

Ports and Logistics

APDPL/Env. statement/2023-24

Date: 20.06.2024 XGN ID: - 31664

To, Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector 10-A, Gandhinagar – 382010

Subject: Environment Statement for the financial year ending 31st March 2024 for M/s Adani Petronet (Dahej) Port Ltd.

Ref: Consent Order No. AWH- 73359, AWH – 109820, CCA Amendment No. W-108215 & AWH-116434.

Dear Sir,

With reference to the above-mentioned subject and reference, please find enclosed Environmental Statement in Form V prescribed under Rule 14 of the Environment (Protection) Rules 1986, for M/s Adani Petronet (Dahej) Port Ltd., At & Post Lakhigam, Taluka Vagra, District Bharuch for the financial year ending 31st March 2024.

Thanking you,

Yours faithfully, For Adani Petronet (Dahej) Port Ltd.

(Authorized Signatory)

Encl: As above.

Copy to:
 The Regional Officer, Gujarat Pollution Control Board, Bharuch.

Post Received Sularat Pollution Control Board

BHARUCH

Adani Petronet (Dahej) Port Limited At & PO: Lakhigam Taluka: Vagra, Via Dahej Bharuch 392 130 Gujarat, India CIN: U63012GJ2003PTC041919 Tel +91 2641 28 5002 www.adaniports.com

Registered Office: Adani Corporate House, Shantigram, Nr Vaishno Devi Circle, S G Highway, Khodiyar, Ahmedabad 382 421, Gujarat, India

FORM V (See Rule 14)

Environmental Statement for the Financial Year ending 31st March 2024

PART – A

(i) Name and address of the Owner/ Occupier of the Industry Operation or Process

: Mr. Pankaj Uke Chief Operating Officer Adani Petronet (Dahej) Port Ltd. At & Post Lakhigam, Taluka: Vagra, District: Bharuch (Gujarat)

(ii) Industry Category Primary (STC Code) Secondary (STC Code) : Red – Large NA NA

(iii) Production Capacity

: Handling & Storage of Solid cargo - 1.34 MMT/ Month

(iv) Year of Establishment

: September 2011.

Date of last Environment Statement : 19th May 2023 (v) submitted

<u>PART – B</u>

Water and Raw Material Consumption

(i) Water Consumption

Water Consumption Cu. Mtr./Day	1311 m³/day
Process	Nil
Cooling (DSS, DFDS, FFS)	1288.61 m³/day
Domestic	22.36 m³/day

Name of Products	Process Water Consumption per unit of Product Output				
	During the current financial year (2022 – 23)				
Handling & Storage of Solid cargo	No process water consumption. 378479 m³ of water consumption for dust suppression, firefighting & cooling (0.034 m³/MT)	No process water consumption. 427651 m³ of water consumption for dust suppression, firefighting & cooling (0.039 m ³ /MT)			

* Unit does not go under any manufacturing process. The water consumed was mainly in firefighting, dust suppression, sprinkling, washing and greenbelt development activities.

(ii) Raw Material Consumption

Name of	Name of	, Consumption of Raw Mater	ial per Unit of Output	
Raw Products Material		During the current financial year (2022 – 23)	During the current financial year (2023 – 24)	
NIL*	Not Applicable	Nil	Nil	

* Unit does not go under any manufacturing process. The water consumed was mainly in firefighting, dust suppression, sprinkling, washing and Greenbelt development activities.

<u>PART – C</u>

Pollutants discharged to Environment/Unit of Output (Parameters as specified in consent issued)

Pollutant	Parameter	Quantity of pollutants discharged (Mass/day)	Concentration of pollutant in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons		
(a) Water (Domestic	TSS	0.298 · (Kg/day)	15.33 mg/L	No Deviation from		
Sewage)	BOD	0.229 (Kg/day)	11.8 mg/L	prescribed standards		
	Parameter	Quantity of pollutants discharged (Mass/day)	Concentration of pollutant in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons		
	DG set 1 - SS 5 (MRSS Building)					
	PM (mg/Nm3)	0.0117 (Kg/day)	44 (mg/Nm3)			
	SO₂ (PPM)	0.0049 (Kg/day)	14.21 (PPM)	No Deviation from prescribed standards		
(b) Air	NOx (PPM)	0.0023 (Kg/day)	8.97 (PPM)			
			DG set 2 - SS 7B			
	PM (mg/Nm3)	0.0125 (Kg/day)	48 (mg/Nm3)			
	SO₂ (PPM)	0.0048 (Kg/day)	13.54 (PPM)	No Deviation from prescribed standards		
	NOx (PPM)	0.0019 (Kg/day)	7.66 (PPM)			
		DG set 3	- SS 08 (Marine Build	ding)		
	PM (mg/Nm3)	0.0139 (Kg/day)	51 (mg/Nm3)	No Deviation from		
	SO₂ (PPM)	0.0057	16.68 (PPM)	prescribed standards		

	(Kg/day)		
NOx (PPM)	0.0026 (Kg/day)	10.72 (PPM)	
		set 4 - SS 11 (Silo)	
PM	0.139		
(mg/Nm3)	(Kg/day)	51 (mg/Nm3)	1
SO ₂ (PPM)	0.0126		No Deviation from
	(Kg/day)	16.09 (PPM)	prescribed standards
NOx (PPM)	0.0056		-
	(Kg/day)	9.84 (PPM)	
		DG set 5 - SS 7A	
PM	0.0108	40 (ma/blmZ)	Philipped and an an an and a star would be taken a three beneding the base
(mg/Nm3)	(Kg/day)	40 (mg/Nm3)	
SO₂ (PPM)	0.0048	13.96 (DDAA)	No Deviation from
	(Kg/day)	13.86 (PPM)	prescribed standards
NOx (PPM)	0.0020	8.09 (PPM)	1
	(Kg/day)	0.09 (FFIN)	

* Unit does not go under any manufacturing process, as it is service industry (Port) engaged in Handling & Storage of Solid Cargo. There is no effluent generation & disposal.

- DG sets were kept only as standby power source and used only during power failure. Analysis
 reports of DG stack monitoring and ambient air quality monitoring are enclosed as Annexure 1.
- There was approx. 19.44 KL/day sewage water generation. The sewage water was treated in the Sewage treatment plant (STP) and treated water confirming to prescribed standards reused in gardening and plantation activities. Analysis Report of STP is attached as Annexure 1.

<u>PART – D</u>

Hazardous Wastes

(As specified under Hazardous Wastes Management and Handling Rules 1989)

Hazardous Wastes	Total Quantity						
	During the current financial year (2022 – 23)	During the current financial year (2023 – 24)					
(a) From Process	 Sludge and Filter Contaminated with oil (Cat. 3.3) – Nil. Used Oil (Cat. 5.1) – 2.14 MT Wastes/ Residues containing Oil (Cat. 5.2) – Nil. Process Waste, Residues & Sludge (Paint) (Cat. – 21.1) – Nil. 	 Sludge and Filter Contaminated with oil (Cat. 3.3) - Nil. Used Oil (Cat. 5.1) - 7.845 MT Wastes/ Residues containing Oil (Cat. 5.2) - Nil. Process Waste, Residues & 					

	5). Discarded Barrels (Cat. 33.1) – Nil. 6). Contaminated Cotton rags or other cleaning materials (Cat. 33.2) – 0.950 MT	Sludge (Paint) (Cat. – 21.1) – Nil. 5). Discarded Barrels (Cat. 33.1) – 120 nos. 6). Contaminated Cotton rags or other cleaning materials (Cat. 33.2) – 2.02 MT.
(b) From Pollution Control facilities	Nil	Nil

<u> PART – E</u>

Solid Waste

Solid Waste	Total Quantity Generated (MT/Annum)				
	During the current financial year	During the current financial year			
	(2022 – 23)	(2023 – 24)			
(a) From Process (Ash)	Nil	Nil			
(b) From Pollution Control facilities	100 kg sewage from STP.	100 kg sewage from STP.			
(C-1) Quantity recycled or reutilized within the unit	Approx. 50 MT (Vermicomposting 45 MT & remaining organic waste converted in green manure)	Approx. 24 MT (Vermicomposting 20 MT & remaining organic waste converted in green manure)			
(C-2) Sold	321 MT (Tyre, MS Scrap, etc.)	216.1 MT (Tyre, MS Scrap, etc.)			
(C-3) Disposed	Nil	Nil			

Note: Scrap is collected in designated scrap yard at central store and sold to scrap authorized recycler/vendor

<u>PART – F</u>

Please specify the characterization (in terms of Composition and quantum) of hazardous as well as solids wastes and indicate disposal practice adopted for both these categories of waste:

- Used/Spent oil was generated from various maintenance activities which was collected in Barrels kept in covered hazardous waste storage area. These wastes are sold to GPCB authorized registered recyclers.
- Cotton waste (Oily rugs) generated from site the same was packed in HDPE bags and stored in Hazardous waste storage area. This waste is disposed at GPCB authorized CHWIF.

<u>PART – G</u>

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

Unit has installed 80 M³/Day capacities Sewage Treatment Plant for treatment of the Sewage water generated at site. The treated water is being reused within port premises for gardening. Unit has formed dedicated Horticulture department & developing green belt within port premises. Total 25.27 Ha. of green belt development is carried out till date.

<u> PART – H</u>

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

- Unit is doing Regular Environmental Monitoring of Port & surrounding area through reputed NABL certified Laboratory. All the required environmental parameters are well within specified limit and the details of monitored data are regularly submitted to GPCB.
- Unit has installed STP for the treatment of the Sewage water the treated water is reusing for plantation & gardening activities. Unit has also provided dump pond and conveyance channel for collection of runoffs generated from Coal Yard.
- Unit has provided Dust Suppression System and Dry Fog Dust Suppression System at coal yard & conveyer system and carrying out regular water spreading to control the dust exposure. Wind breaking wall has provided around the periphery of Coal Yard.
- Unit has formed dedicated Horticulture department & developing green belt within port premises.
- Regular road cleaning both inside and outside the port premises is a continuous activity carried out by below two methods. The road sweeping by both methods is carried out till 3 Km from the port main gate on the main road leading to Dahej by APDPL.

Road cleaning by sweeping machine: APDPL, have 02 nos. of large capacity road sweeping machine and one tractor sweeping machine. Truck mounted Industrial Vacuum Cleaning Machines have road cleaning capacity substantially as the storage capacity of the chassis mounted vacuum machine are 04 tone/ hour each which allow rapid collection of spillage, dust and subsequent disposal.

Manual Road Cleaning: In addition to the sweeping machine APDPL has employed labour for continuous cleaning of roads both inside and outside the port area. It is done by three team consisting of 5 members each. All the coal dust collected is sent to the coal yard.

- Tyre washing system has installed at to restrict the dust carry over through cargo vehicles.
- Unit has installed 14 m height wind screen for control of dust from yard.
- Tarpaulin covering of rail wagons at silo.

PART - I

Any other particulars for improving the quality of environment.

- Environmental awareness programs have been conducted during the year for employees at port.
- Integrated housekeeping management is undertaken at top priority to maintain neat and clean working environment in the plant area.

- APDPL adoption of 5 R's principle of waste management i.e., reduce, reuse, reprocess, recycle & recover.
- 100% sewage generated is being reused.

(Authorized Signatory) M/s. Adani Petronet Dahej Port Limited

Annexure - 1

DG SETS STACK EMISSION AND NOISE LEVEL MONITORING

1. MRSS (SS 5) 125 KVA

Date: 20.06.2024

SR.	TEST	UNIT	DG SET # 1 MRSS (SS 5) 125 KVA			
NO.	PARAMETERS	ONT	30/05/2023	31/08/2023	21/11/2023	26.02.2024
1	Particulate Matter	mg/Nm3	38	40	42	46
2	Sulphur Dioxide	ppm	13.35	16.31	14.55	13.87
3	Oxide of Nitrogen	ppm	7.64	9.05	8.88	9.07
4	Non-Methyl Hydro Carbon (NMHC)	mg/m3	N.D.	N.D.	N.D.	N.D.
5	Carbon Monoxide (CO)	gm/kw- hr.	0.061	0.065	0.072	0.076
	DG NOISE Leq dB (A	69.70	65.40	70.60	69.10	

BDL*: Below Detection Limit: Non Methyl Hydro Carbon 5 mg/m3, Result on 15% O2 Correction when oxygen is greater than 15%

2. SS7B 125 KVA

SR.	TEST	UNIT	DG SET # 2 SS7B 125 KVA			Acad Street Street
NO.	PARAMETERS	UNIT	30/05/2023	31/08/2023	21/11/2023	26.02.2024
1	Particulate Matter	mg/Nm3	47	43	45	51
2	Sulphur Dioxide	ppm	16.04	14.58	13.03	14.06
3	Oxide of Nitrogen	ppm	9.40	8.20	7.31	8.02
4	Non-Methyl Hydro Carbon (NMHC)	mg/m3	N.D.	N.D.	N.D.	N.D.
5	Carbon Monoxide (CO)	gm/kw- hr.	0.0055	0.073	0.076	0.079
	DG NOISE Leq dB	74.80	65.40	71.80	67.80	

BDL*: Below Detection Limit: Non Methyl Hydro Carbon 5 mg/m3, Result on 15% O2 Correction when oxygen is greater than 15%

3. MARINE (SS8) 125 KVA

SR.	TEST	UNIT	DG SET # 3 MARINE (SS8) 125 KVA			
NO.	PARAMETERS	ONT	30/05/2023	31/08/2023	21/11/2023	26.02.2024
1	Particulate Matter	mg/Nm3	51	50	53	49
2	Sulphur Dioxide	ppm	18.05	15.29	17.50	15.87
3	Oxide of Nitrogen	ppm	10.36	9.28	10.29	11.16
4	Non-Methyl Hydro Carbon (NMHC)	mg/m3	N.D.	N.D.	N.D.	N.D.
5	Carbon Monoxide (CO)	gm/kw- hr.	0.081	0.077	0.084	0.082
DG NOISE Leq dB (A)						

BDL*: Below Detection Limit: Non Methyl Hydro Carbon 5 mg/m3, Result on 15% O2 Correction when oxygen is greater than 15%

4. SILO (SS11) 125 KVA

SR.	TEST	UNIT	DG SET # 4 SILO (SS11) 125 KVA			
NO.	PARAMETERS	UNIT	30/05/2023	31/08/2023	21/11/2023	26.02.2024
1	Particulate Matter	mg/Nm³	41	36	49	53
2	Sulphur Dioxide	ppm	16.51	14.90	16.31	15.87
3	Oxide of Nitrogen	ppm	9.82	7.21	9	10.69
4	Non-Methyl Hydro Carbon (NMHC)	mg/m³	N.D.	N.D.	N.D.	N.D.
- 5	Carbon Monoxide (CO)	gm/kw- hr.	0.074	0.068	0.070	0.072
	DG NOISE Leq dB (65.90	67.80	69.10	67.80	

BDL*: Below Detection Limit: Non Methyl Hydro Carbon 5 mg/m3, Result on 15% O2 Correction when oxygen is greater than 15%

5. SS 7A 125 KVA

SR. NO.	TEST PARAMETERS	UNIT	DG SET # 5 SS 7A 125 KVA				
			30/05/2023	31/08/2023	21/11/2023	26.02.2024	
1	Particulate Matter	mg/Nm3	44	47	39	41	
2	Sulphur Dioxide	ppm	14.62	13.60	14.83	12.89	
3	Oxide of Nitrogen	ppm	8.87	7.83	8.34	7.84	
4	Non-Methyl Hydro Carbon mg/m3 (NMHC)		N.D.	N.D.	N.D.	N.D.	
5	Carbon Monoxide (CO)	gm/kw- hr.	0.049	0.070	0.088	0.081	
DG NOISE Leq dB (A)			70.20	60.80	72.80	68.30	

BDL*: Below Detection Limit: Non Methyl Hydro Carbon 5 mg/m3, Result on 15% O2 Correction when oxygen is greater than 15%

	FY 24 Average Values							
Sr. No.	Parameters	UOM	Marine Building	EHS Building	SS 7B Building	JS 1	Silo Gate	SS 11 terrace
1	Respirable Particulate Matter (PM10)	µg∕m³	76.89	70.26	76.27	65.66	66.15	67.60
2	Particulate Matter (PM 2.5)	µg/m³	42.01	41.34	35.79	31.77	30.82	28.26
3	Sulphur Dioxide (SO2)	µg/m³	14.61	14.30	12.82	13.13	12.73	12.94
4	Oxides of Nitrogen	µg∕m³	20.01	18.53	17.34	17.14	16.70	17.22

Ambient Air Quality Result

STP Treated Water Results

Parameters	Unit	Min	Max	Perm. Limit
PH	-	6.44	7.63	6.5-8.5
TSS	mg/L	9	23	30
BOD (3 Days @ 27 °C	mg/L	4	15	20
Residual Free Chlorine	mg/L	0.62	2.66	0.5(Min)

S. NO.	ACTIVITY/ CATEGORY	Cost incurred (IN Lacs)	Budgeted Cost (IN Lacs)	
		2023-2024	2024	
1.	EHS Manpower	6.5	6.5	
2.	Legal & Statutory Expenses	3.0	4.5	
3.	Environmental Monitoring Services	11.25	13.10	
4.	Cost for Water Consumption and use dust suppression	311	312	
5.	Hazardous Waste Management & Disposal	1.0	2.18	
6.	Greenbelt Development and Plantation	44.66 ,	51.44	
7.	O&M of Sewage Treatment Plant	6.79	6.79	
8.	Environment Day Celebration	0.35	0.50	
9.	Treatment and Disposal of Bio-Medical Waste	2.01	2.0	
10.	Operation and Maintenance of Road Cleaning equipment and manpower	53.0	59.0	
11.	Operation and Maintenance of Fire staff engage in water sprinkling activity	78.90	92.99	
	Total Amount (In Lacs)	518.46	551	

<u>Annexure – 2</u> Expenditure for Environmental Protection Activities during FY 2023-2024

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