

adani

Ports and
Logistics

PCB ID: 46110

AKBTPL/ENV/ENVSTATEMENT/2023-24

Date: 16.09.2024

To,

The Member Secretary,
Gujarat Pollution Control Board,
Paryavaran Bhavan,
Sector 10-A,
Gandhinagar – 382 010.

Sub: Environmental Statement for the Financial Year ending 31st March 2024 for
M/s Adani Kandla Bulk Terminal Pvt Ltd (AKBTPL)

Ref: PCB ID: 46110, Consent Order No. AWH – 105213, Date of issue: 21.11.2019,
Valid upto: 02.12.2024

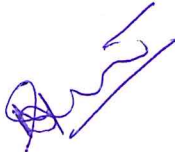
Dear Sir,

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-Kandla Bulk Terminal Pvt Ltd, Village: Tuna, Taluka: Anjar, Dist.: Kutch for the financial year ending 31st March 2024.

Thanking you,

Yours faithfully,

For, **Adani Kandla Bulk Terminal Pvt. Ltd.**



Authorised Signatory
Mohit Shaktawat
(COO-AKBTPL)

Encl: As above

19/09/24
Gujarat Pollution Control Board
Head Office
Sector No.-10-A,
Gandhinagar-382010

Copy to:

The Regional Officer, Gujarat Pollution Control Board (East – Kutch), Gandhidham

Adani Kandla Bulk Terminal Pvt. Ltd.
Adani Corporate House,
Shantigram, S G Highway
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Gujarat, India
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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. Mohit Shaktawat COO – AKBTP Adani Kandla Bulk Terminal Pvt Ltd. Plot No: Dry Bulk Terminal, Off Tekra, Near Tuna Outside Kandla Creek, Village: Tuna, Taluka: Anjar Dist: Kutch (Gujarat)
(ii)	Industry Category Primary (STC Code) Secondary (STC Code)	:	Red-Large NA NA
(iii)	Production Capacity	:	Loading and Unloading of Dry Bulk Cargo: 12 MMTPA
(iv)	Year of Establishment	:	2011 – 12 (As per certification of incorporation date of company)
(v)	Date of last Environment Statement submitted	:	10/05/2023

PART – B

Water and Raw Material Consumption

(i) Water Consumption

Water Consumption Cu. Mtr./Day	Average
Process	Nil
Cooling (Used in sprinkling / Gardening / Dust Suppression)	1054.56 m ³ /day
Domestic	14.36 m ³ /day

Details of Water Consumption for the year 2023-24 are enclosed as **Annexure – 1**.

Name of Products	Process Water Consumption per unit of Product Output*	
	During the previous financial year (2022-23)	During the current financial year (2023-24)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

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Handling, Storage and Distribution of Dry Bulk Cargo*	0.0513 KL/MT of Cargo Handled	0.0402 KL/MT of Cargo Handled
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*** Unit does not go under any manufacturing process. The water consumed was mainly in firefighting, dust suppression, sprinkling and horticulture activities.**

Name of Products	Total Production per unit of Product Output*	
	During the previous financial year (2022-23)	During the current financial year (2023-24)
Handling, Storage and Distribution of Dry Bulk Cargo*	8.16 MMT of Cargo Handled	9.73 MMT of Cargo Handled

(ii) Raw Material Consumption

Name of Raw Material	Name of Products	Consumption of Raw Material per Unit of output	
		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. It is involved in the service business and no production or manufacturing activity involved, hence there is no raw material being used.**

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

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PART - C

Pollutants discharged to Environment/Unit of Output

(Parameters as specified in consent issued)

Pollutants	Quantity of pollutants discharged (Mass/day)		Concentrations of pollutants in discharges (mass/volume)		Percentage of variation from prescribed standards with reasons
	Parameters	Avg. Mass Kg/Day	Parameters	Avg.	
(a) Waste Water (Domestic sewage)	pH	--	pH	7.47	There is no variation from prescribed standards in terms of quality of wastewater discharge. 1. From STP, 3781 KL treated water discharged during April 2023 – March 2024. Which is being used for the horticulture/plantation. 2. Analysis reports of treated water are enclosed as Annexure – 2.
	Total Suspended Solids	0.1777	Total Suspended Solids (mg/l)	17.21	
	BOD (3 Days @ 27 °C)	0.1410	BOD (3 Days @ 27 °C) (mg/l)	13.65	
	Fecal Coliform	1.0584	Fecal Coliform (MPN/100ml)	102.46	
(b) Air (DG Stack 125 + 125 + 125 KVA)	Parameters	Avg. Mass Kg/Day	Parameters	Avg.	There is no variation from prescribed standards in terms of quality of wastewater discharge. 1. DG sets having capacities 125 KVA + 125 KVA + 125 KVA are provided as a standby power source and used during power failure. Analysis reports of stack monitoring are enclosed as Annexure – 2. 2. The ambient air quality monitoring is being done regularly (twice a week) through NABL and MoEF&CC recognized laboratory namely M/s. Pollucon Laboratories Pvt. Ltd., Surat. 3. Analysis reports of ambient air quality monitoring are enclosed as Annexure – 2.
	Particulate Matter (PM)	0.00057	Particulate Matter (PM) (mg/Nm ³)	19.36	
	Sulphur Dioxide (SO ₂)	0.00048	Sulphur Dioxide (SO ₂) (ppm)	6.25	
	Nitrogen Oxide (NO _x)	0.00164	Nitrogen Oxide (NO _x) (ppm)	29.91	

*** Unit does not go under any manufacturing process, as it is service industry (Port) engaged in Handling & Storage of general dry cargo. The source of waste water generation is from domestic activity only.**

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

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PART – D
Hazardous Wastes

(As specified under Hazardous & Other Wastes Management Rules 2016)

Hazardous Wastes	Total Quantity (MT)	
	During the previous financial year (2022-23)	During the current financial year (2023-24)
(a) From Process	a) Used oil(cat.5.1)- 1.499 MT b) Discarded Containers (cat.33.3) – 1.067 MT c) Waste Residue Containing Oil (cat.5.2) – 0.48 MT	a) Used oil (cat.5.1)- 4.043 MT b) Discarded Containers (cat.33.3) – 6.147 MT c) Waste Residue Containing Oil (cat.5.2) – NIL
(a) From Pollution Control facilities	Nil	Nil

* Unit does not go under any manufacturing process. It is involved in the service business and no production or manufacturing activity involved, hence there is no raw material being used.

PART – E

Solid Wastes

Solid Waste	Total Quantity Generated (MT/Annum)	
	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	-	-
(C-1) Quantity recycled or reutilized within the unit	Details is Attached as Annexure-3	
(C-2) Sold		
(C-3) Disposed		

Note: Above Quantity shown is waste generated / disposed from Adani Kandla Bulk Terminal Private Limited.

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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:

- The Unit is handling Dry Bulk Cargo mainly coal with integrated mechanized automation and there is no any manufacturing process involved. It is involved in the service business and no production or manufacturing activity involved.
- The spent / used oil and discarded containers collect and store at dedicated Hazardous Waste storage facility available with organization which is disposed by selling to registered authorized recyclers and reusing for the lubrication purpose in stitching machine and railway siding.
- Unit has developed MRF (Material Recovery Facility) for Waste Segregation as per 5R (Reduce, Reuse, Recycle, Recover & Reprocess) principles of Waste Management. Segregated Recyclable Materials sent to respective recycling units, whereas remaining Non-recyclable Waste is bailed and sent to Cement Plants for Co-processing as RDF (Refused Derived Fuel).
- Sludge generated from STP is being utilized as manure in Horticulture activity within AKBTPL premises.
- Zero Waste” initiative - No waste is being sent to landfill in @ Adani Ports & SEZ (also as a 100% subsidiary company of APSEZ, AKBTPL is also intended to contribute the same), all waste are being managed through 5R principal of waste Management. AKBTPL has eminent Material Recovery Facility (MRF), having appropriate facility to proper segregate & recover the materials as per set process. To manage all operation of MRF, AKBTPL developed local vendor though his past learnings and employed local men staff mainly to segregate waste.
- Food Waste being managed through Organic Waste Composting Facility and Converted manure used by the Horticulture Department.
- AKBTPL has awarded with Zero Waste to Landfill Certificate (CII/ZWL/2022/002) from Cofederation of Indian Industry TÜV Rheinland India Pvt. Ltd (attached as **Annexure – 4**).

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

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PART – G

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

Water Conservation:

- Unit has installed Sewage Treatment Plant and for treatment of Sewage Water being generated at Site.
- AKBTPL has planted mangroves in 250 Ha. Area near Sach Saida Bet, Kutch Sea coast. Unit has formed dedicated Horticulture Department & developing Green Belt within Port Premises. So far, we have developed 15.09 Ha. Green Belts within Port Premises and the same is being well maintained.
- AKBTPL has taken significant step towards energy reduction program Reduced the idle running of Material handling system through PLC interlocking System stop in auto mode if idle up to 30 Minutes and controlling the speed of high-speed conveyors (KC 2A/2C) with respect to load.
- Treated Water Utilization
- The Total Cost incurred on Environmental Protection measures is enclosed as **Annexure-5**

Following safeguard measures are taken for abatement of dust and noise emissions:

- ✓ Regular sprinkling on road and other open area
- ✓ Regular cleaning of roads
- ✓ D.G. Set having acoustic enclosures
- ✓ Adequate greenbelt and plantation area
- ✓ Transfer Towers and Conveyor belts
- ✓ Regular sprinkling on coal heaps

PART – H

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

- Unit is doing Regular Environmental Monitoring across Port premises & Surrounding area through reputed NABL certified Laboratory. All the required Environmental Parameters are well within specified limits & the details are being submitted regularly to GPCB, CPCB, MOEF & Concerned authorities.
- Unit has installed STP for treatment of the Sewage Water being generated at Site. The unit has also provided Dump Pond & Conveyance Channel for Collection of Runoffs generated from Coal Yard.
- Unit has installed Organic Waste Conveyer Machine for treatment of Daily Food Waste generated at Site. Composting Manure (4.98 MT) is being used by the Horticulture Department as an Organic Fertilizer.
- Unit has provided FFS & DSS at Coal Yard & Conveyor System and Carrying out Regular Water Sprinkling to Control the Dust Exposure.

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

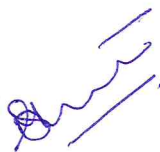
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- Mechanized Road Sweeping Machines have been deployed for regular cleaning of Road Cleaning activities & to control the fugitive dust emissions.
- AKBTPL has developed Greenbelt Area is approx. 15.09 hectare area till March'24.
- Developed the 02 Nos. of Weighbridge at Outside of the Main gate of Port to easier operational activities & also developed the road to the Pump House.
- Continually taking new initiatives for protection of Environment with respect to Air-Water-Soil.

PART - I

Any other particulars for improving the quality of environment:

- Monitoring of Environmental Parameters such as Air, Noise, and Wastewater quality being done regular basis through MoEF & NABL recognized laboratory (M/s. Pollucon Laboratories Ltd., Surat).
- AKBTPL have regularly doing Integrated House Keeping Drive & Plastic Waste Collection Drive along with the Senior Management Team on regular basis.
- AKBTPL has Separate Environment Cell for Environmental Management System and Environmental Monitoring.
- AKBTPL Budget for environmental management measures (including horticulture) for the FY 2023-24 was to the tune of INR 731.61 Lakh out of which INR 701.24 Lakh was spent. Environment protection expenditure during the year 2023-24 is enclosed as **Annexure - 5**.



Date: 16-09-2024

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

Name: **Mr. Mohit Shaktawat**

Designation: **COO - AKBTPL**

Address: **Adani Kandla Bulk Terminal Pvt. Ltd.**

Plot No: Dry Bulk Terminal, Off Tekra, Near Tuna, Outside Kandla Creek, Village: Tuna, Taluka: Anjar, Dist: Kutch (Gujarat)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

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**ANNEXURE – 1
Details of Water Consumption and Treated Water Discharge
(April-23 to March-24)**

Month	Water Consumption			Treated Water Discharge, KL
	Industrial, KL (Category-1)	Domestic, KL (Category-2)	Total, KL	
Apr-23	43703	415	44118	313
May-23	43753	462	44215	338
Jun-23	26054	255	26309	138
Jul-23	8763	447	9210	307
Aug-23	28568	522	29090	388
Sep-23	28194	442	28636	322
Oct-23	31235	403	31638	232
Nov-23	34217	586	34803	450
Dec-23	35812	546	36358	429
Jan-24	36780	428	37208	332
Feb-24	31564	372	31936	284
Mar-24	37325	377	37702	248
Total	385968	5255	391223	3781
Per Month	32164.00	437.92	32601.92	315.08
Per Day	1054.56	14.36	1068.92	10.33

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

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ANNEXURE – 2

Analysis Reports of Environmental Monitoring Parameter of F.Y. 2023-24, AKBTPL - Tuna

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

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“ENVIRONMENTAL MONITORING REPORT”

For

**ADANI KANDLA BULK TERMINAL PRIVATE LIMITED.
KANDLA, KUTCH.**

APRIL 2023 TO SEPTEMBER 2023


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

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METHODS AND EQUIPMENTS USED FOR SAMPLING AND ANALYSIS

SR. NO.	Monitoring Details	Equipments Used	Sampling and Analysis Method
1	Ambient Air Quality Monitoring	RDS, FDS, Gaseous Attachment with Impinger	CPCB Guideline/IS:5182
2	Noise Monitoring	Noise Meter	IS 9876/IS 9989
3	Sea Water Monitoring	Depth Sampler	IS:3025/APHA/USEPA/ASTM
4	Sea Sediment Monitoring	Grab Sampler	CPCB Guideline/IS/APHA/USEPA/ASTM
5	Drinking Water Analysis	Sealed & Sterile Bottle	IS:10500:2012
6	Sewage water Analysis	Sealed & Sterile Bottle	APHA/IS:3025
7	Stack Monitoring	Stack Monitoring Sampler/Kit	IS:11255/NDIR Gas Analyzer
8	Dump Pond Discharge	Sealed & Sterile Bottle	APHA/IS:3025
9	Wind Rose Diagram	Online Weather Station	Wind Rose Plotting Software


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

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NATIONAL AMBIENT AIR QUALITY STANDARDS **DATED 16TH NOV.2009, CPCB NEW DELHI.**

SR. NO.	TEST PARAMETER	UNIT	Concentration in ambient air	Method Of Measurement
1	Particulate Matter (PM ₁₀)	µg/m ³	100	IS:5182(Part 23)
2	Particulate Matter (PM _{2.5})	µg/m ³	60	CPCB guidelines for AAQM (Vol. I, NAAQMS/36/2012-13)
3	Sulphur Dioxide (SO ₂)	µg/m ³	80	IS:5182(Part 2)
4	Oxides of Nitrogen (NO ₂)	µg/m ³	80	IS:5182(Part6)

NS#: Not Specified, ** National Ambient Air Quality Standards Dated: 18/11/2009 as per Central Pollution Control Board, New Delhi.


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

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TABLE NO. 1 RESULTS OF AAQM FOR LC GATE NO.2 [APRIL 2023 TO SEPTEMBER 2023]

Sr No.	Date of Sampling	Particulate Matter (PM ₁₀) (µg/m ³)	Particulate Matter (PM _{2.5}) (µg/m ³)	Sulphur Dioxide (SO ₂) (µg/m ³)	Oxides of Nitrogen (NO _x) (µg/m ³)
1	03/04/2023	72.32	29.42	9.99	23.14
2	06/04/2023	68.37	25.67	13.28	26.36
3	10/04/2023	55.32	21.68	8.50	18.62
4	13/04/2023	77.44	31.54	11.20	20.26
5	17/04/2023	58.38	24.55	14.79	21.32
6	20/04/2023	53.42	19.27	17.29	30.15
7	24/04/2023	76.31	28.63	7.99	14.42
8	27/04/2023	60.43	22.26	15.22	22.02
9	01/05/2023	65.32	28.34	10.52	27.83
10	04/05/2023	58.32	26.26	17.69	22.47
11	08/05/2023	51.22	23.43	9.65	26.22
12	11/05/2023	76.38	41.15	12.84	21.61
13	15/05/2023	54.55	22.47	8.47	19.27
14	18/05/2023	66.23	25.34	15.14	28.20
15	22/05/2023	60.21	37.62	11.63	23.41
16	25/05/2023	55.53	27.63	7.61	16.34
17	29/05/2023	62.75	21.35	14.11	18.64
18	01/06/2023	64.72	31.62	6.28	22.41
19	05/06/2023	55.36	29.42	10.32	16.51
20	08/06/2023	61.35	26.31	13.47	29.93
21	19/06/2023	60.86	35.53	12.46	19.62
22	22/06/2023	51.48	19.65	15.17	24.62
23	26/06/2023	46.21	21.68	17.55	21.68
24	29/06/2023	65.62	27.53	11.67	25.62
25	03/07/2023	51.71	29.27	11.28	25.35
26	06/07/2023	78.36	38.39	13.52	31.83
27	10/07/2023	53.64	25.62	10.36	27.27
28	13/07/2023	67.55	32.17	7.55	30.63
29	17/07/2023	50.31	28.19	12.44	24.28
30	20/07/2023	73.58	39.47	14.69	21.48
31	24/07/2023	52.62	24.25	17.26	26.43
32	27/07/2023	70.33	34.24	8.35	19.54
33	31/07/2023	57.62	30.35	6.65	15.28
34	03/08/2023	65.48	30.47	15.67	23.42
35	07/08/2023	56.32	18.90	12.65	26.54
36	10/08/2023	50.61	24.42	20.24	16.31
37	14/08/2023	68.21	31.26	10.95	22.43
38	17/08/2023	72.62	22.05	8.44	17.76
39	21/08/2023	48.54	27.40	6.89	13.40
40	24/08/2023	55.62	21.06	16.30	25.87
41	28/08/2023	71.23	33.50	11.91	18.65
42	31/08/2023	58.81	29.27	7.70	12.62
43	04/09/2023	60.23	31.51	10.34	30.23
44	07/09/2023	55.57	23.67	9.51	27.38
45	11/09/2023	70.67	29.64	6.80	15.39
46	14/09/2023	51.05	20.15	8.39	26.35
47	18/09/2023	56.46	24.25	14.28	21.58
48	21/09/2023	72.62	28.15	17.33	25.83
49	25/09/2023	66.46	25.87	13.70	22.30
50	28/09/2023	57.87	21.35	7.86	28.65


H. T. Shah
 Lab Manager




Dr. Arun Bajpai
 Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

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TABLE NO. 2 RESULTS OF AAQM FOR STARTING OF PILE APPROACH [APRIL 2023 TO SEPTEMBER 2023]

Sr No.	Date of Sampling	Particulate Matter (PM ₁₀) (µg/m ³)	Particulate Matter (PM _{2.5}) (µg/m ³)	Sulphur Dioxide (SO ₂)(µg/m ³)	Oxides of Nitrogen (NO _x) (µg/m ³)
1	03/04/2023	82.61	40.19	14.62	24.98
2	06/04/2023	78.62	36.52	17.62	28.35
3	10/04/2023	65.68	29.44	13.70	23.44
4	13/04/2023	88.42	46.56	21.55	22.13
5	17/04/2023	62.65	30.44	16.47	25.11
6	20/04/2023	73.16	38.69	20.38	36.33
7	24/04/2023	81.56	35.90	10.66	27.37
8	27/04/2023	68.63	28.11	18.92	35.20
9	01/05/2023	85.37	46.23	17.26	23.84
10	04/05/2023	72.42	37.23	22.46	39.29
11	08/05/2023	62.48	31.11	14.41	36.29
12	11/05/2023	83.44	48.64	19.22	24.62
13	15/05/2023	69.32	32.44	12.32	20.23
14	18/05/2023	74.22	41.23	7.44	25.48
15	22/05/2023	86.25	45.35	13.21	30.41
16	25/05/2023	71.56	34.65	11.23	19.43
17	29/05/2023	64.28	39.23	9.30	21.87
18	01/06/2023	80.34	44.34	10.90	34.63
19	05/06/2023	67.97	35.43	16.35	29.47
20	08/06/2023	86.37	30.40	20.63	26.49
21	19/06/2023	72.62	37.61	19.62	24.26
22	22/06/2023	69.45	32.42	17.81	28.26
23	26/06/2023	61.22	26.27	22.39	33.80
24	29/06/2023	78.28	38.15	14.63	31.25
25	03/07/2023	72.65	40.28	14.20	33.41
26	06/07/2023	82.23	44.63	11.15	36.33
27	10/07/2023	57.34	28.57	16.45	22.21
28	13/07/2023	63.45	35.85	20.47	34.25
29	17/07/2023	75.63	43.71	9.48	27.69
30	20/07/2023	86.33	46.72	17.91	38.28
31	24/07/2023	64.58	31.21	22.42	35.43
32	27/07/2023	81.24	41.66	12.77	29.35
33	31/07/2023	68.67	34.68	15.65	32.46
34	03/08/2023	78.62	33.42	17.31	29.22
35	07/08/2023	65.31	36.22	19.37	34.67
36	10/08/2023	72.67	38.57	22.44	31.95
37	14/08/2023	80.35	41.62	16.37	12.40
38	17/08/2023	86.36	37.56	18.31	32.35
39	21/08/2023	64.43	31.41	15.44	26.87
40	24/08/2023	70.24	35.35	20.54	33.57
41	28/08/2023	83.85	39.45	14.34	25.35
42	31/08/2023	73.67	32.54	10.32	22.35
43	04/09/2023	80.34	41.83	16.30	25.38
44	07/09/2023	66.57	32.63	14.48	32.78
45	11/09/2023	81.28	43.63	18.38	24.82
46	14/09/2023	69.96	33.25	15.34	35.45
47	18/09/2023	62.23	30.33	21.22	26.50
48	21/09/2023	83.44	45.85	23.41	22.53
49	25/09/2023	71.26	34.26	17.64	37.56
50	28/09/2023	82.85	42.37	19.29	33.41


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

(PCB ID: 46110)




Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986

TABLE NO. 3 RESULTS OF AAQM FOR SOUTH WEST CORNER AT PUMP HOUSE [APRIL 2023 TO SEPTEMBER 2023]

Sr No.	Date of Sampling	Particulate Matter (PM ₁₀) (µg/m ³)	Particulate Matter (PM _{2.5}) (µg/m ³)	Sulphur Dioxide (SO ₂)(µg/m ³)	Oxides of Nitrogen (NO ₂) (µg/m ³)
1	03/04/2023	77.54	33.67	7.65	16.83
2	06/04/2023	54.34	22.46	14.34	21.62
3	10/04/2023	60.34	27.69	12.33	12.66
4	13/04/2023	72.65	35.25	15.36	24.68
5	17/04/2023	52.41	28.69	13.42	19.62
6	20/04/2023	57.25	25.53	9.67	15.67
7	24/04/2023	70.42	32.42	6.79	23.21
8	27/04/2023	55.64	20.34	16.79	26.85
9	01/05/2023	76.23	35.25	15.36	20.36
10	04/05/2023	64.31	30.22	19.33	33.84
11	08/05/2023	56.61	20.47	11.61	28.45
12	11/05/2023	70.01	38.40	9.49	14.56
13	15/05/2023	63.54	36.24	7.87	15.96
14	18/05/2023	58.63	24.25	10.40	30.18
15	22/05/2023	65.85	34.25	17.55	27.65
16	25/05/2023	61.23	23.50	14.86	25.24
17	29/05/2023	55.27	28.23	6.88	13.53
18	01/06/2023	69.32	34.75	8.42	29.25
19	05/06/2023	45.68	23.57	13.60	23.48
20	08/06/2023	71.35	40.97	19.30	16.41
21	19/06/2023	66.35	31.62	15.17	18.44
22	22/06/2023	58.68	25.32	12.34	21.83
23	26/06/2023	53.45	18.65	20.41	28.42
24	29/06/2023	70.22	30.71	9.54	17.62
25	03/07/2023	67.62	36.59	9.57	28.41
26	06/07/2023	58.53	31.29	17.37	32.15
27	10/07/2023	48.65	22.61	8.65	20.29
28	13/07/2023	54.34	27.66	15.36	24.64
29	17/07/2023	61.24	33.46	10.23	21.56
30	20/07/2023	78.66	43.22	16.96	26.24
31	24/07/2023	59.34	28.50	13.60	31.28
32	27/07/2023	76.64	39.84	6.33	18.64
33	31/07/2023	50.27	25.41	11.66	25.45
34	03/08/2023	51.86	23.99	10.24	19.58
35	07/08/2023	44.55	15.60	6.16	13.32
36	10/08/2023	61.28	29.33	18.64	26.34
37	14/08/2023	73.27	38.63	11.24	15.25
38	17/08/2023	79.62	34.63	13.84	24.33
39	21/08/2023	58.41	22.65	9.66	20.30
40	24/08/2023	63.42	30.25	19.53	17.23
41	28/08/2023	55.25	21.65	12.84	21.21
42	31/08/2023	65.68	24.95	8.64	27.24
43	04/09/2023	71.15	35.30	13.81	20.23
44	07/09/2023	60.16	28.66	7.62	22.63
45	11/09/2023	76.25	36.76	10.78	17.42
46	14/09/2023	57.52	25.53	12.87	28.13
47	18/09/2023	46.33	16.86	19.78	18.12
48	21/09/2023	77.62	38.42	14.64	15.54
49	25/09/2023	56.75	29.12	11.37	25.67
50	28/09/2023	78.22	37.55	17.11	23.49


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

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TABLE NO. 4 RESULTS OF AAQM FOR NORTH EAST CORNER AT RAILWAY BUILDING [APRIL 2023 TO SEPTEMBER 2023]

Sr No.	Date of Sampling	Particulate Matter (PM ₁₀) (µg/m ³)	Particulate Matter (PM _{2.5}) (µg/m ³)	Sulphur Dioxide (SO ₂)(µg/m ³)	Oxides of Nitrogen (NO ₂) (µg/m ³)
1	03/04/2023	87.56	43.66	18.64	26.98
2	06/04/2023	73.51	34.57	21.24	30.86
3	10/04/2023	69.34	32.83	16.31	27.52
4	13/04/2023	82.62	40.36	22.47	39.14
5	17/04/2023	68.43	35.35	19.34	32.47
6	20/04/2023	78.93	42.30	23.44	42.46
7	24/04/2023	86.33	46.35	12.65	31.82
8	27/04/2023	74.54	33.49	20.61	37.38
9	01/05/2023	88.62	48.63	21.82	36.82
10	04/05/2023	82.45	42.22	25.65	42.63
11	08/05/2023	68.42	34.44	18.67	34.52
12	11/05/2023	89.62	45.86	20.20	30.24
13	15/05/2023	76.51	39.86	14.63	28.64
14	18/05/2023	81.21	46.35	16.38	23.57
15	22/05/2023	70.62	43.25	19.66	35.20
16	25/05/2023	75.34	37.67	17.86	29.46
17	29/05/2023	80.27	44.16	15.65	24.51
18	01/06/2023	84.62	40.35	16.87	39.55
19	05/06/2023	71.68	39.48	11.25	33.43
20	08/06/2023	81.24	42.70	23.44	35.66
21	19/06/2023	80.62	43.48	22.34	27.13
22	22/06/2023	74.14	41.25	20.77	34.57
23	26/06/2023	69.14	31.39	24.31	38.53
24	29/06/2023	85.33	46.25	14.12	32.46
25	03/07/2023	77.68	44.93	15.78	37.24
26	06/07/2023	88.63	46.74	20.21	40.26
27	10/07/2023	65.32	31.23	17.69	30.44
28	13/07/2023	72.35	38.57	25.65	38.57
29	17/07/2023	81.65	48.64	16.21	32.57
30	20/07/2023	89.65	50.37	21.70	42.43
31	24/07/2023	69.52	36.43	24.64	39.42
32	27/07/2023	86.51	47.57	14.46	31.95
33	31/07/2023	79.63	43.56	18.18	34.58
34	03/08/2023	83.48	45.67	19.97	36.34
35	07/08/2023	74.11	30.86	21.72	31.72
36	10/08/2023	80.41	41.34	25.64	40.25
37	14/08/2023	86.91	46.25	20.41	26.26
38	17/08/2023	79.68	49.34	22.37	38.84
39	21/08/2023	69.37	35.77	18.53	30.44
40	24/08/2023	75.61	42.66	23.49	37.32
41	28/08/2023	89.48	48.27	16.52	32.64
42	31/08/2023	78.57	39.23	13.50	29.61
43	04/09/2023	88.83	43.56	16.83	34.57
44	07/09/2023	70.72	37.13	18.63	37.65
45	11/09/2023	84.34	47.69	21.97	27.57
46	14/09/2023	78.68	42.12	19.52	39.42
47	18/09/2023	71.58	34.36	23.30	31.57
48	21/09/2023	86.34	49.34	25.34	28.73
49	25/09/2023	82.63	38.66	20.34	33.62
50	28/09/2023	87.72	46.33	22.47	36.42


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

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AMBIENT AIR QUALITY ANALYSIS REPORT OBSERVATIONS

Ambient Air Quality Monitoring Sample Analysis									
Sr.No.	Month	Particulate Matter (PM ₁₀) (µg/m ³)		Particulate Matter (PM _{2.5}) (µg/m ³)		Sulphur Dioxide (SO ₂)(µg/m ³)		Oxides of Nitrogen (NO ₂) (µg/m ³)	
		Max	Min	Max	Min	Max	Min	Max	Min
L.C. Gate No.2									
1	April-23	77.44	53.42	31.54	19.27	17.29	7.99	30.15	14.42
2	May-23	76.38	51.22	41.15	21.35	17.69	7.61	28.20	16.34
3	June-23	65.62	46.21	35.53	19.65	17.55	6.28	29.93	16.51
4	July-23	78.36	50.31	39.47	24.25	17.26	6.65	31.83	15.28
5	August-23	72.62	48.54	33.50	18.90	20.24	6.89	26.54	12.62
6	September-23	72.62	51.05	31.51	20.15	17.33	6.80	30.23	15.39
Starting Of Pile Approach (Near SS2 Building)									
1	April-23	88.42	62.65	46.56	28.11	21.55	10.66	36.33	22.13
2	May-23	86.25	62.48	48.64	31.11	22.46	7.44	39.29	19.43
3	June-23	86.37	61.22	44.34	26.27	22.39	10.90	34.63	24.26
4	July-23	86.33	57.34	46.72	28.57	22.42	9.48	38.28	22.21
5	August-23	86.36	64.43	41.62	31.41	22.44	10.32	34.67	12.40
6	September-23	83.44	62.23	45.85	30.33	23.41	14.48	37.56	22.53
South West Corner at Pump House									
1	April-23	77.54	52.41	35.25	20.34	16.79	6.79	26.85	12.66
2	May-23	76.23	55.27	38.40	20.47	19.33	6.88	33.84	13.53
3	June-23	71.35	45.68	40.97	18.65	20.41	8.42	29.25	16.41
4	July-23	78.66	48.65	43.22	22.61	17.37	6.33	32.15	18.64
5	August-23	79.62	44.55	38.63	15.60	19.53	6.16	27.24	13.32
6	September-23	78.22	46.33	38.42	16.86	19.78	7.62	28.13	15.54
North East Corner at Railway Building									
1	April-23	87.56	68.43	46.35	32.83	23.44	12.65	42.46	26.98
2	May-23	89.62	68.42	48.63	34.44	25.65	14.63	42.63	23.57
3	June-23	85.33	69.14	46.25	31.39	24.31	11.25	39.55	27.13
4	July-23	89.65	65.32	50.37	31.23	25.65	14.46	42.43	30.44
5	August-23	89.48	69.37	49.34	30.86	25.64	13.50	40.25	26.26
6	September-23	88.83	70.72	49.34	34.36	25.34	16.83	39.42	27.57


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

(PCB ID: 46110)



Environmental Auditors, Consultants & Analysts.
Cleaner Production / Waste Minimization Facilitator

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RESULTS OF NOISE LEVEL MONITORING

Sampling Date	: As Per Table
Test Method	: IS 9876/IS 9989
Sampling Location	: As Per Table
Sampling By	: Pollucon Laboratories Pvt. Ltd.
Protocol (purpose)	: Environmental Monitoring

TABLE NO. 5 RESULTS OF DAY TIME NOISE LEVEL MONITORING [APRIL 2023 TO SEPTEMBER 2023]

Noise Level Day Time dB(A)Leq*									
Sr. No.	Name of Location	LC Gate No.2		Starting Of Pile Approach		South West Corner at Pump House		North East Corner at Railway Building	
		Max	Min	Max	Min	Max	Min	Max	Min
1.	April-23	68.8	55.7	69.6	55.2	69.9	57.2	69.5	58.7
2.	May-23	69.2	53.7	67.8	54.8	69.8	58.3	69.2	59.5
3.	June-23	69.1	54.7	68.2	54.6	69.8	57.9	69.4	60.1
4.	July-23	69.7	53.8	68.4	55.6	69.2	58.3	69.9	60.6
5.	August-23	67.2	54.4	67.7	55.2	69.7	59.3	69.2	59.8
6.	September-23	66.2	56.9	67.2	57.9	69.2	58.3	69.7	59.1

TABLE NO. 6 RESULTS OF NIGHT TIME NOISE LEVEL MONITORING [APRIL 2023 TO SEPTEMBER 2023]

Noise Level Night Time dB(A)Leq*									
Sr. No.	Name of Location	LC Gate No.2		Starting Of Pile Approach		South West Corner at Pump House		North East Corner at Railway Building	
		Max	Min	Max	Min	Max	Min	Max	Min
1.	April-23	64.7	50.2	60.9	51.9	63.5	54.8	63.7	54.2
2.	May-23	63.6	50.1	59.4	50.2	62.3	55.4	62.1	53.6
3.	June-23	63.2	48.5	59.1	51.6	62.2	54.3	61.6	53.2
4.	July-23	64.4	50.9	59.6	53.1	62.8	53.4	61.2	55.1
5.	August-23	62.5	51.9	61.2	54.2	61.9	54.3	61.5	53.1
6.	September-23	63.6	51.3	61.4	53.3	62.5	55.2	59.8	54.3

AMBIENT AIR QUALITY STANDARDS FOR NOISE SPECIFIED BY CPCB

Area Code	Category of Area/Zone	Limits in dB(A) Leq [#]	
		Day time	Night time
A	Industrial area	75	70

Notes:

- Day time shall mean from 6.00 a.m. to 10.00 p.m.
- Night time shall mean from 10.00 p.m. to 06.00 a.m.

[#]dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

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TABLE NO.12 RESULTS OF STACK MONITORING

PERMISSIBLE LIMIT FOR STACK MONITORING

SR. NO.	TEST PARAMETER	UNIT	GPCB LIMIT**	TEST/SAMPLING METHOD
1	Particulate Matter	mg/Nm ³	150	IS:11255 (Part-1)
2	Sulfur Dioxide as SO ₂	ppm	100	IS:11255 (Part-2)
3	Oxides of Nitrogen as NO _x	ppm	50	IS: 11255 (Part-7)


**Details provided by customer.

RESULTS OF STACK MONITORING

Date of Monitoring			June-23		
Sampling Location			SS-1 DG Set -1 (125 KVA)	SS-2 DG Set -2 (125 KVA)	SS-3 DG Set -3 (125 KVA)
SR. NO.	TEST PARAMETER	UNIT	27/06/2023		
1	Particulate Matter	mg/Nm ³	18.33	15.85	22.48
2	Sulfur Dioxide as SO ₂	ppm	7.80	5.27	6.13
3	Oxides of Nitrogen as NO _x	ppm	32.43	26.86	30.67
4	Noise Level Monitoring				
4.1	Near DG Set	dB(A)	72.2	71.6	71.9


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

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“ENVIRONMENTAL MONITORING REPORT”

For

**ADANI KANDLA BULK TERMINAL PRIVATE LIMITED.
KANDLA, KUTCH.**

OCTOBER 2023 TO MARCH 2024


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

(PCB ID: 46110)



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METHODS AND EQUIPMENTS USED FOR SAMPLING AND ANALYSIS

SR. NO.	Monitoring Details	Equipments Used	Sampling and Analysis Method
1	Ambient Air Quality Monitoring	RDS,FDS, Gaseous Attachment with Impinger	CPCB Guideline/IS:5182
2	Noise Monitoring	Noise Meter	IS 9876/IS 9989
3	Sea Water Monitoring	Depth Sampler	IS:3025/APHA/USEPA/ASTM
4	Sea Sediment Monitoring	Grab Sampler	CPCB Guideline/ IS/APHA/USEPA/ASTM
5	Drinking Water Analysis	Sealed & Sterile Bottle	IS:10500:2012
6	Sewage water Analysis	Sealed & Sterile Bottle	APHA/IS:3025
7	Stack Monitoring	Stack Monitoring Sampler/Kit	IS:11255/NDIR Gas Analyzer
8	Dump Pond Discharge	Sealed & Sterile Bottle	APHA/IS:3025
9	Wind Rose Diagram	Online Weather Station	Wind Rose Plotting Software


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

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NATIONAL AMBIENT AIR QUALITY STANDARDS DATED 16TH NOV.2009, CPCB NEW DELHI.

SR. NO.	TEST PARAMETER	UNIT	Concentration in ambient air	Method Of Measurement
1	Particulate Matter (PM ₁₀)	µg/m ³	100	IS:5182(Part 23)
2	Particulate Matter (PM _{2.5})	µg/m ³	60	CPCB guidelines for AAQM (Vol. I, NAAQMS/36/2012-13)
3	Sulphur Dioxide (SO ₂)	µg/m ³	80	IS:5182(Part 2)
4	Oxides of Nitrogen (NO ₂)	µg/m ³	80	IS:5182(Part6)

NS#: Not Specified, ** National Ambient Air Quality Standards Dated: 18/11/2009 as per Central Pollution Control Board, New Delhi.


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

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TABLE NO. 1 RESULTS OF AAQM FOR LC GATE NO.2 / NEAR SUB STATION -1 [OCTOBER 2023 TO MARCH 2024]

Sr No.	Date of Sampling	Particulate Matter (PM ₁₀) (µg/m ³)	Particulate Matter (PM _{2.5}) (µg/m ³)	Sulphur Dioxide (SO ₂) (µg/m ³)	Oxides of Nitrogen (NO ₂) (µg/m ³)
1	02/10/2023	64.34	37.23	12.43	14.22
2	05/10/2023	43.54	24.33	10.38	19.58
3	09/10/2023	65.44	26.24	17.50	25.64
4	12/10/2023	59.82	30.35	13.61	28.15
5	16/10/2023	74.96	40.34	15.65	23.04
6	19/10/2023	50.12	23.34	7.29	18.91
7	23/10/2023	67.68	35.61	14.24	24.32
8	26/10/2023	58.24	32.46	16.44	30.48
9	30/10/2023	70.37	28.44	8.32	16.37
10	02/11/2023	51.34	25.66	8.61	19.27
11	06/11/2023	80.42	35.44	15.36	23.47
12	09/11/2023	75.62	31.55	11.62	18.60
13	13/11/2023	70.34	36.15	16.56	29.47
14	16/11/2023	76.34	39.42	6.41	13.58
15	20/11/2023	65.94	30.43	14.52	21.92
16	23/11/2023	56.30	24.29	10.42	17.71
17	27/11/2023	50.31	22.43	12.84	15.33
18	30/11/2023	73.67	38.64	9.62	20.78
19	04/12/2023	55.38	23.34	14.76	25.67
20	07/12/2023	49.97	20.56	11.25	17.42
21	11/12/2023	70.81	36.48	8.81	15.67
22	14/12/2023	75.21	40.25	19.28	24.97
23	18/12/2023	54.91	30.84	7.48	16.53
24	21/12/2023	63.01	27.65	10.22	20.54
25	25/12/2023	45.11	17.62	15.43	26.48
26	28/12/2023	68.07	37.81	6.41	21.40
27	01/01/2024	75.94	33.87	13.39	17.95
28	04/01/2024	53.61	22.26	10.61	25.67
29	08/01/2024	65.42	32.46	7.29	14.81
30	11/01/2024	51.62	25.41	11.17	18.68
31	15/01/2024	66.11	28.60	8.44	30.46
32	18/01/2024	59.23	29.64	12.66	15.64
33	22/01/2024	50.41	23.67	9.53	19.69
34	25/01/2024	61.04	26.45	16.23	26.42
35	29/01/2024	55.63	27.57	6.56	13.66
36	01/02/2024	56.88	28.27	10.24	22.37
37	05/02/2024	69.14	38.59	6.59	16.24
38	08/02/2024	50.23	22.59	11.62	29.74
39	12/02/2024	70.41	43.53	9.49	19.93
40	15/02/2024	65.87	37.23	16.52	21.00
41	19/02/2024	72.27	41.54	8.61	17.45
42	22/02/2024	66.25	32.63	19.52	24.44
43	26/02/2024	59.82	27.65	13.40	27.57
44	29/02/2024	48.44	33.37	7.68	14.26
45	04/03/2024	60.31	39.76	16.46	24.42
46	07/03/2024	51.64	26.57	14.64	22.42
47	11/03/2024	62.61	36.48	12.61	26.41
48	14/03/2024	54.56	21.93	6.56	17.64
49	18/03/2024	68.70	25.54	17.53	20.62
50	21/03/2024	52.60	19.86	10.73	23.17
51	25/03/2024	61.32	27.15	7.34	21.11
52	28/03/2024	50.39	22.88	11.10	25.84


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

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Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986

TABLE NO. 2 RESULTS OF AAQM FOR STARTING OF PILE APPROACH [OCTOBER 2023 TO MARCH 2024]

Sr No.	Date of Sampling	Particulate Matter (PM ₁₀) (µg/m ³)	Particulate Matter (PM _{2.5}) (µg/m ³)	Sulphur Dioxide (SO ₂) (µg/m ³)	Oxides of Nitrogen (NO _x) (µg/m ³)
1	02/10/2023	50.73	31.54	10.33	17.51
2	05/10/2023	70.34	33.84	13.91	23.47
3	09/10/2023	82.61	42.16	19.43	29.91
4	12/10/2023	75.68	34.13	22.32	32.54
5	16/10/2023	89.48	47.64	17.68	34.14
6	19/10/2023	60.47	30.62	12.64	27.77
7	23/10/2023	86.26	44.42	8.76	30.54
8	26/10/2023	71.66	38.48	20.29	36.58
9	30/10/2023	78.67	46.22	18.29	31.53
10	02/11/2023	72.67	36.48	11.32	34.58
11	06/11/2023	87.65	51.28	22.37	18.40
12	09/11/2023	83.42	46.39	12.61	22.63
13	13/11/2023	76.84	39.82	20.95	33.86
14	16/11/2023	81.18	43.75	15.46	19.63
15	20/11/2023	59.63	33.42	13.67	25.66
16	23/11/2023	79.52	45.43	21.37	36.49
17	27/11/2023	62.32	31.50	16.10	28.32
18	30/11/2023	84.34	41.33	19.32	24.25
19	04/12/2023	70.27	32.63	18.47	35.48
20	07/12/2023	79.68	41.91	20.14	32.83
21	11/12/2023	85.34	49.61	16.13	30.16
22	14/12/2023	81.26	45.34	12.95	25.55
23	18/12/2023	71.18	40.37	14.89	22.60
24	21/12/2023	84.32	38.07	22.50	37.17
25	25/12/2023	76.21	46.47	17.28	34.27
26	28/12/2023	82.41	50.32	10.91	31.13
27	01/01/2024	85.25	47.73	19.63	31.34
28	04/01/2024	65.25	34.64	14.27	28.56
29	08/01/2024	77.53	38.36	17.38	24.28
30	11/01/2024	55.37	28.03	13.24	34.15
31	15/01/2024	75.15	31.50	16.33	18.13
32	18/01/2024	86.34	48.40	18.67	32.48
33	22/01/2024	74.26	37.52	12.37	23.59
34	25/01/2024	80.32	42.50	20.25	30.08
35	29/01/2024	71.56	32.79	10.21	26.98
36	01/02/2024	76.25	46.56	11.46	25.12
37	05/02/2024	64.37	29.82	19.95	20.26
38	08/02/2024	73.96	37.44	12.55	23.42
39	12/02/2024	82.61	47.06	16.47	26.94
40	15/02/2024	72.62	43.54	18.39	29.42
41	19/02/2024	90.36	52.41	13.55	24.34
42	22/02/2024	80.38	42.50	21.61	27.28
43	26/02/2024	70.52	31.16	15.62	33.56
44	29/02/2024	75.13	45.93	17.34	19.03
45	04/03/2024	71.95	45.34	18.46	27.18
46	07/03/2024	66.43	35.64	20.24	17.57
47	11/03/2024	80.25	46.26	10.65	30.44
48	14/03/2024	69.92	38.53	15.35	24.67
49	18/03/2024	86.32	44.59	22.42	26.35
50	21/03/2024	72.63	36.48	17.70	29.66
51	25/03/2024	67.51	39.49	16.52	25.94
52	28/03/2024	63.25	32.42	19.28	36.48


H. T. Shah
 Lab Manager




Dr. Arun Bajpai
 Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

(PCB ID: 46110)



Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986

TABLE NO. 3 RESULTS OF AAQM FOR SOUTH WEST CORNER AT PUMP HOUSE (OCTOBER 2023 TO MARCH 2024)

Sr No.	Date of Sampling	Particulate Matter (PM ₁₀) (µg/m ³)	Particulate Matter (PM _{2.5}) (µg/m ³)	Sulphur Dioxide (SO ₂)(µg/m ³)	Oxides of Nitrogen (NO ₂) (µg/m ³)
1	02/10/2023	55.63	31.92	8.45	22.33
2	05/10/2023	75.44	38.22	11.47	17.33
3	09/10/2023	70.65	34.29	13.44	15.66
4	12/10/2023	65.24	39.72	10.60	21.78
5	16/10/2023	57.97	32.46	7.57	14.46
6	19/10/2023	66.44	28.25	17.40	24.23
7	23/10/2023	76.36	40.89	12.82	19.62
8	26/10/2023	67.73	25.62	14.53	25.73
9	30/10/2023	60.34	22.70	15.29	18.63
10	02/11/2023	57.62	33.46	6.37	31.67
11	06/11/2023	63.11	26.62	12.48	20.36
12	09/11/2023	51.52	24.45	9.34	16.35
13	13/11/2023	60.37	31.62	14.34	23.87
14	16/11/2023	68.42	38.26	10.29	27.53
15	20/11/2023	48.37	19.23	8.47	14.67
16	23/11/2023	61.61	28.62	17.60	28.67
17	27/11/2023	69.63	30.41	13.48	26.50
18	30/11/2023	55.03	32.25	16.37	22.43
19	04/12/2023	49.53	21.36	12.28	21.35
20	07/12/2023	55.67	27.37	15.36	24.65
21	11/12/2023	64.53	32.38	11.66	18.21
22	14/12/2023	68.21	29.79	17.45	33.84
23	18/12/2023	59.64	23.41	8.55	19.62
24	21/12/2023	73.51	38.63	6.34	17.24
25	25/12/2023	65.41	30.29	13.42	20.26
26	28/12/2023	76.87	41.10	7.72	14.36
27	01/01/2024	54.26	22.65	10.45	19.23
28	04/01/2024	58.87	28.20	8.69	17.61
29	08/01/2024	62.02	35.17	12.52	21.36
30	11/01/2024	57.65	23.28	7.50	16.59
31	15/01/2024	70.33	34.92	13.77	22.47
32	18/01/2024	76.56	41.14	15.45	28.70
33	22/01/2024	52.56	32.25	6.73	18.52
34	25/01/2024	60.38	39.43	9.83	24.38
35	29/01/2024	65.87	36.38	11.61	15.76
36	01/02/2024	71.21	41.18	7.28	18.84
37	05/02/2024	53.67	23.95	9.36	13.17
38	08/02/2024	67.56	34.50	15.37	20.76
39	12/02/2024	49.44	28.45	6.41	22.87
40	15/02/2024	60.84	33.13	14.15	26.54
41	19/02/2024	65.32	27.87	12.71	21.71
42	22/02/2024	72.37	35.71	17.54	17.98
43	26/02/2024	50.62	25.66	10.32	19.16
44	29/02/2024	70.43	42.43	13.60	24.51
45	04/03/2024	66.86	40.33	13.58	15.82
46	07/03/2024	60.44	31.55	16.34	24.56
47	11/03/2024	56.71	27.64	8.62	18.63
48	14/03/2024	62.72	35.25	12.49	23.43
49	18/03/2024	80.66	41.37	10.34	19.41
50	21/03/2024	59.36	29.97	6.40	16.62
51	25/03/2024	48.66	17.52	11.80	29.46
52	28/03/2024	55.35	26.47	14.34	31.26


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

(PCB ID: 46110)



Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986

TABLE NO. 4 RESULTS OF AAQM FOR NORTH EAST CORNER AT RAILWAY BUILDING [OCTOBER 2023 TO MARCH 2024]

Sr No.	Date of Sampling	Particulate Matter (PM ₁₀) (µg/m ³)	Particulate Matter (PM _{2.5}) (µg/m ³)	Sulphur Dioxide (SO ₂)(µg/m ³)	Oxides of Nitrogen (NO ₂) (µg/m ³)
1	02/10/2023	74.38	40.22	13.22	29.57
2	05/10/2023	81.71	47.15	19.28	25.86
3	09/10/2023	91.42	55.61	23.51	32.60
4	12/10/2023	80.36	44.72	18.59	35.98
5	16/10/2023	94.31	57.92	21.56	28.60
6	19/10/2023	76.96	34.20	15.79	34.53
7	23/10/2023	92.66	46.53	11.92	21.24
8	26/10/2023	79.47	41.63	17.24	39.29
9	30/10/2023	84.41	49.96	22.67	36.21
10	02/11/2023	80.11	41.58	9.84	38.45
11	06/11/2023	93.62	54.33	21.63	30.45
12	09/11/2023	88.28	48.68	14.60	25.41
13	13/11/2023	81.33	47.48	23.43	37.36
14	16/11/2023	90.31	51.82	19.67	32.94
15	20/11/2023	70.45	36.47	16.49	16.90
16	23/11/2023	89.41	49.22	22.71	39.44
17	27/11/2023	76.63	39.40	18.68	31.23
18	30/11/2023	91.23	55.86	20.90	33.52
19	04/12/2023	78.46	30.36	20.42	37.48
20	07/12/2023	84.28	37.42	25.38	34.35
21	11/12/2023	90.32	52.35	13.54	24.29
22	14/12/2023	86.35	49.13	22.61	39.95
23	18/12/2023	77.15	45.13	14.52	27.63
24	21/12/2023	92.65	53.63	17.62	29.02
25	25/12/2023	68.93	36.22	21.25	41.80
26	28/12/2023	88.35	54.33	11.97	35.78
27	01/01/2024	92.55	50.49	23.47	26.34
28	04/01/2024	71.98	30.86	17.27	31.62
29	08/01/2024	83.43	42.37	20.91	36.22
30	11/01/2024	69.31	32.43	16.95	30.38
31	15/01/2024	80.97	39.48	18.27	33.84
32	18/01/2024	93.64	54.29	21.10	37.51
33	22/01/2024	82.66	48.64	15.23	25.31
34	25/01/2024	89.36	51.24	22.40	32.24
35	29/01/2024	78.51	40.22	19.29	23.13
36	01/02/2024	80.05	52.76	15.12	29.37
37	05/02/2024	74.37	39.15	24.60	22.55
38	08/02/2024	81.25	41.83	14.40	26.31
39	12/02/2024	88.47	53.47	18.39	31.79
40	15/02/2024	79.62	46.86	21.19	35.30
41	19/02/2024	95.35	55.45	16.86	30.64
42	22/02/2024	85.15	49.22	23.58	32.38
43	26/02/2024	75.67	40.43	20.33	36.27
44	29/02/2024	84.53	47.07	22.69	33.26
45	04/03/2024	81.42	51.67	25.43	35.41
46	07/03/2024	72.35	38.19	18.12	25.46
47	11/03/2024	85.14	55.19	15.68	20.47
48	14/03/2024	82.17	49.49	10.09	26.84
49	18/03/2024	92.66	47.52	19.51	28.45
50	21/03/2024	79.67	34.38	20.67	38.43
51	25/03/2024	73.42	42.83	22.71	34.52
52	28/03/2024	66.34	35.72	24.51	40.37


H. T. Shah
 Lab Manager




Dr. Arun Bajpai
 Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

(PCB ID: 46110)



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AMBIENT AIR QUALITY ANALYSIS REPORT OBSERVATIONS

Ambient Air Quality Monitoring Sample Analysis									
Sr.No.	Month	Particulate Matter (PM ₁₀) (µg/m ³)		Particulate Matter (PM _{2.5}) (µg/m ³)		Sulphur Dioxide (SO ₂) (µg/m ³)		Oxides of Nitrogen (NO _x) (µg/m ³)	
		Max	Min	Max	Min	Max	Min	Max	Min
L.C. Gate No.2 / NEAR SUB STATION -1									
1	October-23	74.96	43.54	40.34	23.34	17.50	7.29	30.48	14.22
2	November-23	80.42	50.31	39.42	22.43	16.56	6.41	29.47	13.58
3	December-23	75.21	45.11	40.25	17.62	19.28	6.41	26.48	15.67
4	January-24	75.94	50.41	33.87	22.26	16.23	6.56	30.46	13.66
5	February-24	72.27	48.44	43.53	22.59	19.52	6.59	29.74	14.26
6	March-24	68.70	50.39	39.76	19.86	17.53	6.56	26.41	17.64
Starting Of Pile Approach									
1	October-23	89.48	50.73	47.64	30.62	22.32	8.76	36.58	17.51
2	November-23	87.65	59.63	51.28	31.50	22.37	11.32	36.49	18.40
3	December-23	85.34	70.27	50.32	32.63	22.50	10.91	37.17	22.60
4	January-24	86.34	55.37	48.40	28.03	20.25	10.21	34.15	18.13
5	February-24	90.36	64.37	52.41	29.82	21.61	11.46	33.56	19.03
6	March-24	86.32	63.25	46.26	32.42	22.42	10.65	36.48	17.57
South West Corner at Pump House									
1	October-23	76.36	55.63	40.89	22.70	17.40	7.57	25.73	14.46
2	November-23	69.63	48.37	38.26	19.23	17.60	6.37	31.67	14.67
3	December-23	76.87	49.53	41.10	21.36	17.45	6.34	33.84	14.36
4	January-24	76.56	52.56	41.14	22.65	15.45	6.73	28.70	15.76
5	February-24	72.37	49.44	42.43	23.95	17.54	6.41	26.54	13.17
6	March-24	80.66	48.66	41.37	17.52	16.34	6.40	31.26	15.82
North East Corner at Railway Building									
1	October-23	94.31	74.38	57.92	34.20	23.51	11.92	39.29	21.24
2	November-23	93.62	70.45	55.86	36.47	23.43	9.84	39.44	16.90
3	December-23	92.65	68.93	54.33	30.36	25.38	11.97	41.80	24.29
4	January-24	93.64	69.31	54.29	30.86	23.47	15.23	37.51	23.13
5	February-24	95.35	74.37	55.45	39.15	24.60	14.40	36.27	22.55
6	March-24	92.66	66.34	55.19	34.38	25.43	10.09	40.37	20.47


H. T. Shah
 Lab Manager




Dr. Arun Bajpai
 Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

(PCB ID: 46110)



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RESULTS OF NOISE LEVEL MONITORING

Sampling Date	: As Per Table
Test Method	: IS 9876/IS 9989
Sampling Location	: As Per Table
Sampling By	: Pollucon Laboratories Pvt. Ltd.
Protocol (purpose)	: Environmental Monitoring

TABLE NO. 5 RESULTS OF DAY TIME NOISE LEVEL MONITORING [OCTOBER 2023 TO MARCH 2024]

Noise Level Day Time dB(A)Leq*									
Sr. No.	Name of Location	LC Gate No.2 / Near Sub Station-1		Starting Of Pile Approach		South West Corner at Pump House		North East Corner at Railway Building	
		Max	Min	Max	Min	Max	Min	Max	Min
1.	October-23	66.1	56.7	66.4	58.6	69.3	59.6	68.8	57.9
2.	November-23	68.4	55.2	68.3	57.4	69.5	58.2	69.4	58.6
3.	December-23	69.1	53.8	69.3	54.9	69.2	58.5	68.8	59.2
4.	January-24	69.8	56.1	68.7	55.6	69.9	56.3	69.6	58.9
5.	February-24	69.5	55.9	68.2	56.5	69.7	57.1	69.8	57.7
6.	March-24	68.9	57.7	68.3	55.8	67.2	56.7	69.6	58.2

TABLE NO. 6 RESULTS OF NIGHT TIME NOISE LEVEL MONITORING [OCTOBER 2023 TO MARCH 2024]

Noise Level Night Time dB(A)Leq*									
Sr. No.	Name of Location	LC Gate No.2 / Near Sub Station-1		Starting Of Pile Approach		South West Corner at Pump House		North East Corner at Railway Building	
		Max	Min	Max	Min	Max	Min	Max	Min
1.	October-23	62.1	50.8	61.8	53.5	64.3	56.6	61.3	55.9
2.	November-23	62.8	49.4	62.2	52.8	63.5	54.7	61.9	54.6
3.	December-23	60.5	49.9	60.3	52.1	64.2	54.5	60.2	52.2
4.	January-24	60.4	51.1	61.2	54.2	63.3	53.2	62.3	52.2
5.	February-24	61.3	51.2	58.7	53.8	64.9	53.5	63.5	53.7
6.	March-24	60.3	53.1	59.1	54.3	63.9	52.7	61.7	54.6

AMBIENT AIR QUALITY STANDARDS FOR NOISE SPECIFIED BY CPCB

Area Code	Category of Area/Zone	Limits in dB(A) Leq [#]	
		Day time	Night time
A	Industrial area	75	70

Notes:

- Day time shall mean from 6.00 a.m. to 10.00 p.m.
- Night time shall mean from 10.00 p.m. to 06.00 a.m.

[#]dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing


H. T. Shah
 Lab Manager




Dr. Arun Bajpai
 Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

(PCB ID: 46110)



Environmental Auditors, Consultants & Analysts.
Cleaner Production / Waste Minimization Facilitator

Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986

TABLE NO.12 RESULTS OF STACK MONITORING

PERMISSIBLE LIMIT FOR STACK MONITORING

SR. NO.	TEST PARAMETER	UNIT	GPCB LIMIT**	TEST/SAMPLING METHOD
1	Particulate Matter	mg/Nm ³	150	IS:11255 (Part-1)
2	Sulfur Dioxide as SO ₂	ppm	100	IS:11255 (Part-2)
3	Oxides of Nitrogen as NO _x	ppm	50	IS: 11255 (Part-7)

**Details provided by customer.

RESULTS OF STACK MONITORING

Date of Monitoring			December-23		
Sampling Location			SS-1 DG Set -1 (125 KVA)	SS-2 DG Set -2 (125 KVA)	SS-3 DG Set -3 (125 KVA)
SR. NO.	TEST PARAMETER	UNIT	15/12/2023		
1	Particulate Matter	mg/Nm ³	20.42	18.64	20.46
2	Sulfur Dioxide as SO ₂	ppm	5.71	6.74	5.85
3	Oxides of Nitrogen as NO _x	ppm	31.43	30.46	27.6
4	Noise Level Monitoring				
4.1	Near DG Set	dB(A)	71.4	72.3	71.2


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited**(PCB ID: 46110)****ANNEXURE - 3
Waste Disposal Details, AKBTPL, Tuna**

Sr. No.	Waste Description	Disposal Method	Unit	Quantity 2023-24
Non-Hazardous:				
1.	Dry Waste (Recyclable Waste-Metal, Wood, paper, plastic etc.)	Recycle (send to reg. recycler)/ Reuse (Used by Organiser)	MT	109.16
2.	RDF (Non-Recyclable)	Co-processing at Cement Plant	MT	13.44
3.	STP Sludge	Reprocess (Manure)	MT	0.10
4.	Organic Waste (included food waste)	Reprocess & Recovery Manure	MT	4.98
Hazardous:				
5.	Used Spent Oil:	Recycle (send to Recycler)	MT	4.043
6.	Oily Cotton Waste:	Co-processing/Incineration	MT	--
7.	Discarded Containers:	Recycle (send to Recycler)	MT	6.147
8.	Waste Residue Containing Oil	Recycle (send to Recycler)	MT	--
9.	E-Waste	Recycle (send to Registered recycler)	MT	5.45
10.	Battery Waste	Recycle (send to Registered recycler)	MT	3.76

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

(PCB ID: 46110)

**ANNEXURE - 4
Zero Waste to Landfill, AKBTPL, Tuna**



**CII-ITC Centre of Excellence
for Sustainable Development**



Confederation of Indian Industry

Certificate

Zero Waste to Landfill

Adani Kandla Bulk Terminal Pvt. Ltd, Tuna

This is to certify that Adani Kandla Bulk Terminal Pvt. Ltd, Tuna, Kutch (Gujarat) has the best waste management practices with the achievement of a waste diversion rate of above 95% in the year 2021-22.

This Certificate is valid from 01 August 2022 to 31 July 2025 subject to a satisfactory annual surveillance assessment.



Seema Arora
*Deputy Director General
Confederation of Indian Industry (CII)
Centre of Excellence for Sustainable Development (CESD)*

Certificate Date: 28 July 2022

Certificate No.: CII/ZWL/2022/002

This certificate has been awarded after the company fulfilled the requirements for zero waste to landfill practice and provided evidence for it. Responsibility for the data provided to CII rests solely with the company. The conditions of certification are detailed in the Annex.

Environment Statement for 2023-24 for M/s Adani Kandla Bulk Terminal Private Limited

(PCB ID: 46110)

**ANNEXURE - 5
Cost of Environmental Protection Measures of AKBTPL, Tuna
F.Y. 2023-24**

Sr. No.	Activity	Cost incurred (INR in Lacs)	Budgeted Cost (INR in Lacs)
		2023 - 24	2023 - 24
1.	Environmental Monitoring	13.77	15.30
2.	Environment Days Celebration, Awareness Program, Award Application	1.90	2.0
3.	Greenbelt Development	40.90	42.98
4.	Treatment and Disposal of Biomedical Waste	1.45	1.50
5.	Hazardous/Non-Hazardous Waste Management & Disposal	12.86	12.86
6.	O&M of sewage treatment plant and OWC plant	12.90	13.55
7.	Dust Suppression Activities	261.58	272.71
8.	Maintenance of conveyor belt.	355.88	370.71
	Total	701.24	731.61