regional Office,Ministry of Environment, Forest & Climate Change (MoEF&CC),I[st]Floor,Additional Office Block for GPOA, Shastri Bhawan, Haddows Road, Nungambakkam -600006

ENVIRONMENTAL STATEMENTS

FORM – V
(See Rule 14)

The Ministry of Environment & Forest vide its notification dated 13th March, 1992directed all industries which need to have consent under Water (Prevention & Control of Pollution) 1974 and Air (Prevention & Control of Pollution) 1981 to file the environmental statement every year. This is to be filed for the period ending March by September every year. The format for the same is as follows:

Environmental Statement for the financial year ending the 31stMarch, 2024

PART – A

i. Name and Address of the owner/occupier of the industry operation or process.

Karaikal Port Private Limited,
Keezhvanjore Village
T.R.Pattinam – 609606
Phone: +91 4365 256600
Fax: +91 4365 256603

ii. Industry category Primary : **Infrastructure**(4400) ; Secondary : **Minor Port** (SIC Code)

iii. Production capacity 21.5MMTPA(Handling Capacity)

Cargo Quantity is 17.5 MMTPA (Coal 10 MMTPA+ General Cargo 3.5 MMTPA +Crude & Petroleum 1 MMTPA+ Edible Oil 0.5 MMTPA + Sand 1 MMTPA + Cement in Bulk 0.5 MMTPA+ LNG 1 MMTPA) as per the Consent from Puducherry Pollution Control Committee.

iv. Year of Establishment:2006 with the issue of EC. Port operations started in the year 2009.

v. Date of the last environmental statement submitted, 03.04.2023

PART – B

Water and Raw Material Consumption

i. Water consumption m^3 / day:350 KL(Domestic, Supply to Ships, Gardening, Fire Service & Pollution Control & Miscellaneous) as per the water consent order.

Process: Effluent & Sewage Treatment Plants, Gardening, Miscellaneous consented quantity is 150 KLD

Cooling : Pollution Control (Dust Suppressions), Fire Services consented quantity is 160 KLD

Domestic : 40 KLD

Name of Products	Process water consumption per unit of product output.	
	During the previous financial year	During the Current financial year
	(1)	(2)
No manufacturing activities are carried out and therefore this table is not applicable. The Port activity does not involve any product to be generated except for the operation of the port in material handling. Hence there is no water consumption per product generated. However the water is consumed for the purposes as mentioned above.		

ii. Raw Material Consumption

*Name of raw materials	Name of products	Consumption of raw material per unit of output	
		During the previous financial year	During the Current financial year
No manufacturing activities are carried out and therefore this table is not applicable. The Port activity does not consume any raw materials and make any products. It is a Port infrastructure project. Hence there is no consumption of raw material involved.			

PART – C

Pollutants discharged to environment / unit of output

(Parameter as specified in the consent issued).

Pollutants		Quantity of pollutants discharged (mass/day)	Concentrations of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
(a)	**Water**	No pollutant is discharged for operation of the port project.	Nil	Nil
(b)	**Air** (Ambient air pollutants at the site)	Not applicable No manufacturing activities are carried out.		
	PM_{10}		58.8 µg/m³	No variations (Pollutants values are under prescribed standards of PPCC/CPCB
	$PM_{2.5}$		36.5µg/m³	
	SO_2		14.3 µg/m³	
	NO_2		15.8 µg/m³	
	CO		Below Detectable Limit (Detectable limit is 1 mg/m³)	

PART – D

Hazardous Wastes

(as specified under Hazardous Waste Management and Handling Rules, 2016)

Hazardous Waste		Total Quantity (Kg.)	
		During the year 2022-23	During the current 2023-24
(a)	From process (Heavy equipment such as the Front end Loaders and other earth moving equipment)	1. Used Oil– No disposal to registered recyclers – Accumulated & Generated Qty -12700 (61 barrels approx.) 2. Waste Residue containing oil – No disposal - Accumulated & Generated Qty -0.9 Ton (192 Filters approx..)	1. Used oil Generated – 13430 (Litres) – Disposed -24972 – Stock -1169 2. Waste residue containing oil – Generation - 3
(b)	From pollution control facilities		

		Sludge and Filters contaminated with Oil from Ships – 108.2 to Southern Petro Coal; Battery – No disposal – Accumulated & Generated 182 Numbers	Foam Pigs – No disposal – Stock – (0.9 Ton) 3. Sludge and Filters contaminated with Oil – Generated & disposed off – 200.57 MT 4. Battery – Generation 161 Numbers Accumulation 182 Disposed off – 300 numbers Stock – 43 Numbers

PART – E

Solid Wastes

Solid Waste		Total Quantity (Kg.)	
		During the FY 2022-23	During the FY 2023-24
(a)	From process	Processes from this Project activity does not generate any Solid Waste	
(b)	From pollution control facilities	Nil	Nil
(c)	(1) Quantity recycled or re-utilized within the unit	988 Kg/Annum	4365 Kg/Annum
	(2) Sold	Nil	Nil

	(3) Disposed	58420 Kg/Annum	67950 Kg/Annum

Sources of Solid Waste generation are from Labour Canteen - Kitchen,Garden and Admin Office Buildings. All the recyclable waste such as Paper, Plastics are disposed as per the Solid Waste Management Rules, 2016.Biodegradable waste such as Kitchen & Garden waste are composed as manure through vermi composting method. The manure is being used for the Development of Green Belt & in the Nursery.

PART – F

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

Karaikal Port generates both Bio-degradable and Non-Biodegradable Waste. Wastes generated from Kitchen, Office Buildings and Green Belt Area are bio-degradable wastes. Non Bio-degradable Hazardous waste generated from material handling systems and equipment's categorized as used oil or spent oil, waste containing oil including foam pigs. Ship related waste such as sludge containing oil, sludge and filter contaminated with oil, Ballast Water containing oil from ships are also falls under Hazardous Waste Category.

All Bio-Degradable wastes are segregated at source and the wastes which are recyclable sent as per the Solid Waste Management Rules, 2016. Wastes which are used for composting to convert in to manure and used for Horticulture and Green Belt Development.

Hazardous Waste is being disposed to the registered recyclers as per the Hazardous Waste Management Rules, 2016.

PART – G

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

Dust Suppression System: Dry Fog Dust Suppression (DFDS), Water Sprinklers, Road Wetting by dedicated Water Tankers and Tractors were installed for controlling fugitive dust emissions during bulk cargo handling which is pre-dominantly coal.

Dust Containment System: Windscreen all along the Coal Yard & Railway siding at a height of 15M to capture the air-borne dust to handling of coal.

Sewage Treatment Plant: STP of capacity 25 KL/Day have been installed to collect wash-water and kitchen water, sewage and treated using physico-chemical and biological treatment. The treated sewage has been recycled for Green Belt Development thus replacing the freshwater requirement for Green Belt Requirements.

Vehicle Wash Treatment Plants: Vehicle Wash water is collected and treated for physico-chemical treatment and the water is reused.

Tyre wash system installed for outbound coal cargo truck is in place where the wash-water after treatment is reused back in to system

For collection of rainwater during monsoon and other season, rain water harvesting pond developed at 3 locations in the port Premises

Contour bund along the arterial road inside the port have been developed for a length of 1000m which will retain and regulate the water to the green belt areas.

Guard Pond covering the open stock yard inside the port to collect runoff water has been developed at Mechanization Area.

Green Belt & Horticulture Development: Port has planted more than 2, 72,650 trees since 2010

Environment & Sustainability: - Senior Manager – Environment head the Department supported with Manager, Associate Manager, Officers. The key functions of the Department are to demonstration of environmental compliance for EC, Consent to Operate Conditions issued under Air and Water Act, Compliance to Authorization obtained under Hazardous & Other Wastes (Management and Handling) Rules, 2016. It involves operation and maintenance of Pollution Control System installed for control of fugitive dust emissions, washwater treatment, sewage treatment plant. It develops and implement the waste management system for Solid Waste, Plastic Waste and Battery Waste Rules and ensure for its compliance. 3 Continuous Ambient Air Quality Monitoring Stations installed at Port Premises for Particulate Matter ($PM_{2.5}$, PM_{10} and CO) and Gaseous Emission on 24x7 for 365 days. The server connected to PPCC Server for continuous monitoring and surveillance.

Separate Horticulture and Green Belt Development functions for making port greenery and develop in-house for seedlings, saplings for tree plantation. 30 Womens from adjoining villages are engaged for this purpose and received training on Horticulture

Waste generated from Port premises such as tree cuttings, leaf are sent for mulching, soil collected on roads are used for nursery growth, plastic rope trimmings used for tarpaulin cover for truck and rail wagon used for tying tree protection fencing, cut thorny bushes has been reused for protection of small shrubs, plants from Live Stocks thus ensuring sustainable waste management practices.

PART – H

Additional measures/investment proposal for environmental protection including abatement of pollution, prevention of pollution.

- Permanent corrugated wind screen have been erected all along the coal yards
- Efficient water spraying methods have erected and commissioned at South Coal Yard
- Efficient water spraying methods have been erected and commissioned such as the high pressure water monitors and water sprayer machines.
- Dust Suppression System Sprinklers have been installed at mechanized coal yard

- Dry Fog Dust Suppression System installed at Transfer Tower located at Material Handling System
- Road Sweeping Machine deployed for collection of road side dust
- Road Wetting done through dedicated water tankers for maintaining the road in wet condition to prevent settled road dust emission gets air-borne.

Effective Environmental Management Plan have been put in place and monitored through 24x7 (3 shifts) through deployment of manpower for monitoring and control of fugitive dust emission thus ensuring the Ambient Air Quality in and around the port premises meeting the norms and standards prescribed by PPCC.

Mechanized Coal Handling System comprises of the following

1. Ship Unloaders
2. Stacker and Reclamier
3. Truck Loading System
4. Wagon Loading System
5. Conveyor System Package

The above system have been commissioned during October 2018 for efficient discharge of coal from ship and deliver to rail wagon through wagon loading system. It is considered as energy efficient, environment friendly operation, cost effective, productive and clean operation. This has prevented the manual handling of coal right from the ship to rail wagon thus eliminating fugitive dust emission and thereby compliance to the conditions stipulated by PPCC and MoEF&CC – Environmental Clearance.

PART – I

Any other particulars for improving the quality of the environment.

- Green Belt Development being implemented on a regular basis. Various variety such as Pungam, Casuarinas, Ashoka, Conocarpusetc., are planted in suitable location. Around 82 species are being maintained in & around Port.
- 30 hectares area of green belt were strengthened with variety of species.
- 8000 Sq. Feet area of landscape have been developed during
- 3000 Sq. Feet area of Vegetable garden was developed.
- Pipeline arrangement made from STP to garden area for irrigation.
- Massive tree plantation carried out for World Environment Day, International Forest Day & other special occasions a maximum of 5800 saplings