

Subramanian A

From: Sathish Kumar R
Sent: Thursday, September 22, 2022 4:39 PM
To: eccompliance-tn@gov.in; DEE GMP TNPCB
Cc: Ramde Karangiya; Subramanian A
Subject: Submission of Environmental Statement (Form V) for the financial year ending 31st March, 2022 of Adani Ennore Container Terminal Private Limited, Chennai
Attachments: AECTPL _Form V (2021-22).pdf

Dear Sir,

With reference to the captioned subject, we submit herewith the **Environmental Statement** of **M/s Adani Ennore Container Terminal Private Limited**, in **Form-V** prescribed under Rule 14 of the Environment (Protection) Rules 1986 for the financial year ending 31st March 2022.

Submitted for your kind information and records.

Thanks and Regards

R. Sathish Kumar

Deputy General Manager - Environment | Adani Ports and SEZ Limited |

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Growth
with
Goodness

Our Values: Courage | Trust | Commitment



AECTPL/TNPCB/2022-23/128

Date:22.09.2022

To,

The Member Secretary,
Tamil Nadu Pollution Control Board,
76, Mount Salai,
Guindy,
Chennai - 600 032

Dear Sir,

Sub: Submission of Environmental Statement (Form V) for the financial year ending 31st March, 2022 of Adani Ennore Container Terminal Private Limited (AECTPL) - Reg.

Ref: 1. Consent to Operate Order No. 2108136876855 dated 24.08.2021 under Water Act
2. Consent to Operate Order No. 2108236876855 dated 24.08.2021 under Air Act

With reference to the captioned subject and cited references above, we submit herewith the Environmental Statement of **M/s Adani Ennore Container Terminal Private Limited**, in **Form-V** prescribed under Rule 14 of the Environment (Protection) Rules 1986 for the financial year ending 31st March 2022.

Submitted for your kind information and records.

Thanking you,

For, **M/s. ADANI ENNORE CONTAINER TERMINAL PRIVATE LIMITED.**

R. Sathish Kumar
Head - Environment



Enclosure: as above

Copy To:

- 1) The Joint Chief Environmental Engineer, Tamilnadu Pollution Control Board, First Floor, 950/1, Poonamallee High Road, Arumbakkam, Chennai-600 106
- 2) The District Environmental Engineer, Tamil Nadu Pollution Control Board, Gummidipoondi - 601201.

Adani Ennore Container Terminal Pvt Ltd
Adani House
C/o. Kamarajar Port Limited
Ponneri Taluk, Tiruvallur District
Tamil Nadu- 600 120.

Tel +91 44 2824 3062

info@adani.com
www.adani.com

CIN: U61200GJ2014PTC078795

Form-V

(See rule 14 of Environment (Protection) Rules, 1986)

Environmental Statement for the financial year ending 31st March 2022

PART - A

i) Name and Address of the owner / occupier of the industry operation or process	:	Mr. G.J. Rao Chief Executive Officer Adani Ennore Container Terminal Private Limited C/O Kamarajar Port Limited Vallur Post, Ennore Thiruvallur District- 600 120 Tamil Nadu, India
ii) Industry Category	:	Primary : Red Secondary : 1065 – Ports and Harbour, Jetties and Dredging Operations.
iii) Production Capacity	:	Cargo Handling Capacity : 11.68 MMTPA of Container cargo
iv) Year of establishment	:	2016
v) Date of the last environmental statement submitted	:	Vide our Letter No. AECTPL/TNPCB/2021-22/79 dated 23.09.2021



PART - B

WATER AND RAW MATERIAL CONSUMPTION

(i) Water Consumption

S. No	Water Consumption (m ³ /Calendar Day)	2020-2021	2021-2022
1.	Process	NIL	NIL
2.	Cooling	NIL	NIL
3.	Domestic	13.8	12.6

(ii) Raw Material Consumption

S. No.	Name of Raw Material	Name of Products	Consumption of Raw Material per Unit of output	
			During the previous financial year (2020-21)	During the current financial year (2021-22)
1	Not Applicable	Not Applicable	NIL	NIL

The unit does not undergo any manufacturing process. Hence, there is no raw material consumption.



PART - C

POLLUTION DISCHARGE TO ENVIRONEMENT/ UNIT OF OUTPUT
(Parameters as specified in the consent issued)

Pollutants	Quality of Pollutants Discharged (Mass/day)	Concentration of Pollutants discharges (mass/volume)	Percentage of variation from prescribed standards with reason	
a) Water	STP Treated Water Characteristics: -			
	Parameter	Consent Limit	Actual	% Variation with prescribed standard
	pH	5.5-9	7.44	-Nil-
	Total Suspended Solids (mg/l)	30	18.62	-Nil-
	BOD (3 days at 27°C) (mg/l)	20	12.59	-Nil-
	Fecal Coliform (MPN/100ml)	1000	177.08	-Nil-
b) Air	<p>DG sets are provided as standby power source and are used during power failure only. The Height of DG stacks as per CPCB/ TNPCC Standards. All the monitored parameters are within standards.</p> <p>All the DG Sets are retrofitted to reduce the Particulate Matter emission level. Efficiency of the retrofitting equipment is observed above 90% against the TNPCC requirement of >70%.</p> <p>All the monitored parameters are well within the prescribed standards.</p>			
	Particulate Matter (mg/Nm ³)	DG stack emission report is enclosed as Annexure 1		
	Sulphur Dioxide (mg/Nm ³)			
	Nitrogen Oxide (ppm)			



PART-D

HAZARDOUS WASTES

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

Hazardous Wastes	Total Quantity (Kg)	
	During the previous Financial Year (2020-21)	During the current Financial Year (2021-22)
(a) From Process	-Nil-	<ul style="list-style-type: none">• Used/Spent Oil (5.1) – 2500 Liters (2.268 Tons)• Wastes or residue containing oil (5.2) - 800 Liters (0.72 Tons)
(b) From Pollution control facilities	NA	NA

PART-E

SOLID WASTES

TOTAL QUANTITY GENERATED			
Solid Waste		During the previous Financial Year (2020-21)	During the current Financial Year (2021-22)
a)	From process	NIL	NIL
b)	From pollution control facilities- STP	63.42 kgs	99.3 kgs
c)	1. Quantity recycled or reutilized within the Unit	63.42 kgs	99.3 kgs
	2. Sold	NIL	NIL
	3. Disposed	NIL	NIL



PART-F

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

- **"Zero Waste to Landfill" Initiative** – No waste is being sent to landfill or incineration facility. AECTPL is having Integrated Waste Management System (IWMS) to proper segregate & recover the materials and are handled as per 5R (Reduce, Reuse, Recycle, Recover and Reprocess) principle.
- AECTPL has awarded with Zero Waste to Landfill Management System (ZWTL MS 2020) from TÜV Rheinland India Pvt. Ltd (Annexure – 2).
- Hazardous wastes include Used oil, Filters contaminated with Oil and Empty barrels / containers contaminated with hazardous wastes. All the hazardous wastes are collected and stored properly in Integrated Waste Management Shed & are being disposed to TNPCB authorized /registered recyclers in line with Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 (As amended).
- The used batteries and E –wastes are also stored in Integrated Waste Management Shed and disposed off through approved vendor in line to E-Waste Management Rules 2016 (as amended).
- Hazardous waste Annual returns in Form 4 was submitted in line with the Hazardous and Other Wastes (Management & Trans boundary Movement) Rules, 2016.
- E-waste returns in Form 3 was submitted in line with the E-waste Management Rules, 2016.
- 100% utilization of STP sludge for greenbelt maintenance as manure.
- AECTPL certified as "Single Use Plastic (SUP) Free" site from CII –ITC Centre of Excellence for Sustainable Development.



PART-G

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

- Adani Ennore Container Terminal Private Limited is having electrified cranes only and hence the diesel consumption by the cranes is eliminated completely.
- All the DG Sets are retrofitted to reduce the Particulate Matter emission level. Efficiency of the retrofitting equipment is observed above 90% against the TNPCB requirement of >70%.
- All the domestic wastewaters being generated at port is treated at existing sewage treatment plant and the treated water is being reused within port premises for gardening/horticulture purpose.
- Sewage Treatment Plant (STP) is in continuous operation and the treated effluent water quality is meeting the TNPCB norms. The total cost spent on STP operation during the year 2021-22 is Rs. 4.56 Lakhs.
- Regular Environmental monitoring is being carried out through NABL accredited laboratory. All the monitored environmental parameters are well within the prescribed norms & the details of monitored data is being submitted regularly to TNPCB, CPCB, MoEF&CC and other concerned authorities.
- Unit is continuously developing and maintaining Greenbelt within the port premises.
- Implemented Integrated Waste Management System (IWMS) for managing all types of wastes in line with 5R (Reduce, Reuse, Recycle, Recover and Reprocess) principle.



PART-H

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

<u>Regular Expenditure (Cost in INR lakhs/year)</u>		
S. No.	Description	Cost
1	Environmental monitoring & Environment Studies	7.86
2	Green belt & Horticulture development	4.87
3	Annual maintenance contractor of STP operation	4.56
4	Operation & Maintenance of Integrated Waste Management System	2.89
5	Housekeeping	37.20

PART-I

ANY OTHER PARTICULARS IN RESPECT TO ENVIRONMENT

- Handling of all types of wastes in line with 5R (Reduce, Reuse, Recycle, Recover and Reprocess) Principle.
- Paperless Operation is in place (Except for Statutory requirements) using application tools and Software – Terminal Info Gateway (TIG).
- Energy Conservation Committee to measure the amount of energy consumed and take actions to reduce the energy consumed through port operations
- Water Warriors committee to identify and reduce the water consumption. The committee would propose innovative water solutions.
- Integrated Management System (ISO 9001:2015, 14001:2015, 45001:2018 and 50001:2018) certified Port.
- Obtained "5S" Certification at MIDPL
- AECTPL is bestowed with the top honors and the details of accolades received during the year 2021-22 are mentioned here under (photos attached at Annexure-3);
 - "21st Annual Greentech Environment & Sustainability" Award 2021' organized by Greentech Foundation, New Delhi for outstanding achievements in "**Environment Protection**" category



- "Platinum Award" under Apex India Green Leaf Award 2021 for Energy Efficiency category

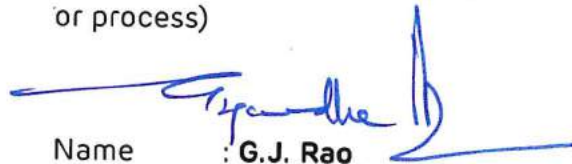
- **Community Development:**

Kattupalli Port has been propagating the community development through a broad based Corporate Social Responsibility (CSR) program in the project area through Adani Foundation since 2018 to ensure inclusive growth and catering to the developmental needs of the community at the grassroots level. The *project area encompasses 11 panchayats covering about 46 villages within 10 Km radius of the Kattupalli Port*. The key interventions introduced in the project area are as under:

- Education
- Community Health
- community Infrastructure facility
- Sustainable Livelihood development
- Tree Plantation & Bio-Diversity development program
- Special Focus Groups
- COVID / Cyclone relief measures

Date: 22.09.2022

(Signature of a person carrying out an industry operation or process)



Name : **G.J. Rao**

Designation: **Chief Executive Officer**

Address : Adani Ennore Container Terminal Pvt Ltd
C/O Kamarajar Port Limited
Vallur post, Ennore
Thiruvallur District- 600 120.



ANNEXURE - 1

ANNEXURE - 1

AECTPL- STACK MONITORING (April'2021 to March'2022)													
Location		DG - 1 1500KVA											
Month & Year		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
S.No.	Parameters	20.04.21	21.05.21	19.06.21	21.07.21	19.08.21	16.09.21	22.10.21	16.11.21	27.12.21	24.01.22	17.02.22	24.03.22
1	Stack Temperature, °C	230.0	237.0	-	237.0	223.0	213.0	218.0	226.0	234.0	229.0	-	230.0
2	Flue Gas Velocity, m/s	22.6	21.3	-	20.2	21.4	22.1	21.5	22.0	21.0	22.9	-	22.6
3	Gas Discharge, Nm3/hr	6053.0	5606.0	-	5316.0	5794.0	6107.0	5877.0	5926.0	5581.0	6143.0	-	5606.0
4	Sulphur Dioxide, mg/Nm3	8.9	8.2	-	7.9	8.1	8.9	7.3	7.9	8.2	7.6	-	8.2
5	NOX (as NO2) in ppmv	126.0	129.0	-	152.0	140.0	152.0	128.0	135.0	140.0	134.0	-	131.0
6	Particular matter, mg/Nm3	34.8	32.8	-	32.0	34.1	37.3	11.0	10.0	9.4	11.0	-	9.2
7	Carbon Monoxide, mg/Nm3	81.0	84.0	-	87.0	83.0	80.0	65.0	69.0	75.0	40.0	-	40.0

Location		DG-2 1500KVA											
Month & Year		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
S.No.	Parameters	20.04.21	21.05.21	19.06.21	21.07.21	19.08.21	16.09.21	22.10.21	16.11.21	27.12.21	24.01.22	17.02.22	24.03.22
1	Stack Temperature, °C	221.0	228.0	220.0	242.0	235.0	228.0	235.0	-	218.0	223.0	-	235.0
2	Flue Gas Velocity, m/s	21.0	21.4	19.5	21.6	23.0	21.0	21.6	-	22.5	21.5	-	23.1
3	Gas Discharge, Nm3/hr	5714.0	5755.0	5327.0	5632.0	6094.0	5634.0	5728.0	-	6154.0	5830.0	-	5755.0
4	Sulphur Dioxide, mg/Nm3	8.0	7.8	8.3	8.9	8.1	7.5	6.7	-	7.8	7.2	-	7.8
5	NOX (as NO2) in ppmv	115.0	122.0	118.0	164.0	155.0	139.0	120.0	-	129.0	131.0	-	127.0
6	Particular matter, mg/Nm3	33.1	35.4	32.1	34.7	32.0	34.4	8.2	-	9.5	10.0	-	8.8
7	Carbon Monoxide, mg/Nm3	75.0	80.0	74.0	85.0	88.0	85.0	61.0	-	68.0	42.0	-	36.0

Location		DG-3 1500KVA											
Month & Year		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
S.No.	Parameters	20.04.21	21.05.21	19.06.21	21.07.21	19.08.21	16.09.21	22.10.21	16.11.21	27.12.21	24.01.22	17.02.22	24.03.22
1	Stack Temperature, °C	225.0	214.0	-	-	218.0	224.0	217.0	205.0	223.0	-	220.0	214.0
2	Flue Gas Velocity, m/s	22.0	21.0	-	-	22.5	21.4	22.1	20.7	22.4	-	22.2	21.2
3	Gas Discharge, Nm3/hr	5951.0	5796.0	-	-	6151.0	5785.0	6057.0	5835.0	6068.0	-	6050.0	5796.0
4	Sulphur Dioxide, mg/Nm3	8.4	7.1	-	-	7.4	7.9	6.5	6.1	7.5	-	8.1	7.1
5	NOX (as NO2) in ppmv	120.0	110.0	-	-	130.0	135.0	124.0	120.0	136.0	-	127.0	120.0
6	Particular matter, mg/Nm3	32.3	30.6	-	-	30.6	33.1	4.1	6.8	11.0	-	9.6	10.4
7	Carbon Monoxide, mg/Nm3	79.0	73.0	-	-	79.0	83.0	64.0	56.0	64.0	-	35.0	33.0

Location		DG-4 125KVA											
Month & Year		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
S.No.	Parameters	20.04.21	21.05.21	19.06.21	21.07.21	19.08.21	16.09.21	22.10.21	16.11.21	27.12.21	24.01.22	17.02.22	24.03.22
1	Stack Temperature, °C	127.0	122.0	125.0	-	121.0	125.0	130.0	126.0	121.0	-	126.0	122.0
2	Flue Gas Velocity, m/s	12.1	11.4	12.2	-	11.8	12.5	12.9	12.1	11.7	-	12.1	12.9
3	Gas Discharge, Nm3/hr	568.0	547.0	580.0	-	568.0	592.0	606.0	606.0	563.0	-	571.0	571.0
4	Sulphur Dioxide, mg/Nm3	4.6	4.4	4.7	-	5.0	5.4	4.2	4.0	4.5	-	4.9	5.3
5	NOX (as NO2) in ppmv	87.0	80.0	86.0	-	81.0	87.0	73.0	68.0	61.0	-	67.0	60.0
6	Particular matter, mg/Nm3	13.9	14.5	13.0	-	14.3	16.0	9.4	8.5	5.3	-	4.6	5.3
7	Carbon Monoxide, mg/Nm3	30.0	33.0	36.0	-	29.0	33.0	26.0	29.0	25.0	-	23.0	21.0



Certificate

Standard: **Zero Waste to Landfill Management System
(ZWTL MS 2020)**

Certificate Holder: **Adani Ennore Container Terminal Private Limited**
Ennore Terminal, C/O Kamarajar Port Ltd,
Tiruvallur - 600120, Tamil Nadu, India

Scope: **Providing Port facilities for Handling and
Storage of Containerized Cargo**

Proof has been furnished by means of an audit that the
Requirements of ZWTL MS 2020 are met, with the
achievement of waste diversion rate of above 99%

Validity: This certificate is valid from 01-06-2021 until 31-05-2024
Subject to satisfactory annual surveillance audits.

Certificate No. TUV/ZWLMS/2021/Adani Ports/0503

A handwritten signature in green ink, appearing to be 'Ganga', located below the certificate text.

New Delhi, 01-06-2021

TÜV Rheinland India Pvt. Ltd.
Office 610, 6th Floor, iThum
Tower, A-40, Sector-62,
Noida- 201301, India

Accolades

Annexure - 3



Greentech Foundation Winner Awards -2021



APEX India Green Leaf Platinum Award - 2021