

adani

Ports and
Logistics

01C

PCB ID: 46110

Ref No. AKBTP/ENVSTATEMENT/2020-21

Date: 20th April, 2021

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

Sub: Environmental Statement for the financial year ending 31st March, 2021 for M/s
Adani Kandla Bulk Terminal Pvt Ltd (AKBTPL)

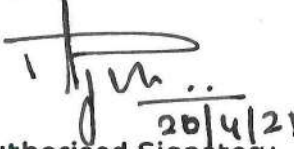
Ref: PCB ID: - 46110, Consent Order No. AWH - 105213

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, Ta. Anjar** for the financial year ending 31st March 2021.

Thank you,

For, Adani Kandla Bulk Terminal Pvt Ltd


20/4/21
Authorised Signatory
Ajit Pisharody (O&M Head - AKBTP)

Encl: As above.

Copy to:

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


6/5/21
Gujarat Pollution Control Board
Head Office
Sector No.-10-A,
Gandhinagar-382010.

Adani Kandla Bulk Terminal Pvt Ltd
Adani House,
Nr Mithakhali Circle, Navrangpura
Ahmedabad 380 009
Gujarat, India
CIN: U63090GJ2012PTC069305

Tel +91 79 2656 5801
Fax +91 79 2555 6490
info@adani.com
www.adani.com

Registered Office: Adani House, Nr Mithakhali Circle, Navrangpura, Ahmedabad 380 009, Gujarat, India

FORM V
(See Rule 14)

Environmental Statement for the Financial Year ending 31st March 2021

PART – A

- | | | | |
|-------|--|---|---|
| (i) | Name and address of the Owner/
Occupier of the Industry Operation
or Process | : | Hiren Shah
Head – AKBTPL
Adani Kandla Bulk Terminal Pvt Ltd.
Tuna Tekra, Taluka - Anjar
Dist. Kutch (Gujarat) |
| | | | |
| (ii) | Industry Category
Primary (STC Code)
Secondary (STC Code) | : | Red – Large
NA
NA |
| | | | |
| (iii) | Production Capacity | : | Dry Bulk Cargo Handling – 14 MMTPA |
| | | | |
| (iv) | Year of Establishment | : | 2011 – 12 (As per certification of
incorporation date of company) |
| | | | |
| (v) | Date of last Environment
Statement submitted | : | 26.06.2020 |

Environment Statement for 2020-21 for M/s Adani Kandla Bulk Terminal Pvt Ltd

PART – B

Water and Raw Material Consumption

(i) Water Consumption

Water Consumption Cu.Mtr./Day	
Process	Nil
Cooling (Used in sprinkling / gardening / dust suppression)	982.04 m ³ /day*
Domestic	8.45 m ³ /day*

Name of Products	Process Water Consumption per unit of Product Output	
	During the previous financial year (2019– 20)	During the current financial year (2020 – 21)
Handling and Storage of dry bulk cargo*	6.48 MMT	7.17 MMT

(ii) Raw Material Consumption

Name of Raw Material	Name of Products	Consumption of Raw Material per Unit of output	
		During the previous financial year (2019 – 20)	During the current financial year (2020 – 21)
NIL*	Not Applicable	Nil	Nil

Note: AKBTPL is involved logistic business, hence there no raw material being used.

Environment Statement for 2020-21 for M/s Adani Kandla Bulk Terminal Pvt Ltd

PART – C

Pollutants discharged to Environment/Unit of Output

(Parameters as specified in consent issued)

Pollutants	Pollution Load				
(a) Water	Sr no	Parameter	Quantity of pollutants discharged (Mass/day)	Concentrations of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
	1	TSS	0.1176 Kg/day	17.3 (Mg/L)	No Deviation from prescribed standards
	2	BOD (3 Days @ 27 °C)	0.0959 (Kg/day)	14.1 (Mg/L)	
(b) Air	Sr no	Parameter	Quantity of pollutants discharged (Mass/day)	Concentrations of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
Particulate Matter (mg/Nm3)	SS-1 DG Set- 1 (125 KVA)				
	1	PM (Mg/Nm3)	0.0026 (Kg/day)	18.62 (Mg/Nm3)	No Deviation from prescribed standards
	2	So2 (PPM)	0.0021 (Kg/day)	5.75 (PPM)	
	3	Nox (PPM)	0.0085 (Kg/day)	32.75 (PPM)	
Sulphur Dioxide (PPM)	SS-2 DG Set- 2 (125 KVA)				
	1	PM (Mg/Nm3)	0.00088 (Kg/day)	19.62 (Mg/Nm3)	No Deviation from prescribed standards
	2	So2 (PPM)	0.00073 (Kg/day)	6.17 (PPM)	
	3	Nox (PPM)	0.00242 (Kg/day)	28.58 (PPM)	
Nitrogen Oxide (PPM)	SS-3 DG Set- 3 (125 KVA)				
	1	PM (Mg/Nm3)	0.00110 (Kg/day)	17.015 (Mg/Nm3)	No Deviation from prescribed standards
	2	So2 (PPM)	0.00071 (Kg/day)	4.19 (PPM)	
	3	Nox (PPM)	0.00352 (Kg/day)	29.04 (PPM)	
	- DG sets are provided 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.				

Environment Statement for 2020-21 for M/s Adani Kandla Bulk Terminal Pvt Ltd

PART – D

Hazardous Wastes

(As specified under Hazardous Wastes Management and Handling Rules 2016)

Hazardous Wastes	Total Quantity (Kg)	
	During the previous financial year (2019-20)	During the current financial year (2020-21)
(a) From Process i. Oily Cotton Waste ii. Used Oil iii. Discarded Drum iv. Discarded oil filter	<u>Oily Cotton waste:-</u> Generation:-Approx. 1.36 MT Disposed:- 1.880 MT <u>Used Oil:-</u> Generation:- 5.93 MT Reused:-2.93 MT (Used in Railway siding and MBU machine as a lubricant) In Stock End of the year:- 3.00 MT (Used Oil).	<u>Oily Cotton waste:-</u> Generation:-Approx. 4.22 MT Disposed:- 3.77 MT <u>Used Oil:-</u> Generation:- 4.729 MT Disposed:- 3.647 MT Reused:-3.552 MT (Used in Railway siding and MBU machine as a lubricant) <u>Discarded Drum</u> Generation:-Approx. 2.75 MT Disposed:- 2.56 MT <u>Discarded oil filter</u> Generation:-Approx. 0.900MT Disposed:- 0.600 MT In Stock End of the year:- 0.530 MT (Used Oil). 0.450 MT (Oily Cotton waste) 0.190MT (Discarded Drum) 0.300 MT (Discarded oil filter)
(b) From Pollution Control facilities	Nil	Nil

*AKBTPL is involved in logistic business; hence there is no process waste Generated.

Environment Statement for 2020-21 for M/s Adani Kandla Bulk Terminal Pvt Ltd

PART - E

Solid Waste

Solid Waste	Total Quantity Generated (MT/Annum)	
	During the previous financial year (2019-20)	During the current financial year (2020-21)
(a) From Process (Ash)	Nil	Nil
(b) From Pollution Control facilities	Nil	Nil
(C-1) Quantity recycled or reutilized within the unit	5.86 MT (Food waste converted in to manure and utilized for horticulture purpose)	7.041 MT (Food waste converted in to manure and utilized for horticulture purpose)
(C-2) Sold	--	--
(C-3) Disposed	Approx. 44.85 MT (Garbage Waste)	Approx. 57.910 MT (Garbage Waste)

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:

- Used oil is being sent to authorized recycler and sometimes same is being reused for the lubrication purpose in stitching machine and railway siding.
- Oily cotton waste is being sent to common hazardous waste incineration facility (SEPPL) for the incineration process.
- 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).

Environment Statement for 2020-21 for M/s Adani Kandla Bulk Terminal Pvt Ltd

PART – G

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

- Unit has installed Sewage Treatment Plant and for treatment of the Sewage water being generated at site.
- AKBTPL has planted mangroves in 250 ha area near Satsaida Bet (Kandla), Kutch sea coast. Unit has formed dedicated Horticulture department & developing green belt within port premises. So, far we have developed 15.78 Ha green belts within port premises and 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 min's and controlling the speed of high speed conveyors (KC 2A/2C) with respect to load.
- The total cost incurred on environmental protection measures is enclosed as **Annexure-2** and the green belt developed so far enclosed as **Annexure-3**.

PART – H

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

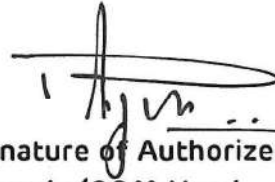
- Unit is doing Regular Environmental Monitoring of Port & surrounding area through reputed NABL certified Laboratory. All the required environmental parameters are well within specified limit & the details are being submitted regularly to GPCB, CPCB, MOEF & concerned authorities.
- Unit has installed STP for treatment of the Sewage water being generated at site. Unit has also provided dump pond & conveyance channel for collection of runoff generated from Coal Yard.
- Unit has installed OWC (organic waste converter) machine for treatment of daily food waste generated at site. Composting manure is being used by the horticulture department as an organic fertilizer.
- Unit has provided DSS at coal yard & conveyer system and carrying out regular water sprinkling to control the dust exposure.
- Unit has deployed road sweeping machine to control the fugitive dust emissions.
- Unit is developing green belt within port and outside continually with help of Horticulture dept.
- Continually taking new initiatives for protection of environment with respect to air-water-soil.

Environment Statement for 2020-21 for M/s Adani Kandla Bulk Terminal Pvt Ltd

PART - I

Any other particulars for improving the quality of environment:

- Environmental awareness programs have been conducted for workmen at site.
- Integrated housekeeping and waste management being maintained regularly.
- AKBTPL has separate Environment Cell for environmental management.



Signature of Authorized Person
Ajit Pisharody (O&M Head – AKBTPL)

Date : 20.04.2021

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

Name : Hiren Shah

Designation : Business Head – AKBTPL

Address : Adani Kandla Bulk Terminal Pvt Ltd,
Tuna Tekra, Taluka Anjar, District Kutch (Gujarat)

Annexure – 1

(Ambient Air Monitoring Reports)



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"ENVIRONMENTAL MONITORING REPORT"

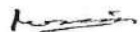
For

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

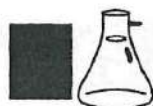
APRIL 2020 TO SEPTEMBER 2020


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

PLOT NO.5/6 "POLLUCON HOUSE", OPP. BALAJI INDUSTRIAL SOCIETY, OLD SHANTINATH SILK MILL LANE, NEAR GAYTRI FARSAN MART,
NAVJIVAN CIRCLE, UDHANA MAGDALLA ROAD, SURAT-395007. PHONE: [0261] 2635750, 2635751
EMAIL: pollucon@gmail.com. WEBSITE: www.pollucon.com



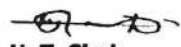
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METHODS AND EQUIPMENTS USED FOR SAMPLING AND ANALYSIS

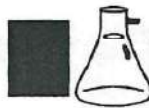
SR. NO.	Monitoring Details	Equipments Used	Sampling and Analysis Method
1	Ambient Air Quality Monitoring	RDS, FDS, Gaseous Attachment with Impinger	CPCB Guideline/IS:5182
2	Noise Monitoring	Noise Meter	IS 9876/IS 9989
3	Sea Water Monitoring	Depth Sampler	IS:3025/APHA/USEPA/ASTM
4	Sea Sediment Monitoring	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) 2017
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) 2017 Improved West and Gaeke
4	Oxides of Nitrogen (NO ₂)	µg/m ³	80	IS 5182 (Part6) 2017 Modified Jacob &Hochheiser (Na-Arsenite)

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


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TABLE NO. 1 RESULTS OF AAQM FOR LC GATE NO.2 [APRIL 2020 - SEPTEMBER 2020]

Sr No.	Date of Sampling	Particulate Matter (PM10) (µg/m3)	Particulate Matter (PM2.5) (µg/m3)	Sulphur Dioxide (SO2)(µg/m3)	Oxides of Nitrogen (NO2) (µg/m3)
1	28/05/2020	64.38	37.64	6.30	15.76
2	01/06/2020	63.75	28.70	11.41	23.68
3	04/06/2020	56.88	24.38	14.31	20.91
4	08/06/2020	49.63	22.68	8.70	18.66
5	11/06/2020	74.73	31.72	12.75	22.83
6	15/06/2020	53.59	30.77	9.41	19.50
7	18/06/2020	65.35	26.71	10.58	21.56
8	22/06/2020	50.39	23.51	13.87	24.42
9	25/06/2020	62.69	38.40	7.66	27.57
10	29/06/2020	55.70	25.83	15.76	30.45
11	02/07/2020	58.63	26.45	14.61	29.25
12	06/07/2020	44.56	15.62	9.53	22.43
13	09/07/2020	62.23	24.25	11.26	26.38
14	13/07/2020	71.24	36.28	7.60	18.46
15	16/07/2020	56.38	28.58	15.45	27.62
16	20/07/2020	75.27	39.45	8.65	17.47
17	23/07/2020	59.63	25.41	12.82	23.22
18	27/07/2020	70.23	30.45	10.16	14.61
19	30/07/2020	50.23	21.20	13.89	16.95
20	03/08/2020	69.33	30.99	12.37	19.51
21	06/08/2020	57.63	46.37	8.62	16.53
22	10/08/2020	70.37	26.33	14.70	22.46
23	13/08/2020	66.52	29.33	10.34	28.43
24	17/08/2020	58.62	22.33	7.71	15.68
25	20/08/2020	68.37	37.53	13.46	23.46
26	24/08/2020	42.63	15.33	6.54	17.52
27	27/08/2020	65.34	31.83	15.26	18.69
28	03/09/2020	78.53	32.45	13.90	20.33
29	07/09/2020	64.51	26.33	11.19	15.36
30	10/09/2020	74.67	38.58	16.23	27.68
31	14/09/2020	68.62	31.54	9.39	14.19
32	17/09/2020	47.51	18.62	12.63	18.22
33	21/09/2020	56.23	28.33	6.29	21.50
34	24/09/2020	61.36	20.37	10.37	16.51
35	28/09/2020	73.48	40.20	14.59	22.85


H. T. Shah
Lab Manager
Dr. Arun Bajpai
Lab Manager (Q)PLOT NO.5/6 "POLLUCON HOUSE", OPP. BALAJI INDUSTRIAL SOCIETY, OLD SHANTINATH SILK MILL LANE, NEAR GAYTRI FARSEN MART,
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TABLE NO. 2 RESULTS OF AAQM FOR STARTING OF PILE APPROACH [APRIL 2020 - SEPTEMBER 2020]

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	28/05/2020	70.59	38.71	22.51	28.60
2	01/06/2020	78.36	47.35	17.69	33.84
3	04/06/2020	85.36	43.26	21.70	38.62
4	08/06/2020	68.67	34.26	14.77	29.39
5	11/06/2020	80.32	40.43	18.58	32.54
6	15/06/2020	74.35	41.26	15.25	27.66
7	18/06/2020	82.74	37.89	22.68	30.69
8	22/06/2020	72.71	33.76	16.34	34.67
9	25/06/2020	84.39	49.39	12.77	31.58
10	29/06/2020	70.43	38.68	20.53	35.68
11	02/07/2020	73.63	38.37	16.73	34.91
12	06/07/2020	55.61	27.49	19.57	37.67
13	09/07/2020	67.57	45.41	21.62	28.55
14	13/07/2020	88.47	49.49	11.70	25.47
15	16/07/2020	63.64	32.66	20.23	30.45
16	20/07/2020	84.24	43.20	12.34	23.57
17	23/07/2020	64.23	46.53	10.40	32.41
18	27/07/2020	82.63	44.66	18.68	26.46
19	30/07/2020	77.55	36.41	15.28	31.12
20	03/08/2020	82.67	46.28	18.31	25.73
21	06/08/2020	68.24	33.66	12.33	31.50
22	10/08/2020	84.32	44.24	20.26	27.19
23	13/08/2020	72.61	39.95	16.43	36.57
24	17/08/2020	71.85	34.24	14.40	22.55
25	20/08/2020	74.58	42.32	23.45	37.59
26	03/09/2020	72.47	39.16	21.56	29.33
27	07/09/2020	69.33	29.87	16.63	26.37
28	10/09/2020	79.51	41.24	22.31	36.80
29	14/09/2020	85.25	46.24	14.19	23.53
30	17/09/2020	58.32	26.24	17.52	27.55
31	21/09/2020	68.33	35.28	20.24	35.36
32	24/09/2020	78.62	31.24	15.27	24.66
33	28/09/2020	84.23	50.24	19.28	31.21


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

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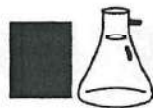
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TABLE NO. 3 RESULTS OF AAQM FOR SOUTH WEST CORNER AT PUMP HOUSE [APRIL 2020 - SEPTEMBER 2020]

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	28/05/2020	57.66	28.40	8.44	17.66
2	01/06/2020	68.54	32.53	12.60	18.58
3	04/06/2020	75.64	36.80	15.90	25.46
4	08/06/2020	56.53	24.44	6.62	15.52
5	11/06/2020	64.19	27.47	9.78	19.82
6	15/06/2020	58.34	20.37	7.61	17.90
7	18/06/2020	72.46	29.42	16.59	24.39
8	22/06/2020	60.38	25.47	11.63	27.28
9	25/06/2020	76.73	35.72	10.44	23.49
10	29/06/2020	66.84	31.70	17.55	26.38
11	02/07/2020	67.26	33.62	9.58	23.93
12	06/07/2020	49.54	18.20	17.51	31.58
13	09/07/2020	53.62	29.66	15.66	17.64
14	13/07/2020	76.78	30.24	6.54	15.23
15	16/07/2020	69.37	35.62	13.42	24.53
16	20/07/2020	70.51	32.45	10.62	14.56
17	23/07/2020	54.56	28.62	7.50	25.62
18	27/07/2020	78.24	37.20	12.67	19.34
19	30/07/2020	65.23	25.62	8.40	21.47
20	03/08/2020	76.53	23.58	14.55	21.53
21	06/08/2020	62.84	29.45	10.23	24.51
22	10/08/2020	77.53	35.62	16.18	19.38
23	13/08/2020	61.53	32.37	12.42	33.32
24	17/08/2020	53.58	19.54	9.59	18.22
25	20/08/2020	63.84	26.41	17.88	26.73
26	24/08/2020	48.34	18.54	8.22	20.72
27	27/08/2020	74.35	38.41	13.64	25.68
28	03/09/2020	62.38	25.45	11.51	25.62
29	07/09/2020	53.34	22.83	8.20	20.49
30	10/09/2020	69.44	32.45	14.32	16.39
31	14/09/2020	74.21	37.53	7.60	18.64
32	17/09/2020	51.22	21.25	10.61	13.61
33	21/09/2020	61.65	31.24	15.29	23.47
34	24/09/2020	70.55	27.54	12.19	19.55
35	28/09/2020	64.27	43.45	9.67	24.54

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TABLE NO. 4 RESULTS OF AAQM FOR NORTH EAST CORNER OF BACK UP AREA [APRIL 2020 - SEPTEMBER 2020]

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	28/05/2020	76.91	41.09	21.50	36.35
2	01/06/2020	73.83	43.87	14.40	29.74
3	04/06/2020	92.36	49.80	17.90	35.82
4	08/06/2020	61.42	38.68	11.31	20.64
5	11/06/2020	88.40	44.41	21.41	36.79
6	15/06/2020	79.68	35.67	13.22	22.64
7	18/06/2020	87.40	31.28	20.80	27.85
8	22/06/2020	77.88	37.64	18.29	30.70
9	25/06/2020	89.66	45.71	16.73	34.55
10	29/06/2020	76.61	41.61	22.73	38.56
11	02/07/2020	77.68	41.53	20.35	37.54
12	06/07/2020	61.58	30.45	12.44	34.28
13	09/07/2020	74.68	33.04	24.27	30.25
14	13/07/2020	82.43	45.66	13.57	28.35
15	16/07/2020	76.23	39.24	22.39	35.65
16	20/07/2020	90.25	47.53	17.62	19.23
17	23/07/2020	79.61	36.20	14.26	38.64
18	27/07/2020	88.65	48.53	23.38	21.24
19	30/07/2020	70.32	40.24	19.34	25.33
20	03/08/2020	90.21	50.20	22.31	28.35
21	06/08/2020	75.83	44.57	15.56	36.44
22	10/08/2020	89.31	48.32	18.70	33.56
23	13/08/2020	78.68	37.58	24.56	41.23
24	17/08/2020	63.42	30.41	12.55	26.37
25	20/08/2020	80.23	46.37	21.23	34.27
26	24/08/2020	58.66	32.54	11.33	29.42
27	27/08/2020	86.35	49.20	17.18	37.23
28	03/09/2020	84.66	49.91	17.58	35.46
29	07/09/2020	78.47	36.37	14.68	31.65
30	10/09/2020	86.24	45.20	20.69	39.26
31	14/09/2020	79.23	40.28	19.67	32.42
32	17/09/2020	62.56	29.45	21.40	22.45
33	21/09/2020	75.33	38.41	18.32	29.58
34	24/09/2020	65.44	24.62	23.31	33.81
35	28/09/2020	89.52	53.49	16.32	27.83


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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	May-20	--	--	--	--	--	--	--	--
2	June-20	74.73	49.63	38.40	22.68	15.76	7.66	30.45	18.66
3	July-20	75.27	44.56	39.45	15.62	15.45	7.60	29.25	14.61
4	August-20	70.37	42.63	46.37	15.33	15.26	6.54	28.43	15.68
5	September-20	78.53	47.51	40.20	18.62	16.23	6.29	27.68	14.19
Starting Of Pile Approach (Near SS2 Building)									
1	May-20	--	--	--	--	--	--	--	--
2	June-20	85.36	68.67	49.39	33.76	22.68	12.77	38.62	27.66
3	July-20	88.47	55.61	49.49	27.49	21.62	10.40	37.67	23.57
4	August-20	84.32	60.22	46.28	33.66	23.45	11.51	37.59	18.61
5	September-20	85.25	58.32	50.24	26.24	22.31	14.19	36.80	23.53
South West Corner Of Back Up Area									
1	May-20	--	--	--	--	--	--	--	--
2	June-20	76.73	56.53	36.80	20.37	17.55	6.62	27.28	15.52
3	July-20	78.24	49.54	37.20	18.20	17.51	6.54	31.58	14.56
4	August-20	77.53	48.34	38.41	18.54	17.88	7.48	33.32	14.71
5	September-20	74.21	51.22	43.45	21.25	15.29	7.60	25.62	13.61
North East Corner Of Back Up Area									
1	May-20	--	--	--	--	--	--	--	--
2	June-20	92.36	61.42	49.80	31.28	22.73	11.31	38.56	20.64
3	July-20	90.25	61.58	48.53	30.45	24.27	12.44	38.64	19.23
4	August-20	90.24	58.66	50.20	30.41	24.56	11.33	41.23	16.35
5	September-20	89.52	62.56	53.49	24.62	23.31	14.68	39.26	22.45

Note: In May-2020, only one visit for AAQM. So, Max. and Min. values are same.


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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 2020 TO SEPTEMBER 2020]

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 of Back up Area	
	Month	Max	Min	Max	Min	Max	Min	Max	Min
1.	June-20	66.7	51.6	62.0	59.2	59.0	53.7	62.5	59.4
2.	July-20	64.2	59.2	63.7	57.6	60.5	52.8	63.8	57.5
3.	August-20	67.8	60.2	62.2	59.5	59.7	52.6	62.4	58.4
4.	September-20	62.7	57.6	63.1	55.2	60.2	55.3	64.4	57.9

TABLE NO. 6 RESULTS OF NIGHT TIME NOISE LEVEL MONITORING [APRIL 2020 TO SEPTEMBER 2020]

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 of Back up Area	
	Month	Max	Min	Max	Min	Max	Min	Max	Min
1.	June-20	65.0	62.6	61.4	58.6	59.4	55.6	60.8	57.8
2.	July-20	64.2	58.6	60.5	55.2	59.8	51.8	63.6	56.6
3.	August-20	65.7	61.7	61.1	58.0	60.1	55.3	60.6	58.5
4.	September-20	62.3	58.4	62.4	58.1	59.8	55.8	62.9	59.7

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)

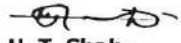
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AMBIENT AIR QUALITY MONITORING & NOISE QUALITY MONITORING LOCATIONS

Sr. No	Name of Location	GPS Coordinate
1.	LC Gate No.2	N 22° 58' 14.29"E 70° 05' 51.07'
2.	Starting Of Pile Approach	N 22° 54' 27.47" E 70° 06' 15.63'
3.	South West Corner at Pump House	N 22° 55' 22.98" E 70° 06' 7.37'
4.	North East Corner Of Back Up Area	N 22° 55' 53.09 E 70° 06' 27.17'

FIGURE NO. 1 GOOGLE EARTH IMAGE OF AMBIENT AIR QUALITY MONITORING & NOISE QUALITY MONITORING LOCATION
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Dr. Arun Bajpai
Lab Manager (Q)PLOT NO.5/6 "POLLUCON HOUSE", OPP. BALAJI INDUSTRIAL SOCIETY, OLD SHANTINATH SILK MILL LANE, NEAR GAYTRI FARISAN MART,
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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): 2014
2	Sulfur Dioxide as SO ₂	ppm	100	IS 11255 (Part-2): 2014
3	Oxides of Nitrogen as NO _x	ppm	50	IS 11255 (Part-7): 2017

**Details provided by customer.

RESULTS OF STACK MONITORING

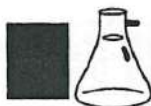
Date of Monitoring			12/06/2020		
Sampling Location			SS-1 DG Set -1 (125 KVA)	SS-2 DG Set -2 (125 KVA)	SS-3 DG Set -3 (125 KVA)
SR. NO.	TEST PARAMETER	UNIT	June-20		
1	Particulate Matter	mg/Nm ³	18.62	22.83	14.51
2	Sulfur Dioxide as SO ₂	ppm	5.75	6.72	3.86
3	Oxides of Nitrogen as NO _x	ppm	32.75	26.41	25.66
4	Noise Level Monitoring				
4.1	Near DG Set	dB(A)	72.5	71.8	73.6


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"ENVIRONMENTAL MONITORING REPORT"

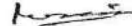
For

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

OCTOBER 2020 TO MARCH 2021


H. T. Shah
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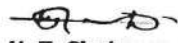
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METHODS AND EQUIPMENTS USED FOR SAMPLING AND ANALYSIS

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
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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) SOP AAQM SPM -01
2	Particulate Matter (PM _{2.5})	µg/m ³	60	SOP AAQM PM2.5 - 06
3	Sulphur Dioxide (SO ₂)	µg/m ³	80	IS:5182(Part 2): Improved West and Gaeke
4	Oxides of Nitrogen (NO ₂)	µg/m ³	80	IS.5182(Part6)Modified Jacob &Hochheiser (Na-Arsenite)

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


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TABLE NO. 1 RESULTS OF AAQM FOR LC GATE NO.2 [OCTOBER 2020 - MARCH 2021]

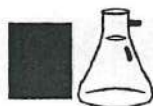
Sr No.	Date of Sampling	Particulate Matter (PM ₁₀) (µg/m ³)	Particulate Matter (PM _{2.5}) (µg/m ³)	Sulphur Dioxide (SO ₂) (µg/m ³)	Oxides of Nitrogen (NO _x) (µg/m ³)
1	01/10/2020	64.52	28.62	8.43	21.52
2	05/10/2020	56.23	24.58	17.86	24.24
3	08/10/2020	44.52	18.62	12.38	31.62
4	12/10/2020	59.51	30.29	7.25	18.53
5	15/10/2020	70.23	35.33	10.30	22.65
6	19/10/2020	63.54	43.57	14.30	26.04
7	22/10/2020	58.35	23.41	19.61	29.24
8	26/10/2020	74.26	34.53	9.26	25.59
9	29/10/2020	60.36	27.66	6.48	23.23
10	02/11/2020	67.21	25.66	18.78	31.52
11	05/11/2020	55.24	22.62	13.38	23.47
12	09/11/2020	62.53	34.53	15.37	18.63
13	12/11/2020	52.65	26.24	8.65	21.85
14	16/11/2020	68.28	30.16	11.36	24.57
15	19/11/2020	50.37	24.33	9.37	28.42
16	23/11/2020	76.24	40.28	14.83	32.57
17	26/11/2020	61.68	27.24	17.31	26.23
18	30/11/2020	51.27	23.41	10.46	30.23
19	03/12/2020	56.67	20.36	16.97	34.25
20	07/12/2020	66.82	33.46	12.57	25.65
21	10/12/2020	73.58	30.31	18.30	30.64
22	14/12/2020	50.26	23.43	6.56	16.43
23	17/12/2020	72.65	34.54	8.65	31.22
24	21/12/2020	57.55	25.25	13.45	29.47
25	24/12/2020	62.47	32.55	11.42	17.86
26	28/12/2020	58.35	28.20	7.58	21.33
27	31/12/2020	70.85	35.66	9.31	20.28
28	04/01/2021	50.67	26.29	19.73	25.46
29	07/01/2021	63.41	37.57	14.51	28.40
30	11/01/2021	58.38	29.52	16.84	22.45
31	14/01/2021	71.61	38.65	7.91	26.31
32	18/01/2021	62.31	33.46	12.73	19.69
33	21/01/2021	55.36	27.62	10.41	23.26
34	25/01/2021	70.32	36.24	8.49	20.62
35	28/01/2021	65.35	32.47	11.42	24.58
36	01/02/2021	65.33	33.67	15.31	29.34
37	04/02/2021	57.63	30.40	19.24	23.74
38	08/02/2021	52.65	25.63	11.43	20.33
39	11/02/2021	60.35	32.34	16.29	28.29
40	15/02/2021	66.52	27.66	18.63	24.22
41	18/02/2021	58.36	31.27	12.65	27.53
42	22/02/2021	71.27	26.50	9.62	18.67
43	25/02/2021	67.34	29.65	13.34	22.42
44	01/03/2021	72.62	28.45	16.24	26.22
45	04/03/2021	64.37	22.60	12.67	22.43
46	08/03/2021	74.25	36.57	8.67	19.63
47	11/03/2021	50.21	29.44	14.81	25.32
48	15/03/2021	63.21	26.37	17.66	36.57
49	18/03/2021	70.24	35.45	11.32	28.62
50	22/03/2021	52.61	25.46	7.63	24.52
51	25/03/2021	78.21	44.25	10.63	20.67
52	29/03/2021	60.56	33.43	9.66	17.87


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

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TABLE NO. 2 RESULTS OF AAQM FOR STARTING OF PILE APPROACH [OCTOBER 2020 - MARCH 2021]

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	01/10/2020	76.28	45.24	16.90	30.22
2	05/10/2020	84.56	48.24	23.41	34.20
3	08/10/2020	67.51	30.29	21.29	40.26
4	12/10/2020	82.86	42.37	17.54	31.34
5	15/10/2020	75.68	38.49	13.52	36.28
6	19/10/2020	85.64	47.24	22.65	41.36
7	22/10/2020	79.61	41.58	20.58	32.65
8	26/10/2020	88.28	44.24	18.61	35.32
9	29/10/2020	74.32	34.24	15.26	38.22
10	02/11/2020	73.64	31.58	20.25	36.33
11	05/11/2020	68.32	36.28	10.58	31.25
12	09/11/2020	80.24	45.37	19.28	33.55
13	12/11/2020	58.65	34.37	15.89	29.45
14	16/11/2020	82.38	39.24	21.22	32.45
15	19/11/2020	69.32	32.62	16.19	38.23
16	23/11/2020	81.26	46.28	18.60	34.53
17	26/11/2020	67.37	30.49	25.61	40.26
18	30/11/2020	75.63	40.24	14.56	35.24
19	03/12/2020	75.38	35.68	24.27	41.21
20	07/12/2020	86.26	44.60	16.62	37.54
21	10/12/2020	79.33	38.51	20.39	34.32
22	14/12/2020	69.35	26.34	18.24	40.22
23	17/12/2020	85.34	41.26	25.65	38.32
24	21/12/2020	68.35	34.26	15.86	35.63
25	24/12/2020	83.21	40.26	22.34	39.22
26	28/12/2020	78.26	36.26	14.20	29.62
27	31/12/2020	81.26	43.51	19.64	32.84
28	04/01/2021	70.61	38.47	25.48	35.41
29	07/01/2021	82.48	43.64	15.33	32.54
30	11/01/2021	74.24	39.47	22.61	37.56
31	14/01/2021	86.22	48.60	20.44	28.20
32	18/01/2021	71.23	45.31	16.48	31.62
33	21/01/2021	66.58	30.22	19.49	36.26
34	25/01/2021	75.68	41.22	17.66	29.26
35	28/01/2021	81.55	44.60	21.23	38.29
36	01/02/2021	76.28	41.35	18.22	36.57
37	04/02/2021	80.34	45.31	25.61	42.36
38	08/02/2021	77.28	35.64	28.24	32.64
39	11/02/2021	85.67	47.51	23.44	35.34
40	15/02/2021	72.46	42.55	15.45	30.38
41	18/02/2021	69.37	38.43	20.44	37.28
42	22/02/2021	87.27	46.31	13.52	26.25
43	25/02/2021	75.43	40.22	16.57	23.44
44	01/03/2021	77.57	34.51	20.53	30.49
45	04/03/2021	85.67	36.51	23.25	33.45
46	08/03/2021	79.53	54.27	18.22	38.57
47	11/03/2021	69.65	37.55	21.25	42.65
48	15/03/2021	75.41	39.44	14.63	39.61
49	18/03/2021	86.24	45.69	22.40	35.43
50	22/03/2021	78.66	38.53	19.29	32.44
51	25/03/2021	92.42	52.55	17.85	28.57
52	29/03/2021	68.34	40.53	13.56	29.48


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TABLE NO. 3 RESULTS OF AAQM FOR SOUTH WEST CORNER AT PUMP HOUSE [OCTOBER 2020 - MARCH 2021]

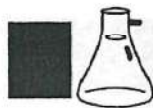
Sr No.	Date of Sampling	Particulate Matter (PM ₁₀) (µg/m ³)	Particulate Matter (PM _{2.5}) (µg/m ³)	Sulphur Dioxide (SO ₂) (µg/m ³)	Oxides of Nitrogen (NO _x) (µg/m ³)
1	01/10/2020	59.35	24.33	12.47	23.40
2	05/10/2020	68.52	28.62	14.53	27.86
3	08/10/2020	52.65	21.50	19.50	34.38
4	12/10/2020	72.61	23.66	10.20	20.59
5	15/10/2020	58.56	27.54	8.25	25.43
6	19/10/2020	73.55	34.49	18.53	31.77
7	22/10/2020	69.28	26.24	16.38	21.21
8	26/10/2020	80.22	39.45	11.54	28.57
9	29/10/2020	66.27	30.24	9.63	19.64
10	02/11/2020	54.38	21.54	9.65	20.49
11	05/11/2020	63.48	26.54	15.32	26.54
12	09/11/2020	72.83	42.62	17.58	23.18
13	12/11/2020	45.61	20.62	6.28	16.84
14	16/11/2020	62.63	34.53	16.51	19.86
15	19/11/2020	57.51	27.20	13.24	32.41
16	23/11/2020	64.22	36.45	10.20	24.65
17	26/11/2020	53.54	22.37	19.57	21.76
18	30/11/2020	60.24	32.66	8.44	27.37
19	03/12/2020	68.25	25.68	13.54	21.58
20	07/12/2020	60.63	30.20	7.63	32.58
21	10/12/2020	56.35	27.59	11.59	18.26
22	14/12/2020	62.61	18.67	9.48	31.33
23	17/12/2020	80.47	38.50	15.39	35.35
24	21/12/2020	52.67	21.20	8.37	20.40
25	24/12/2020	70.23	35.47	14.59	33.45
26	28/12/2020	50.31	23.48	10.86	24.51
27	31/12/2020	76.38	28.63	17.56	16.52
28	04/01/2021	63.22	22.36	16.27	28.66
29	07/01/2021	71.56	32.36	9.29	22.64
30	11/01/2021	52.62	25.35	12.65	33.63
31	14/01/2021	78.56	41.53	15.68	24.21
32	18/01/2021	50.26	26.35	19.36	21.55
33	21/01/2021	44.96	18.67	14.25	27.57
34	25/01/2021	62.51	31.28	11.26	23.65
35	28/01/2021	73.14	35.64	13.68	26.56
36	01/02/2021	70.22	38.38	10.37	18.52
37	04/02/2021	66.38	35.47	16.27	31.53
38	08/02/2021	58.68	29.42	14.50	25.34
39	11/02/2021	69.90	37.55	12.27	21.55
40	15/02/2021	56.36	34.56	9.34	27.66
41	18/02/2021	63.42	26.51	13.54	22.34
42	22/02/2021	76.34	30.37	6.51	15.69
43	25/02/2021	61.53	33.61	11.23	19.23
44	01/03/2021	67.62	31.49	14.24	17.58
45	04/03/2021	59.32	26.26	17.57	25.62
46	08/03/2021	64.21	30.43	11.41	35.54
47	11/03/2021	56.31	33.32	16.58	16.55
48	15/03/2021	69.31	36.62	7.53	33.53
49	18/03/2021	80.21	40.52	9.52	18.54
50	22/03/2021	58.27	29.63	13.29	28.34
51	25/03/2021	70.62	38.55	15.16	34.52
52	29/03/2021	53.55	24.57	12.74	26.33


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TABLE NO. 4 RESULTS OF AAQM FOR NORTH EAST CORNER OF BACK UP AREA [OCTOBER 2020 - MARCH 2021]

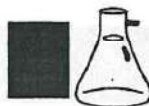
Sr No.	Date of Sampling	Particulate Matter (PM ₁₀) (µg/m ³)	Particulate Matter (PM _{2.5}) (µg/m ³)	Sulphur Dioxide (SO ₂) (µg/m ³)	Oxides of Nitrogen (NO ₂) (µg/m ³)
1	01/10/2020	69.56	41.24	14.97	27.53
2	05/10/2020	79.36	37.58	25.28	30.62
3	08/10/2020	60.28	26.58	17.22	37.68
4	12/10/2020	77.57	33.45	13.78	25.34
5	15/10/2020	82.64	44.24	18.25	31.26
6	19/10/2020	91.56	52.45	16.29	28.36
7	22/10/2020	86.37	47.57	24.67	38.64
8	26/10/2020	93.22	54.24	21.49	32.43
9	29/10/2020	80.38	38.41	19.31	35.62
10	02/11/2020	59.32	35.49	24.84	40.34
11	05/11/2020	73.84	31.54	20.40	35.83
12	09/11/2020	85.62	48.66	23.33	38.51
13	12/11/2020	63.53	32.58	11.55	33.45
14	16/11/2020	87.24	45.32	19.86	28.86
15	19/11/2020	77.60	36.28	21.55	41.67
16	23/11/2020	89.22	52.66	16.65	27.62
17	26/11/2020	74.53	34.24	22.37	34.63
18	30/11/2020	68.62	37.53	17.26	39.52
19	03/12/2020	84.28	31.24	20.51	37.34
20	07/12/2020	72.51	40.23	18.64	28.28
21	10/12/2020	86.38	47.25	25.38	39.81
22	14/12/2020	75.87	36.30	14.59	34.50
23	17/12/2020	91.25	50.22	22.90	41.57
24	21/12/2020	74.58	38.22	11.19	22.64
25	24/12/2020	87.53	44.20	17.31	36.23
26	28/12/2020	73.26	30.28	19.27	33.22
27	31/12/2020	89.37	45.25	23.58	40.34
28	04/01/2021	75.52	40.27	23.50	38.65
29	07/01/2021	89.28	50.26	17.53	36.35
30	11/01/2021	69.34	34.25	26.17	42.65
31	14/01/2021	93.43	53.53	18.27	32.42
32	18/01/2021	76.51	41.19	21.65	26.22
33	21/01/2021	61.35	35.34	24.19	40.25
34	25/01/2021	82.38	45.54	19.24	25.57
35	28/01/2021	90.28	51.23	25.24	41.25
36	01/02/2021	83.64	44.66	21.25	33.43
37	04/02/2021	92.67	49.22	23.63	37.56
38	08/02/2021	88.35	41.23	33.43	34.22
39	11/02/2021	90.32	51.23	20.17	38.48
40	15/02/2021	86.21	46.54	13.25	35.64
41	18/02/2021	75.33	43.57	16.42	30.66
42	22/02/2021	93.48	38.47	11.48	21.24
43	25/02/2021	82.62	45.33	18.46	28.62
44	01/03/2021	84.36	43.49	18.41	35.89
45	04/03/2021	90.35	48.34	20.18	28.22
46	08/03/2021	86.51	44.23	16.33	41.28
47	11/03/2021	76.54	42.56	24.30	31.54
48	15/03/2021	82.61	45.35	22.19	43.29
49	18/03/2021	92.46	51.55	17.36	39.35
50	22/03/2021	71.53	35.45	25.19	36.27
51	25/03/2021	87.52	47.26	21.67	44.2
52	29/03/2021	75.38	30.7	15.6	40.21


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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	October-20	74.26	44.52	43.57	18.62	19.61	6.48	31.62	18.53
2	November-20	76.24	50.37	40.28	22.62	18.78	8.65	32.57	18.63
3	December-20	73.58	50.26	35.66	20.36	18.30	6.56	34.25	16.43
4	January-21	71.61	50.67	38.65	26.29	19.73	7.91	28.40	19.69
5	February-21	71.27	52.65	33.67	25.63	19.24	9.62	29.34	18.67
6	March-21	78.21	50.21	44.25	22.60	17.66	7.63	36.57	17.87
Starting Of Pile Approach (Near SS2 Building)									
1	October-20	88.28	67.51	48.24	30.29	23.41	13.52	41.36	30.22
2	November-20	82.38	58.65	46.28	30.49	25.61	10.58	40.26	29.45
3	December-20	86.26	68.35	44.60	26.34	25.65	14.20	41.21	29.62
4	January-21	86.22	66.58	48.60	30.22	25.48	15.33	38.29	28.20
5	February-21	87.27	69.37	47.51	35.64	28.24	13.52	42.36	23.44
6	March-21	92.42	68.34	54.27	34.51	23.25	13.56	42.65	28.57
South West Corner Of Back Up Area									
1	October-20	80.22	52.65	39.45	21.50	19.50	8.25	34.38	19.64
2	November-20	72.83	45.61	42.62	20.62	19.57	6.28	32.41	16.84
3	December-20	80.47	50.31	38.50	18.67	17.56	7.63	35.35	16.52
4	January-21	78.56	44.96	41.53	18.67	19.36	9.29	33.63	21.55
5	February-21	76.34	56.36	38.38	26.51	16.27	6.51	31.53	15.69
6	March-21	80.21	53.55	40.52	24.57	17.57	7.53	35.54	16.55
North East Corner Of Back Up Area									
1	October-20	93.22	60.28	54.24	26.58	25.28	13.78	38.64	25.34
2	November-20	89.22	59.32	52.66	31.54	24.84	11.55	41.67	27.62
3	December-20	91.25	72.51	50.22	30.28	25.38	11.19	41.57	22.64
4	January-21	93.43	61.35	53.53	34.25	26.17	17.53	42.65	25.57
5	February-21	93.48	75.33	51.23	38.47	33.43	11.48	38.48	21.24
6	March-21	92.46	71.53	51.55	30.70	25.19	15.60	44.20	28.22


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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 2020 TO MARCH 2021]

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 of Back up Area	
	Month	Max	Min	Max	Min	Max	Min	Max	Min
1.	October-20	61.8	58.3	60.7	57.3	66.3	49.4	62.8	58.6
2.	November-20	72.0	63.5	69.8	64.6	70.7	52.2	62.8	57.8
3.	December-20	63.6	57.9	64.4	59.4	64.4	58.4	62.9	56.7
4.	January-21	68.6	59.8	64.4	60.3	62.4	57.6	62.9	57.8
5.	February-21	66.5	57.5	66.7	60.6	62.1	53.2	63.8	54.3
6.	March-21	62.8	54.8	64.7	58.5	64.0	58.9	61.9	55.7

TABLE NO. 6 RESULTS OF NIGHT TIME NOISE LEVEL MONITORING [OCTOBER 2020 TO MARCH 2021]

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 of Back up Area	
	Month	Max	Min	Max	Min	Max	Min	Max	Min
1.	October-20	60.9	58.2	60.2	56.9	65.4	47.1	61.8	57.5
2.	November-20	69.6	62.9	68.1	62.3	69.9	50.9	61.6	56.5
3.	December-20	62.9	56.9	62.7	57.6	62.8	57.5	62.4	55.5
4.	January-21	63.9	57.5	63.2	60.5	61.1	56.4	61.8	53.5
5.	February-21	62.5	50.3	64.4	58.2	61.8	52.2	60.2	52.6
6.	March-21	59.9	53.2	68.7	59.8	63.2	55.8	60.7	53.8

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:			
1. Day time shall mean from 6.00 a.m. to 10.00 p.m.			
2. 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			


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AMBIENT AIR QUALITY MONITORING & NOISE QUALITY MONITORING LOCATIONS

Sr. No	Name of Location	GPS Coordinate
1.	LC Gate No.2	N 22°58' 14.29"E 70°05' 51.07'
2.	Starting Of Pile Approach	N 22°54' 27.47" E 70°06' 15.63'
3.	South West Corner at Pump House	N 22°55' 22.98" E 70°06' 7.37'
4.	North East Corner Of Back Up Area	N 22°55' 53.09 E 70°06' 27.17'

FIGURE NO. 1 GOOGLE EARTH IMAGE OF AMBIENT AIR QUALITY MONITORING & NOISE QUALITY MONITORING LOCATION




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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			22/01/2021		
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	January-21		
1	Particulate Matter	mg/Nm ³	21.75	16.41	19.52
2	Sulfur Dioxide as SO ₂	ppm	7.52	5.62	4.52
3	Oxides of Nitrogen as NO _x	ppm	35.65	30.75	32.42
4	Noise Level Monitoring				
4.1	Near DG Set	dB(A)	71.2	73.5	70.8


H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

PLOT NO.5/6 "POLLUCON HOUSE", OPP. BALAJI INDUSTRIAL SOCIETY, OLD SHANTINATH SILK MILL LANE, NEAR GAYTRI FARSAN MART,
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Environment Statement for 2020-21 for M/s Adani Kandla Bulk Terminal Pvt Ltd

Annexure 2: Expenditure Details on Environmental Safeguards during FY 2020- 21

Sr. no.	Activity	Cost incurred (INR in Lakh)
1	Environmental Monitoring	7.04
2	Environment Days Celebration	0.82
3	Greenbelt development [Area: 15.78 Hectare]	38.17
4	Treatment and Disposal of Bio-Medical Waste	0.84
5	Hazardous /Non Hazardous waste management & Disposal	11.95
6	O&M Of Sewage Treatment plant and OWC Plant	7.35
7	Firefighting Equipment.	223.21
8	Dust Suppression.	
9	Maintenance of conveyor belt.	167.39
Total		456.77

Environment Statement for 2020-21 for M/s Adani Kandla Bulk Terminal Pvt Ltd

Annexure – 3 Green zone developments details

CURRENT GREEN ZONE DETAILS OF TUNA PORT (AKBTPL) UP TO Mar'2021.						
Sr. No.	Location	Area (Ha)	Tree (No.)	Shrubs (SQM)	Green Carpet (SQM)	Palm (No.)
1	Staff Canteen, POB & SS1 Building	2.25	4491	1975	8569	307
2	Green Belt area & Pump House	6.34	15779	250	0	75
3	Approach Road Zero Point to Main Gate	0.40	0	0	0	1150
4	SS2 Building & Jetty Road Area.	3.45	8002	1230	0	0
5	Internal Road & Railway Building	3.34	13180	150	60	250
Total		15.78	41452	3605	8629	1782