

adani

Ports and
Logistics

etc

Ref No.: APDPL/Env. statement/2022-23

Date:18.05.2023
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 2023 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 2023.

Thanking you,

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

Ⓟ 

(Authorized Signatory)

Encl: As above.

Copy to:

1. The Regional Officer, Gujarat 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

 19/5/23
Post Received
Gujarat Pollution Control Board
BHARUCH

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



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(Formerly, Adani Petronet Dahej Port Pvt. Ltd.)

(Authorized Signatory)

Encl: As above.

Copy to:

1. The Regional Officer, Gujarat Pollution Control Board, Bharuch.

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

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

Environment Statement for 2022-23 for M/s Adani Petronet (Dahej) Port Ltd.

FORM V
(See Rule 14)

Environmental Statement for the Financial Year ending 31st March 2023

PART - A

- (i) Name and address of the Owner/
Occupier of the Industry Operation or
Process : Mr. Jagdish Patel
Chief Operating Officer
Adani Petronet (Dahej) Port Ltd.
At & Post Lakhigam, Taluka: Vagra,
District: Bharuch (Gujarat)
- (ii) Industry Category : Red - Large
Primary (STC Code) NA
Secondary (STC Code) NA
- (iii) Production Capacity : 1.34 MMT/ Month
- (iv) Year of Establishment : September 2011.
- (v) Date of last Environment Statement : 24th May 2022
submitted

PART - B

Water and Raw Material Consumption

(i) Water Consumption

| | |
|--------------------------------|-----------------------------|
| Water Consumption Cu. Mtr./Day | 1170.16 m ³ /day |
| Process | Nil |

Environment Statement for 2022-23 for M/s Adani Petronet (Dahej) Port Ltd.

| | |
|----------|-----------------------------|
| Cooling | 1036.92 m ³ /day |
| Domestic | 133.24 m ³ /day |

| Name of Products | Process Water Consumption per unit of Product Output | |
|------------------------------------|--|--|
| | During the current financial year (2020 - 21) | During the current financial year (2022 - 23) |
| Handling of Storage of Solid cargo | No process water consumption. 269492 m³ of water consumption for dust suppression, firefighting & cooling (0.033 m³/MT) | No process water consumption. 378479 m³ of water consumption for dust suppression, firefighting & cooling (0.034 m³/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 Raw Material | Name of Products | Consumption of Raw Material per Unit of Output | |
|----------------------|------------------|--|---|
| | | During the current financial year (2021 - 22) | During the current financial year (2022 - 23) |
| 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.

PART - C

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 |
|-----------|-----------|--|--|--|
|-----------|-----------|--|--|--|

Environment Statement for 2022-23 for M/s Adani Petronet (Dahej) Port Ltd.

| | | | | |
|-----------|---|---|---|---|
| (a) Water | TSS | 0.291 (Kg/day) | 13 mg/L | No Deviation from prescribed standards |
| | BOD | 0.245 (Kg/day) | 11 mg/L | |
| (b) Air | 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/Nm ³) | 0.0085 (Kg/day) | 26.31 (mg/Nm ³) | No Deviation from prescribed standards |
| | SO ₂ (PPM) | 0.0068 (Kg/day) | 8.02 (PPM) | |
| | NO _x (PPM) | 0.0176 (Kg/day) | 29.03 (PPM) | |
| | DG set 2 - SS 7B | | | |
| | PM (mg/Nm ³) | 0.0086 (Kg/day) | 26.83 (mg/Nm ³) | No Deviation from prescribed standards |
| | SO ₂ (PPM) | 0.0060 (Kg/day) | 7.07 (PPM) | |
| | NO _x (PPM) | 0.0180 (Kg/day) | 29.71 (PPM) | |
| | DG set 3 - SS 08 (Marine Building) | | | |
| | PM (mg/Nm ³) | 0.0082 (Kg/day) | 25.60 (mg/Nm ³) | No Deviation from prescribed standards |
| | SO ₂ (PPM) | 0.0070 (Kg/day) | 8.34 (PPM) | |
| | NO _x (PPM) | 0.0169 (Kg/day) | 27.97 (PPM) | |
| | DG set 4 - SS 11 (Silo) | | | |
| | PM (mg/Nm ³) | 0.0098 (Kg/day) | 30.43 (mg/Nm ³) | No Deviation from prescribed standards |
| | SO ₂ (PPM) | 0.0086 (Kg/day) | 10.25 (PPM) | |

Environment Statement for 2022-23 for M/s Adani Petronet (Dahej) Port Ltd.

| | | | | |
|-------------------------|-----------------------------|--------------------|-----------------------------|---|
| | NOx (PPM) (Kg/day) | 0.0198 | 32.75 (PPM) | |
| DG set 5 - SS 7A | | | | |
| | PM (mg/Nm ³) | 0.0086 (Kg/day) | 26.85 (mg/Nm ³) | No Deviation from prescribed standards |
| | SO ₂ (PPM) | 0.0068 (Kg/day) | 8.07 (PPM) | |
| | NOx (PPM) (Kg/day) | 0.0187 | 30.95 (PPM) | |

* 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. 22.35 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.

PART – D

Hazardous Wastes

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

| Hazardous Wastes | Total Quantity | |
|---------------------------------------|---|---|
| | During the current financial year (2021 – 22) | During the current financial year (2022 – 23) |
| (a) From Process | 1). Sludge and Filter Contaminated with oil (Cat. 3.3) – Nil. 2). Used Oil (Cat. 5.1) – 5.67 MT. 3). Wastes/ Residues containing Oil (Cat. 5.2) – Nil. 4). Process Waste, Residues & Sludge (Paint) (Cat. – 21.1) – Nil. 5). Discarded Barrels (Cat. 33.1) – 8 Nos. 6). Contaminated Cotton rags or other cleaning materials (Cat. 33.2) – 2.25 MT | 1). Sludge and Filter Contaminated with oil (Cat. 3.3) – Nil. 2). Used Oil (Cat. 5.1) – 2.14 MT 3). Wastes/ Residues containing Oil (Cat. 5.2) – Nil. 4). Process Waste, Residues & Sludge (Paint) (Cat. – 21.1) – Nil. 5). Discarded Barrels (Cat. 33.1) – Nil. 6). Contaminated Cotton rags or other cleaning materials (Cat. 33.2) – 0.950 MT. |
| (b) From Pollution Control facilities | Nil | Nil |

Environment Statement for 2022-23 for M/s Adani Petronet (Dahej) Port Ltd.

PART - E

Solid Waste

| Solid Waste | Total Quantity Generated (MT/Annun) | |
|---|--|---|
| | During the current financial year (2021 - 22) | During the current financial year (2022 - 23) |
| (a) From Process (Ash) | Nil | Nil |
| (b) From Pollution Control facilities | Nil | 100 kg sewage from STP. |
| (C-1) Quantity recycled or reutilized within the unit | Approx. 180 MT (Vermicomposting 150MT & remaining organic waste converted in green manure) | Approx. 50 MT (Vermicomposting 45 MT & remaining organic waste converted in green manure) |
| (C-2) Sold | Nil | 321 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

PART - F

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.

PART - G

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 24.02 Ha. of green belt development is carried out till date.

PART - H

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

Environment Statement for 2022-23 for M/s Adani Petronet (Dahej) Port Ltd.

- 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 is regularly submitting 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.

Date: 18-05-2023



(Authorized Signatory)

**M/s. Adani Petronet Dahej Port Limited
(Formerly, M/s. Adani Petronet Dahej Port Private Limited)**

Environment Statement for 2022-23 for M/s Adani Petronet (Dahej) Port Ltd.

Annexure - 1

DG SETS STACK EMISSION AND NOISE LEVEL MONITORING

1. MRSS (SS 5) 125 KVA

| SR. NO. | TEST PARAMETERS | UNIT | DG SET # 1 MRSS (SS 5) 125 KVA | | | |
|---------------------|--------------------------------|--------------------|--------------------------------|------------|------------|------------|
| | | | 28/05/2022 | 26/08/2022 | 29/11/2022 | 24.02.2023 |
| 1 | Particulate Matter | mg/Nm ³ | 26.27 | 22.61 | 28.36 | 28 |
| 2 | Sulphur Dioxide | ppm | 3.63 | 4.67 | 5.92 | 17.86 |
| 3 | Oxide of Nitrogen | ppm | 33.44 | 30.65 | 32.65 | 19.37 |
| 4 | Non-Methyl Hydro Carbon (NMHC) | mg/m ³ | N.D. | N.D. | N.D. | N.D. |
| 5 | Carbon Monoxide (CO) | gm/kw-hr. | 0.0290 | 0.0252 | 0.038 | 0.047 |
| DG NOISE Leq dB (A) | | | 72.6 | 70.5 | 72.6 | 74.90 |

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. NO. | TEST PARAMETERS | UNIT | DG SET # 2 SS7B 125 KVA | | | |
|---------------------|--------------------------------|--------------------|-------------------------|------------|------------|------------|
| | | | 28/05/2022 | 26/08/2022 | 29/11/2022 | 24.02.2023 |
| 1 | Particulate Matter | mg/Nm ³ | 24.54 | 27.53 | 24.25 | 31 |
| 2 | Sulphur Dioxide | ppm | 4.57 | 5.05 | 4.74 | 13.93 |
| 3 | Oxide of Nitrogen | ppm | 35.62 | 33.59 | 28.64 | 20.97 |
| 4 | Non-Methyl Hydro Carbon (NMHC) | mg/m ³ | N.D. | N.D. | N.D. | N.D. |
| 5 | Carbon Monoxide (CO) | gm/kw-hr. | 0.0173 | 0.0202 | 0.023 | 0.042 |
| DG NOISE Leq dB (A) | | | 69.5 | 72.1 | 69.9 | 72.50 |

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. NO. | TEST PARAMETERS | UNIT | DG SET # 3 MARINE (SS8) 125 KVA | | | |
|---------------------|--------------------------------|--------------------|---------------------------------|------------|------------|------------|
| | | | 28/05/2022 | 26/08/2022 | 29/11/2022 | 24.02.2023 |
| 1 | Particulate Matter | mg/Nm ³ | 21.54 | 24.35 | 26.51 | 30 |
| 2 | Sulphur Dioxide | ppm | 4.02 | 6.35 | 7.66 | 15.31 |
| 3 | Oxide of Nitrogen | ppm | 30.26 | 32.44 | 30.46 | 18.72 |
| 4 | Non-Methyl Hydro Carbon (NMHC) | mg/m ³ | N.D. | N.D. | N.D. | N.D. |
| 5 | Carbon Monoxide (CO) | gm/kw-hr. | 0.0237 | 0.0265 | 0.032 | 0.057 |
| DG NOISE Leq dB (A) | | | 70.8 | 73.6 | 70.1 | 71.60 |

Environment Statement for 2022-23 for M/s Adani Petronet (Dahej) Port Ltd.

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. NO. | TEST PARAMETERS | UNIT | DG SET # 4 SILO (SS11) 125 KVA | | | |
|----------------------------|--------------------------------|--------------------|--------------------------------|-------------|-------------|--------------|
| | | | 28/05/2022 | 26/08/2022 | 29/11/2022 | 24.02.2023 |
| 1 | Particulate Matter | mg/Nm ³ | 23.47 | 28.83 | 32.43 | 37 |
| 2 | Sulphur Dioxide | ppm | 8.45 | 7.55 | 8.54 | 16.46 |
| 3 | Oxide of Nitrogen | ppm | 36.55 | 38.46 | 35.47 | 20.52 |
| 4 | Non-Methyl Hydro Carbon (NMHC) | mg/m ³ | N.D. | N.D. | N.D. | N.D. |
| 5 | Carbon Monoxide (CO) | gm/kw-hr. | 0.0317 | 0.0398 | 0.045 | 0.045 |
| DG NOISE Leq dB (A) | | | 73.2 | 71.5 | 73.5 | 73.10 |

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 | | | |
|----------------------------|--------------------------------|--------------------|--------------------------|-------------|-------------|--------------|
| | | | 28/05/2022 | 26/08/2022 | 29/11/2022 | 24.02.2023 |
| 1 | Particulate Matter | mg/Nm ³ | 25.30 | 21.55 | 24.53 | 36 |
| 2 | Sulphur Dioxide | ppm | 7.55 | 5.97 | 6.12 | 12.63 |
| 3 | Oxide of Nitrogen | ppm | 32.50 | 35.66 | 33.46 | 22.17 |
| 4 | Non-Methyl Hydro Carbon (NMHC) | mg/m ³ | N.D. | N.D. | N.D. | N.D. |
| 5 | Carbon Monoxide (CO) | gm/kw-hr. | 0.0269 | 0.0313 | 0.030 | 0.033 |
| DG NOISE Leq dB (A) | | | 71.4 | 72.4 | 68.4 | 73.80 |

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

Ambient Air Quality Result

| FY 23 Average Values | | | | | | | | |
|----------------------|--------------------------------------|-------------------|-----------------|--------------|----------------|------------|------------------|-------|
| Sr. No. | Parameters | UOM | Marine Building | EHS Building | SS 7B Building | GCPTL Gate | Silo Porta Cabin | JS 2 |
| 1 | Respirable Particulate Matter (PM10) | µg/m ³ | 91.67 | 71.24 | 67.06 | 64.79 | 61.07 | 82.07 |
| 2 | Particulate Matter (PM 2.5) | µg/m ³ | 50.89 | 35.90 | 32.78 | 30.42 | 30.09 | 42.63 |
| 3 | Sulphur Dioxide (SO ₂) | µg/m ³ | 21.48 | 15.33 | 12.98 | 13.92 | 12.64 | 17.79 |
| 4 | Oxides of Nitrogen | µg/m ³ | 37.92 | 27.78 | 22.75 | 25.64 | 25.01 | 31.49 |

Environment Statement for 2022-23 for M/s Adani Petronet (Dahej) Port Ltd.

STP Treated Water Results

| Parameters | Unit | Min | Max | Perm. Limit |
|------------------------|------|------|------|-------------|
| PH | - | 6.92 | 8.23 | 6.5- 8.5 |
| TSS | mg/L | 8 | 13 | 30 |
| BOD (3 Days @ 27 °C | mg/L | 3 | 11 | 20 |
| Residual Free Chlorine | mg/L | 0.8 | 0.8 | 0.5(Min) |
| Oil & Grease | mg/L | 2.2 | 4.0 | - |

Annexure – 2

Expenditure for Environmental Protection Activities during FY 2022-2023

| S. NO. | ACTIVITY/ CATEGORY | Cost incurred | Budgeted Cost |
|-------------------------------|---|---------------|---------------|
| | | (IN Lacs) | (IN Lacs) |
| | | 2022- 2023 | 2022 |
| 1. | EHS Manpower | 6.0 | 6.0 |
| 2. | Legal & Statutory Expenses | 1.12 | 1.0 |
| 3. | Environmental Monitoring Services | 14.71 | 16.0 |
| 4. | Cost for Water Consumption and use dust suppression | 272.13 | 126.0 |
| 5. | Hazardous Waste Management & Disposal | 2.0 | 3.0 |
| 6. | Greenbelt Development and Plantation | 38.42 | 42.21 |
| 7. | O&M of Sewage Treatment Plant | 6.0 | 6.0 |
| 8. | Environment Day Celebration | 0.35 | 0.50 |
| 9. | Treatment and Disposal of Bio-Medical Waste | 2.10 | 2.0 |
| 10. | Operation and Maintenance of Road Cleaning equipment and manpower | 55.79 | 62.26 |
| 11. | Operation and Maintenance of Fire staff engage in water sprinkling activity | 88.21 | 89.19 |
| 12. | Environmental Study / Audit and Consultancy | 3.90 | 1.0 |
| 13. | Bio Shield Project at village Malpur & Jambusar, Bharuch 1000m x 200m. | 2.30 | 3.0 |
| Total Amount (In Lacs) | | 487.53 | 358.16 |