

Appendix - 4.5

**MONITORING OF NOISE LEVEL
DAY AND NIGHT FOR BOTH INTERNAL AND EXTERNAL (CLOSEST) RECEPTOR**

INTERNAL STATIONS							
Sr. No.	AREA/ LOCATION/POINT	26 th Oct'17 Noise L _{Aeq} (dBA)		27 th Oct'17 Noise L _{Aeq} (dBA)		Average Noise L _{Aeq} (dBA)	
		DAY	NIGHT	DAY	NIGHT	DAY	NIGHT
1	Entrance of Indorama Complex	69.0	65.4	69.6	65.0	69.3	65.2
2	2nd GATE	60.6	44.0	60.8	44.2	60.7	44.1
3	CAR PARK	61.8	42.5	62.4	45.9	62.1	42.7
4.	ETP Near Fire pump house	61.0	51.1	61.6	51.3	61.3	51.2
5.	ETP before incinerators	66.0	63.4	66.0	64.0	66.0	63.7
6.	ETP by incinerators	65.4	61.8	64.8	61.8	65.1	61.8
7.	ETP operational area	67.4	63.2	67.6	62.6	67.5	62.9
8.	Sluice Gate	51.0	43.4	52.6	44.0	51.8	43.7
9.	Flare area 1	64.0	61.3	63.2	61.5	63.6	61.4
10.	Flare area 2	73.0	75.4	72.6	75.2	72.8	75.3
11.	Flare area 3	52.0	47.2	51.0	47.6	51.5	47.4
12.	Flare area 4	70.0	56.0	68.8	55.8	69.4	55.9
13.	Plot by Retention pond	51.0	46.0	50.8	45.0	50.9	45.5
14.	Plot opposite Retention pond	58.5	52.0	58.7	52.6	58.6	52.3
15.	New Air Compressor House	70.0	59.0	68.6	58.2	69.3	58.6
16.	Water Treatment Plant	61.5	58.6	61.9	58.6	61.7	58.6
17.	New Water Treatment &DM Unit	57.0	53.0	56.6	53.8	56.8	53.4
18.	Urea Cooling Tower	69.6	68.1	68.8	68.3	69.2	68.2
19.	Ammonia Cooling Tower	70.0	68.5	69.6	68.9	69.8	68.7
20.	IEPL Cooling Tower	68.4	69.0	68.6	68.6	68.5	68.8
21.	Open field behind power plant	68.0	62.5	67.4	62.1	67.7	62.3
22.	Power Plant	74.5	72.0	74.7	72.6	74.6	72.3
		67.0	65.0	66.4	64.6	66.7	64.8
23.	Ammonia-1 Plant	69.5	66.0	69.5	65.6	69.5	65.8
24.	Polypropylene Plant	86.0	83.0	85.0	81.4	85.5	82.2
		84.5	80.0	84.1	79.0	84.3	79.5

25.	Urea-1 Plant	66.0	63.3	66.4	63.5	66.2	63.4
		61.4	60.0	62.0	59.6	61.7	59.8
26.	PP Warehouse Inside	56.2	55.0	56.2	55.2	56.2	55.1
27.	PP Warehouse Outside	69.0	67.5	69.6	67.3	69.3	67.4
28.	Olefins	85.0	83.2	84.8	83.2	84.9	83.2
		80.0	80.0	80.4	79.6	80.2	79.8
		86.0	81.0	86.0	81.4	86.0	81.2
29.	Polyethylene Plant	77.0	71.0	76.6	71.6	76.8	71.3
		74.0	70.0	73.8	70.0	73.9	70.0
30.	Weigh Bridge	70.0	56.0	69.0	54.8	69.5	55.4
31.	MMD	64.0	60.0	64.2	59.0	64.1	59.5
32.	Workshop	66.0	61.5	65.6	60.5	65.8	61.0
33.	Ethylene Storage	54.5	52.5	53.9	52.7	54.2	52.6
34.	Butane-1 Storage	60.0	49.4	58.8	49.4	59.4	49.4
35.	Propylene Storage	59.0	46.5	58.2	46.9	58.6	46.7
36.	VC5- Storage	54.0	48.0	53.6	47.8	53.8	47.9
37.	PRF Storage	67.4	63.0	67.4	62.8	67.4	62.9
38.	NGL Storage	57.5	49.0	57.9	48.6	57.5	48.8
		55.0	48.0	56.6	46.6	55.8	47.3
39.	Chemical Warehouse	57.0	45.0	56.8	44.4	56.9	44.7
40.	Gas Receiving	64.0	61.0	64.0	61.2	64.0	61.1
41.	Urea warehouse	67.0	64.8	67.4	64.8	67.2	64.8
42.	Urea bagging area	70.0	66.0	69.6	66.4	69.8	66.2
43.	Urea Bulk loading	74.0	67.5	70.8	68.1	72.4	67.8
44.	Near IRC	62.0	44.1	62.4	44.3	62.2	44.2
EXTERNAL STATIONS							
Sr. No.	AREA/ LOCATION/POINT	26 th Oct'17 Noise L _{Aeq} (dBA)		27 th Oct'17 Noise L _{Aeq} (dBA)		Average Noise L _{Aeq} (dBA)	
		DAY	NIGHT	DAY	NIGHT	DAY	NIGHT
1	Akpajo Residential community	55.0	42.5	54.2	41.9	54.6	42.2
2	Theological Institute Akpajo	53.0	48.0	52.0	47.0	52.5	47.5
3	Police Check Point Akpajo	73.0	71.0	72.6	69.8	72.8	70.4

Noise survey – conducted in Oct'2017 (26 & 27th October'2017)

Table 1.7.1 Noise Level Guidelines

Receptor	One Hour LAeq (dBA)	
	Day (0700-2200)	Night (2200-0700)
Residential / Institutional /educational	55	45
Industrial / Commercial	70	70

Dry Season -2017

	Location	NOISE dB(A)			
		17-Jan	17-Feb	17-Mar	Average
AQ1	Aleto Community	54.9	52.1	48.9	52.0
AQ2	Flare Area	47.8	48.4	49.5	48.6
AQ3	NG Receipt facility Area	80.5	70.4	72.3	74.4
AQ4	Urea bagging Plant	57.1	54.5	56.5	56.0
AQ5	Weigh Bridge	62.8	69.7	55.0	62.5
AQ6	Main Gate	64.1	67.7	63.9	65.2
AQ7	Akpajo Community	49.3	49.5	49.2	49.3
AQC 1	Agbonchia Njuru (Control 1)	49.1	48.2	48.6	48.6

Monitoring Reports: January'17; February'17 & March'17