



CVR Labs Pvt Ltd

(Assn. with A&B Labs, Houston, USA)

Dignity Centre, 2nd Floor, New No. 2/9, Old No.21, Abdul Razack Street,
Saidapet, Chennai - 600 015, Tamil Nadu, India.

PATALAGANGA INDUSTRIAL AREA VOC STUDY RESULTS:

AMBIENT AIR QUALITY RESULTS:

LOCATION :1 - PRIA CETP

VOLATILE ORGANIC COMPOUNDS IN AMBIENT AIR QUALITY					
PRIA CETP-Patalganga					
Date & Time : 25.02.2014 [13:15 Hrs] - 26.02.2014 [13:15 Hrs]					
S.NO	Parameter	13:15 - 21:15 Hrs	21:15 - 05:15 Hrs	05:15 - 13:15 Hrs	24 hours (Total)
		Concentration ($\mu\text{g}/\text{m}^3$)			
1	1,1,1,2-Tetrachloroethane	0.1	0.2	0.5	0.8
2	1,2-Dichloroethane	13.4	8.2	3.3	24.9
3	Benzene	0.0	9.9	13.1	23.0
4	Carbon tetrachloride	0.6	0.3	0.5	1.3
5	Chlorobenzene	0.8	19.0	8.8	28.6
6	Ethylbenzene	1.9	6.1	4.8	12.7
7	m- & p-Xylenes	2.6	8.3	6.5	17.3
8	o-Xylenes	0.0	8.5	0.0	8.5
9	Toluene	3.1	3.3	8.3	14.7
10	t-butylbenzene	0.0	10.2	7.9	18.1
Total VOC =		22.5	73.8	53.7	150.0



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LOCATION: 2 - BOMBAY DYEING

VOLATILE ORGANIC COMPOUNDS IN AMBIENT AIR QUALITY					
Bombay Dyeing-Patalganga					
Date & Time : 25.02.2014 [14:15 Hrs] - 26.02.2014 [14:15 Hrs]					
S.NO	Parameter	14:15 Hrs - 22:15 Hrs	22:15 - 06:15 Hrs	06:15 Hrs- 14:15 Hrs	24 hours (Total)
		Concentration ($\mu\text{g}/\text{m}^3$)			
1	Chloroform	1.7	0.2	0.1	1.9
2	1,4-Dichlorobenzene	4.0	0.0	0.1	4.2
3	1,2-Dichloroethane	0.0	0.5	0.6	1.1
4	1,2-Dichlorobenzene	3.0	0.2	0.2	3.4
5	Benzene	2.7	7.6	1.4	11.7
6	Chlorobenzene	1.1	30.2	6.4	37.7
7	Ethylbenzene	1.3	7.0	3.7	12.0
8	m- & p-Xylenes	1.8	9.6	5.0	16.4
9	Toluene	14.7	11.1	5.5	31.2
10	1,3,5-Trimethylbenzene	15.8	0.0	0.0	15.8
11	1,2,4-Trimethylbenzene	3.2	0.0	0.0	3.2
12	1,2,4-Trichlorobenzene	11.6	0.0	0.0	11.6
13	Styrene	0.8	0.0	0.5	1.3
14	t-butylbenzene	15763.0	0.0	0.7	15763.7
15	Naphthalene	4.6	0.0	0.0	4.6
16	Sec-butylbenzene	15.9	0.0	0.0	15.9
Total VOC =		15845.3	66.2	24.1	15935.6



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LOCATION: 3 - UNITOP CHEMICALS

VOLATILE ORGANIC COMPOUNDS IN AMBIENT AIR QUALITY					
UNITOP CEMICALS-Patalganga					
Date & Time : 25.02.2014 [14:25 Hrs] - 26.02.2014 [14:25 Hrs]					
S.NO	Parameter	14:25 Hrs - 22:25 Hrs	22:25 Hrs- 06:25 Hrs	06:25 - 14:25 Hrs	24 hours (Total)
		Concentration ($\mu\text{g}/\text{m}^3$)			
1	Chloroform	0.3	0.1	4.7	5.1
2	1,1,1,2-Tetrachloroethane	0.1	0.4	62.1	62.6
3	1,4-Dichlorobenzene	0.1	0.1	5.9	6.0
4	1,2-Dichloroethane	5.8	0.0	55.7	61.5
5	1,2-Dichlorobenzene	0.1	0.2	7.9	8.2
6	Benzene	0.0	0.0	118.3	118.3
7	Carbon tetrachloride	3.9	0.3	17.6	21.8
8	Chlorobenzene	1.2	8.6	1349.0	1358.7
9	Ethylbenzene	2.1	0.0	0.0	2.1
10	m- & p-Xylenes	2.8	0.0	4670.0	4672.8
11	o-Xylenes	0.0	0.0	2044.0	2044.0
12	Toluene	3.9	0.0	1588.0	1591.9
13	1,3,5-Trimethylbenzene	0.0	0.0	5.7	5.7
14	Styrene	0.1	3.1	229.0	232.2
15	Isopropylbenzene	0.0	0.3	111.0	111.3
16	n-Propylbenzene	0.0	0.0	6.0	6.0
17	t-butylbenzene	2.8	14.1	1583.0	1599.9
18	Sec-butylbenzene	0.0	0.0	5.8	5.8
19	Tetrachloroethylene	0.1	0.3	51.4	51.9
Total VOC =		23.1	27.4	11915.0	11965.6



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LOCATION:4 - ALKYL AMINES CHEMICAL

VOLATILE ORGANIC COMPOUNDS IN AMBIENT AIR QUALITY

Alkyl Amines Chemical-Patalganga

Date & Time : 25.02.2014 [14:20 Hrs] - 26.02.2014 [14:20 Hrs]

S.NO	Parameter	14:20 - 22:20 Hrs	22:20 - 06:20 Hrs	06:20 - 14:20 Hrs	24 hours (Total)
		Concentration ($\mu\text{g}/\text{m}^3$)			
1	Chloroform	0.1	0.2	0.3	0.6
2	1,1,1,2-Tetrachloroethane	0.2	0.4	0.4	0.9
3	1,2-Dichloroethane	2.4	215.0	2.3	219.6
4	Benzene	7.0	0.0	3.1	10.1
5	Carbon tetrachloride	0.8	0.4	0.3	1.5
6	Chlorobenzene	1.3	15.9	7.2	24.3
7	Ethylbenzene	0.0	0.0	12.1	12.1
8	m- & p-Xylenes	12.7	0.0	16.5	29.2
9	o-Xylenes	0.0	8.3	0.0	8.3
10	Toluene	3.8	0.0	7.4	11.2
11	Styrene	0.1	1.2	0.7	2.1
Total VOC =		28.3	241.5	50.0	319.8



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LOCATION:5 - RELIANCE INDUSTRIES

VOLATILE ORGANIC COMPOUNDS IN AMBIENT AIR QUALITY

Reliance Industries-Patalganga

Date & Time : 25.02.2014 [14:10Hrs] - 26.02.2014 [14:10Hrs]

S.NO	Parameter	14:10 - 22:10 Hrs	22:10 - 06:10 Hrs	06:10 - 14:10 Hrs	24 hours (Total)
		Concentration ($\mu\text{g}/\text{m}^3$)			
1	Chloroform	0.0	0.1	1.7	1.8
2	1,2-Dichloroethane	0.4	26.9	5.6	32.8
3	1,2-Dichlorobenzene	0.2	6.5	0.1	6.7
4	Benzene	0.1	0.9	3.0	3.9
5	Chlorobenzene	0.3	0.0	1.5	1.8
6	Ethylbenzene	1.5	17.1	9.6	28.2
7	m- & p-Xylenes	2.0	23.4	13.1	38.5
8	o-Xylenes	0.0	9.1	0.0	9.1
9	Toluene	1.5	0.0	0.0	1.5
10	Styrene	0.1	1.9	0.1	2.1
11	t-butylbenzene	288.0	59.7	0.0	347.7
Total VOC =		294.0	145.5	34.5	474.0



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FUGITIVE EMISSION RESULTS OF PATALAGANGA INDUSTRIES

S.NO	FUGITIVE EMISSION MONITORING	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASTRA	
	SAMPLING SITE:RELIANCE INDUSTRIAL LTD	
	LOCATION:n-PENTANE FRACTION AREA	
	SAMPLING DATE:25.02.2014	
	SAMPLING TIME:17.35 - 21.35	
	PARAMETERS	RESULTS (µg/m3)
1	1,2-Dichloropropane	2.6
2	Benzene	27.8
3	t-butylbenzene	2459.4
4	sec-Butylbenzene	2.2
5	1,2-Dichlorobenzene	1.0
TOTAL VOC =		2493.0



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S.NO	FUGITIVE EMISSION MONITORING	
	SAMPLING AREA:PATALGANGA. AREA,MAHARAISTRA	
	SAMPLING SITE:RELIANCE INDUSTRIAL LTD	
	LOCATION:LAB PROCESS TANK (NEAR GA901A PUMP)	
	SAMPLING DATE:25.02.2014	
	SAMPLING TIME:16.30 - 20.30	
	PARAMETERS	RESULTS (µg/m3)
1	Chloroform	58.8
2	Carbon tetrachloride	88.0
3	1,2-Dichloropropane	300.0
4	Trichloroethylene	5.6
5	Toluene	1196.2
6	Tetrachloroethylene	19.8
7	Dibromochloromethane	4.8
8	1,1,1,2-Tetrachloroethane	24.0
9	Ethylbenzene	615.8
10	m- & p-Xylenes	841.4
11	Styrene	82.8
12	Isopropylbenzene	75.0
13	Bromoform	9.2
14	n-Propylbenzene	14.8
15	1,3,5-Trimethylbenzene	41.4
16	1,2,4-Trimethylbenzene	62.4
17	sec-Butylbenzene	41.6
18	1,3-Dichlorobenzene	8.6
19	1,4-Dichlorobenzene	8.6
20	1,2,4-Trichlorobenzene	2.2
21	1,2-Dichlorobenzene	11.6
TOTAL VOC =		3512.6



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S.NO	FUGITIVE EMISSION MONITORING	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASTRA	
	SAMPLING SITE:RELIANCE INDUSTRIAL LTD	
	LOCATION:B1 LOADING &UNLOADING AREA -BAY NO 9&10	
	SAMPLING DATE:25.02.2014	
	SAMPLING TIME:16.00 - 20.00	
	PARAMETERS	RESULTS (µg/m3)
1	Chloroform	116.6
2	Carbon tetrachloride	102.6
3	Toluene	550.0
4	Tetrachloroethylene	9.4
5	Dibromochloromethane	3.0
6	1,1,1,2-Tetrachloroethane	11.8
7	Ethylbenzene	661.8
8	m- & p-Xylenes	904.4
9	Styrene	81.4
10	o-Xylenes	1002.4
11	Isopropylbenzene	1711.2
12	1,2,3-Trichloropropane	7.2
13	n-Propylbenzene	675.4
14	4-Isopropyltoluene	136.6
15	1,3-Dichlorobenzene	9.2
16	1,4-Dichlorobenzene	9.2
17	1,2-Dichlorobenzene	7.2
18	1,2-Dibromo-3- chloropropane	2.4
19	Naphthalene	15.2
TOTAL VOC =		6017.0



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S.NO	FUGITIVE EMISSION MONITORING	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASTRA	
	SAMPLING SITE:RELIANCE INDUSTRIAL LTD	
	LOCATION:UTILITY ETP OF LAB NEAR OLD HOLDING TANK AREA	
	SAMPLING DATE:25.02.2014	
	SAMPLING TIME:15.30 -19.30	
	PARAMETERS	RESULTS (µg/m3)
1	1,2-Dichloroethane	2.6
2	Ethylbenzene	18.0
3	m- & p-Xylenes	24.6
4	Styrene	1.2
5	o-Xylenes	29.8
6	Isopropylbenzene	2.4
7	n-Propylbenzene	3.4
8	1,3,5-Trimethylbenzene	30.2
9	1,2,4-Trimethylbenzene	18.4
10	n-Butylbenzene	5.4
11	1,2-Dichlorobenzene	0.8
TOTAL VOC =		136.8



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S.NO	FUGITIVE EMISSION MONITORING	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASTRA	
	SAMPLING SITE:RELIANCE INDUSTRIAL LTD	
	LOCATION:PTA-ENERGY CENTER PLANT -ETP	
	SAMPLING DATE:25.02.2014	
	SAMPLING TIME:15.00 -19.00	
	PARAMETERS	RESULTS ($\mu\text{g}/\text{m}^3$)
1	1,2-Dichloroethane	1.8
2	Benzene	16.8
3	Styrene	0.8
4	Isopropylbenzene	7.6
5	n-Propylbenzene	4.4
6	1,3,5-Trimethylbenzene	43.8
7	1,2,4-Trimethylbenzene	26.6
TOTAL VOC =		101.8



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S.NO	FUGITIVE EMISSION MONITORING	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASTRA	
	SAMPLING SITE:PRIA CETP (INDIA) LTD	
	LOCATION:CENTRE OF AREATION TANK(POLISHING TANK)	
	SAMPLING DATE:24.02.2014	
	SAMPLING TIME:13.05 -17.05	
	PARAMETERS	RESULTS ($\mu\text{g}/\text{m}^3$)
1	Chloroform	1.4
2	1,2-Dichloroethane	3.6
3	Benzene	33.2
4	Trichloroethylene	8.4
5	1,1,2-Trichloroethane	3.0
6	Ethylbenzene	8.0
7	m- & p-Xylenes	11.0
8	1,2-Dichlorobenzene	1.8
TOTAL VOC =		70.4



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S.NO	FUGITIVE EMISSION MONITORING	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASTRA	
	SAMPLING SITE:CHIPLA UNIT-2	
	LOCATION:PROCESS AREA -NEAR ER108 REACTOR	
	SAMPLING DATE:24.02.2014	
	SAMPLING TIME:17.40 -21.40	
	PARAMETERS	RESULTS (µg/m3)
1	Chloroform	1.4
2	Carbon tetrachloride	18.2
3	1,2-Dichloroethane	41.6
4	Benzene	127.2
5	Chlorobenzene	27.8
6	1,1,1,2-Tetrachloroethane	3.6
7	Ethylbenzene	54.0
8	m- & p-Xylenes	73.8
9	Styrene	5.6
10	Bromoform	2.8
11	1,2,3-Trichloropropane	2.6
12	1,2,4-Trimethylbenzene	2.6
13	sec-Butylbenzene	3.2
14	1,3-Dichlorobenzene	2.2
15	1,2-Dichlorobenzene	5.4
TOTAL VOC =		372.0



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S.NO	FUGITIVE EMISSION MONITORING	
	SAMPLING AREA:PATALGANGA. AREA,MAHARAISTRA	
	SAMPLING SITE:CHIPLA UNIT-2	
	LOCATION:NEAR ML TANK AREA	
	SAMPLING DATE:24.02.2014	
	SAMPLING TIME:17.20 -21.20	
	PARAMETERS	RESULTS (µg/m3)
1	Chloroform	3.4
2	Carbon tetrachloride	7.2
3	Benzene	50.8
4	Dibromochloromethane	2.4
5	Chlorobenzene	829.0
6	Ethylbenzene	375.8
7	m- & p-Xylenes	513.4
8	Styrene	63.0
9	Isopropylbenzene	40.4
10	Bromoform	4.2
11	1,2,3-Trichloropropane	4.4
12	n-Propylbenzene	6.2
13	1,3,5-Trimethylbenzene	24.4
14	t-butylbenzene	132695.4
15	1,2,4-Trimethylbenzene	13.2
16	sec-Butylbenzene	24.6
17	1,3-Dichlorobenzene	18.4
18	1,4-Dichlorobenzene	18.4
19	1,2-Dichlorobenzene	1411.8
20	Naphthalene	3.6
TOTAL VOC =		136110.0



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S.NO	FUGITIVE EMISSION MONITORING	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASTRA	
	SAMPLING SITE:CHIPLA UNIT-2	
	LOCATION:NEAR ETP AREATION TANK AREA	
	SAMPLING DATE:24.02.2014	
	SAMPLING TIME:17.10 -21.10	
	PARAMETERS	RESULTS (µg/m3)
1	Benzene	1.4
2	Chlorobenzene	1.9
3	m- & p-Xylenes	70.2
4	Styrene	1.6
5	o-Xylenes	26.8
TOTAL VOC =		101.9



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S.NO	FUGITIVE EMISSION MONITORING	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASTRA	
	SAMPLING SITE:BOMBAY DYING & MANUFACTURING CO LTD	
	LOCATION:NEAR ETP AREATION TANK AREA	
	SAMPLING DATE:24.02.2014	
	SAMPLING TIME:16.15 -20.15	
	PARAMETERS	RESULTS (µg/m3)
1	Chloroform	5.4
2	Carbon tetrachloride	41.0
3	1,2-Dichloroethane	198.8
4	Benzene	232.0
5	Bromodichloromethane	1.6
6	Dibromochloromethane	24.2
7	Chlorobenzene	4681.0
8	Ethylbenzene	4500.8
9	m- & p-Xylenes	6150.2
10	Styrene	423.6
11	Isopropylbenzene	74.6
12	Bromoform	67.4
13	1,2,3-Trichloropropane	15.0
14	n-Propylbenzene	5.8
15	1,2-Dichlorobenzene	898.0
16	Naphthalene	2.2
TOTAL VOC =		17321.6



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	SAMPLING AREA:PATALGANGA. AREA,MAHARASTRA	
	SAMPLING SITE:BOMBAY DYING & MANUFACTURING CO LTD	
	LOCATION:DRAW LINE PLANT AREA	
	SAMPLING DATE:24.02.2014	
	SAMPLING TIME:15.30 -19.30	
		PARAMETERS
1	1,2-Dichloroethane	2.0
2	Benzene	10.2
3	Toluene	7.2
4	Chlorobenzene	2.4
5	1,1,1,2-Tetrachloroethane	4.8
6	m- & p-Xylenes	6.6
7	Styrene	2.0
8	Isopropylbenzene	2.8
9	n-Propylbenzene	2.0
10	1,3,5-Trimethylbenzene	18.8
11	t-butylbenzene	9512.6
12	1,2,4-Trimethylbenzene	5.9
13	sec-Butylbenzene	19.0
14	1,2-Dichlorobenzene	76.4
15	Naphthalene	8.8
	TOTAL VOC =	9681.5



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S.NO	FUGITIVE EMISSION MONITORING	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASTRA	
	SAMPLING SITE:ALKYL AMINE CHEMICAL LTD	
	LOCATION: NEAR PRODUCT STORAGE TANK AREA	
	SAMPLING DATE:24.02.2014	
	SAMPLING TIME:13.15 Hrs -17.15 Hrs	
	PARAMETERS	RESULTS (µg/m3)
1	Carbon tetrachloride	44.2
2	1,2-Dichloroethane	176.2
3	Benzene	1081.6
4	Trichloroethylene	11.0
5	Toluene	5119.6
6	1,1,2-Trichloroethane	7.0
7	Tetrachloroethylene	30.4
8	Dibromochloromethane	12.8
9	Chlorobenzene	5036.0
10	1,1,1,2-Tetrachloroethane	37.2
11	Isopropylbenzene	1461.8
12	Styrene	761.4
13	Bromoform	25.2
14	n-Propylbenzene	40.0
15	1,3,5-Trimethylbenzene	73.6
16	2-Chlorotoluene	3.4
17	4-Chlorotoluene	3.4
18	t-Butylbenzene	14869.6
19	1,2,4-Trimethylbenzene	53.4
20	sec-Butylbenzene	74.2
21	4-Isopropyltoluene	68.2
22	1,3-Dichlorobenzene	15.6
23	1,4-Dichlorobenzene	15.6
24	n-Butylbenzene	1.6
25	1,2,4-Trichlorobenzene	2.2
26	1,2-Dichlorobenzene	692.8
TOTAL VOC =		29718.0



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	SAMPLING AREA:PATALGANGA. AREA,MAHARASTRA	
	SAMPLING SITE:ALKYL AMINE CHEMICAL LTD	
	LOCATION: ETP INITIAL COLLECTION TANK AREA	
	SAMPLING DATE:24.02.2014	
	SAMPLING TIME:13.10 Hrs -17.10 Hrs	
	PARAMETERS	RESULTS (µg/m3)
1	1,2-Dichloroethane	2.6
2	Benzene	9.6
3	Toluene	21.8
4	Chlorobenzene	41.2
5	m- & p-Xylenes	34.8
6	Styrene	1.6
7	o-Xylenes	12.6
8	t-Butylbenzene	396.0
9	1,2-Dichlorobenzene	26.2
TOTAL VOC =		546.4



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S.NO	FUGITIVE EMISSION MONITORING	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASTRA	
	SAMPLING SITE:ALKYL AMINE CHEMICAL LTD	
	LOCATION:METHYL AMINE PLANT PROCESS AREA	
	SAMPLING DATE:24.02.2014	
	SAMPLING TIME:13.05 -17.05	
	PARAMETERS	RESULTS (µg/m3)
1	Carbon tetrachloride	1.2
2	1,2-Dichloroethane	4.4
3	Benzene	24.6
4	Chlorobenzene	67.8
5	m- & p-Xylenes	33.4
6	Styrene	1.1
7	o-Xylenes	0.6
8	1,2-Dichlorobenzene	3.2
TOTAL VOC =		136.3



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WASTEWATER ANALYSIS REPORT - PATALAGANGA

S.NO	WATER VOC ANALYSIS	
	SAMPLING AREA:PATALGANGA AREA,MAHARASHTRA	
	SAMPLING SITE:PRIA CETP (INDIA) LTD	
	SAMPLE DESCRIPTION:ETP OUTLET	
	SAMPLING DATE:24.02.2014	
	PARAMETERS	RESULTS (mg/l)
1	1,1-Dichloroethylene	3.1
2	Methylene chloride	2.7
3	trans-1,2-Dichloroethylene	4.6
4	1,1-Dichloroethane	3.8
5	2,2-Dichloropropane	6.3
6	Chloroform	1.4
7	Bromochloromethane	5.4
8	1,1-Dichloropropene	3.9
9	Chlorobenzene	5.3
10	1,1,2,2-Tetrachloroethane	3.1
11	1,3-Dichlorobenzene	1.5
12	1,4-Dichlorobenzene	4.5
13	1,2,4-Trichlorobenzene	1.7
14	1,2-Dichlorobenzene	3.3
15	1,2-Dibromo-3- chloropropane	43.2
TOTAL VOC =		93.9



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S.NO	WATER VOC ANALYSIS	
	SAMPLING AREA:PATALGANGA AREA,MAHARASHTRA	
	SAMPLING SITE:PRIA CETP (INDIA) LTD	
	SAMPLE DESCRIPTION:ETP INLET	
	SAMPLING DATE:24.02.2014	
	PARAMETERS	RESULTS (mg/l)
1	1,1-Dichloroethylene	9.5
2	Methylene chloride	84.3
3	trans-1,2-Dichloroethylene	29.7
4	Bromochloromethane	3.6
5	1,1-Dichloropropene	14.3
6	1,2-Dichloroethane	2.0
7	Benzene	1.8
8	Trichloroethylene	0.8
9	1,2-Dichloropropane	2.7
10	Dibromomethane	6.9
11	cis-1,3-Dichloropropene	3.0
12	trans-1,3-Dichloropropene	3.8
13	1,3-Dichloropropane	19.6
14	Tetrachloroethylene	10.4
15	Chlorobenzene	6.3
16	1,1,1,2-Tetrachloroethane	1.8
17	o-Xylene	0.4
18	Isopropylbenzene	8.1
19	Bromoform	4.4
20	Bromobenzene	1.5
21	t-butylbenzene	2.6
22	1,3-Dichlorobenzene	6.5
23	1,4-Dichlorobenzene	13.9
24	1,2,4-Trichlorobenzene	3.8
25	1,2-Dichlorobenzene	4.0
26	1,2-Dibromo-3- chloropropane	229.7
27	1,2,3-trichlorobenzene	7.9
TOTAL VOC =		483.2



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S.NO	WATER VOC ANALYSIS	
	SAMPLING AREA:PATALGANGA AREA,MAHARASHTRA	
	SAMPLING SITE:PRIA CETP (INDIA) LTD	
	SAMPLE DESCRIPTION:EQUALIZASATION TANK WATER	
	SAMPLING DATE:24.02.2014	
	PARAMETERS	RESULTS (mg/l)
1	1,1-Dichloroethylene	22.3
2	trans-1,2-Dichloroethylene	5.7
3	1,1-Dichloroethane	2.8
4	cis-1,2-Dichloroethylene	4.6
5	Chloroform	4.4
6	Bromochloromethane	12.3
7	1,1,1-Trichloroethane	8.5
8	1,1-Dichloropropene	9.7
9	1,2-Dichloroethane	2.0
10	trans-1,3-Dichloropropene	6.7
11	1,1,2-Trichloroethane	2.4
12	1,3-Dichloropropane	21.0
13	Tetrachloroethylene	5.0
14	1,2-Dibromoethane	40.4
15	Chlorobenzene	33.0
16	1,1,1,2-Tetrachloroethane	17.9
17	m- & p-Xylenes	3.2
18	o-Xylene	3.5
19	Styrene	3.6
20	Isopropylbenzene	2.8
21	1,1,2,2-Tetrachloroethane	12.8
22	1,3-Dichlorobenzene	20.9
23	1,4-Dichlorobenzene	13.4
24	n-Butylbenzene	3766.8
25	1,2-Dichlorobenzene	53.4
26	1,2,3-trichlorobenzene	4.9
27	Naphthalene	2.0
TOTAL VOC =		4086.0



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S.NO	WATER VOC ANALYSIS	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASHTRA	
	SAMPLING SITE:CIPLA UNIT- II	
	SAMPLE DESCRIPTION:ETP INLET WATER	
	SAMPLING DATE:24.02.2014	
	PARAMETERS	RESULTS (mg/l)
1	1,1,1,2-Tetrachloroethane	1.3
2	1,1,1-Trichloroethane	4.2
3	1,1,2,2-Tetrachloroethane	1.5
4	1,1,2-Trichloroethane	3.4
5	1,1-Dichloroethane	2.4
6	1,1-Dichloroethylene	2.8
7	1,1-Dichloropropene	5.8
8	1,2,3-trichlorobenzene	7.7
9	1,2,3-Trichloropropane	4.1
10	1,2,4-Trichlorobenzene	1.9
11	1,2,4-Trimethylbenzene	2.1
12	1,2-Dibromo-3- chloropropane	12.0
13	1,2-Dibromoethane	1.5
14	1,2-Dichlorobenzene	14.1
15	1,2-Dichloroethane	19.3
16	1,2-Dichloropropane	14.6
17	1,3,5-Trimethylbenzene	17.2
18	1,3-Dichlorobenzene	66.3
19	1,3-Dichloropropane	16.6
20	1,4-Dichlorobenzene	21.8
21	2,2-Dichloropropane	29.2
22	2-Chlorotoluene	25.0
23	4-Chlorotoluene	6.5
24	4-Isopropyltoluene	3.5
25	Benzene	22.0
26	Bromobenzene	11.3
27	Bromochloromethane	3.7
28	Bromodichloromethane	6.5
29	Bromomethane	2.3
TOTAL VOC =		330.7



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S.NO	WATER VOC ANALYSIS	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASHTRA	
	SAMPLING SITE:CIPLA UNIT- II	
	SAMPLE DESCRIPTION:ETP OUTLET WATER	
	SAMPLING DATE:24.02.2014	
	PARAMETERS	RESULTS (mg/l)
1	1,1-Dichloroethylene	11.7
2	Methylene chloride	22.2
3	trans-1,2-Dichloroethylene	8.4
4	1,1-Dichloroethane	1.5
5	2,2-Dichloropropane	13.9
6	cis-1,2-Dichloroethylene	11.0
7	Chloroform	19.8
8	1,1,1-Trichloroethane	22.5
9	1,1-Dichloropropene	1.4
10	Carbon tetrachloride	3.9
11	1,2-Dichloroethane	0.9
12	Benzene	1.4
13	Bromodichloromethane	19.3
14	Dibromomethane	2.2
15	Toluene	6.8
16	1,3-Dichloropropane	17.4
17	Dibromochloromethane	8.6
18	Chlorobenzene	15.4
19	1,1,1,2-Tetrachloroethane	1.1
20	Ethylbenzene	18.6
21	m- & p-Xylenes	3.0
22	Isopropylbenzene	6.0
23	1,1,2,2-Tetrachloroethane	1.4
24	1,2,3-Trichloropropane	8.6
25	1,3-Dichlorobenzene	5.5
26	1,4-Dichlorobenzene	14.8
27	1,2-Dibromo-3- chloropropane	49.5
28	1,2,3-trichlorobenzene	3.3
29	Naphthalene	4.8
TOTAL VOC =		305.1



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S.NO	WATER VOC ANALYSIS	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASHTRA	
	SAMPLING SITE:BOMBAY DYING&MANUFACTURATION CO	
	SAMPLE DESCRIPTION:ETP INLET	
	SAMPLING DATE:24.02.2014	
	PARAMETERS	RESULTS (mg/l)
1	trans-1,2-Dichloroethylene	14.4
2	1,1-Dichloroethane	2.9
3	Bromochloromethane	15.0
4	1,1-Dichloropropene	8.5
5	1,2-Dichloroethane	4.2
6	Benzene	2.1
7	Trichloroethylene	4.8
8	1,2-Dichloropropane	10.0
9	Bromodichloromethane	3.5
10	Dibromomethane	13.1
11	1,1,2-Trichloroethane	1.4
12	1,3-Dichloropropane	3.3
13	Dibromochloromethane	8.6
14	1,2-Dibromoethane	10.9
15	Chlorobenzene	7.3
16	o-Xylene	0.6
17	1,1,2,2-Tetrachloroethane	7.7
18	n-Propylbenzene	3.9
19	Bromobenzene	3.8
20	2-Chlorotoluene	3.7
21	t-butylbenzene	4.3
22	sec-Butylbenzene	4.8
23	1,3-Dichlorobenzene	20.7
24	1,4-Dichlorobenzene	19.7
25	1,2,4-Trichlorobenzene	12.9
26	1,2-Dichlorobenzene	7.7
27	1,2-Dibromo-3- chloropropane	371.1
28	1,2,3-trichlorobenzene	3.1
TOTAL VOC =		573.7



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S.NO	WATER VOC ANALYSIS	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASHTRA	
	SAMPLING SITE:BOMBAY DYING&MANUFACTURATION CO	
	SAMPLE DESCRIPTION:ETP OUTLET	
	SAMPLING DATE:24.02.2014	
	PARAMETERS	RESULTS (mg/l)
1	1,1-Dichloroethylene	5.9
2	trans-1,2-Dichloroethylene	5.4
3	2,2-Dichloropropane	4.3
4	cis-1,2-Dichloroethylene	2.2
5	Chloroform	4.3
6	Bromochloromethane	11.6
7	1,1-Dichloropropene	8.2
8	1,2-Dichloroethane	7.2
9	Benzene	7.3
10	Trichloroethylene	3.8
11	1,2-Dichloropropane	17.2
12	Dibromomethane	12.5
13	cis-1,3-Dichloropropene	7.0
14	1,1,2,2-Tetrachloroethane	5.1
15	Bromobenzene	4.4
16	1,3-Dichlorobenzene	5.5
17	1,4-Dichlorobenzene	2.3
18	1,2-Dichlorobenzene	25.2
19	1,2,3-trichlorobenzene	202.3
20	Naphthalene	6.0
TOTAL VOC =		347.7



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S.NO	WATER VOC ANALYSIS	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASHTRA	
	SAMPLING SITE:ALKYL AMINE CHEMICALS LTD	
	SAMPLE DESCRIPTION:ETP INLET	
	SAMPLING DATE:24.02.2014	
	PARAMETERS	RESULTS (mg/l)
1	1,1-Dichloroethylene	12.7
2	Methylene chloride	19.1
3	trans-1,2-Dichloroethylene	12.2
4	1,1-Dichloroethane	3.3
5	2,2-Dichloropropane	2.6
6	cis-1,2-Dichloroethylene	20.2
7	Chloroform	2.1
8	Bromochloromethane	8.6
9	1,1-Dichloropropene	7.1
10	Carbon tetrachloride	4.0
11	1,2-Dichloroethane	12.9
12	Benzene	14.7
13	Trichloroethylene	14.5
14	1,2-Dichloropropane	51.6
15	Bromodichloromethane	4.6
16	Dibromomethane	16.4
17	cis-1,3-Dichloropropene	25.7
18	trans-1,3-Dichloropropene	17.3
19	1,3-Dichloropropane	16.4
20	Tetrachloroethylene	3.9
21	Chlorobenzene	3.8
22	1,1,1,2-Tetrachloroethane	8.4
23	Bromobenzene	1.9
24	t-butylbenzene	2.2
25	1,2,4-Trimethylbenzene	2.5
26	1,3-Dichlorobenzene	7.2
27	1,2-Dichlorobenzene	3.9
28	1,2-Dibromo-3- chloropropane	59.2
29	1,2,3-trichlorobenzene	5.4
TOTAL VOC =		364.2



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S.NO	WATER VOC ANALYSIS	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASHTRA	
	SAMPLING SITE:ALKYL AMINE CHEMICALS LTD	
	SAMPLE DESCRIPTION:ETP OUTLET	
	SAMPLING DATE:24.02.2014	
	PARAMETERS	RESULTS (mg/l)
1	1,1-Dichloroethylene	8.2
2	1,1-Dichloroethane	2.2
3	1,1-Dichloropropene	9.0
4	1,2-Dichloroethane	1.8
5	Benzene	1.4
6	Trichloroethylene	4.0
7	1,2-Dichloropropane	15.0
8	Bromodichloromethane	1.9
9	Dibromomethane	5.4
10	cis-1,3-Dichloropropene	6.9
11	Tetrachloroethylene	2.9
12	m- & p-Xylenes	2.5
13	Isopropylbenzene	3.7
14	1,1,2,2-Tetrachloroethane	5.3
15	1,2,3-Trichloropropane	8.5
16	sec-Butylbenzene	3.1
17	1,4-Dichlorobenzene	6.4
18	n-Butylbenzene	9.2
19	1,2-Dichlorobenzene	12.4
20	1,2,3-trichlorobenzene	75.3
TOTAL VOC =		184.9



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S.NO	WATER VOC ANALYSIS	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASHTRA	
	SAMPLING SITE:RELIANCE INDUSTRIALS LTD	
	SAMPLE DESCRIPTION:TERSEARY CLARIFIER OVERFLOW	
	SAMPLING DATE:24.02.2014	
	PARAMETERS	RESULTS (mg/l)
1	1,1-Dichloroethylene	4.8
2	Methylene chloride	30.6
4	2,2-Dichloropropane	10.9
6	Bromochloromethane	11.2
8	1,1-Dichloropropene	13.9
9	Carbon tetrachloride	7.8
10	1,2-Dichloroethane	4.3
11	Benzene	14.7
12	Trichloroethylene	3.9
14	Bromodichloromethane	1.8
15	Dibromomethane	15.9
16	cis-1,3-Dichloropropene	8.2
17	1,1,1,2-Tetrachloroethane	2.7
18	o-Xylene	0.7
20	Bromobenzene	4.5
22	t-butylbenzene	5.6
24	4-Isopropyltoluene	2.4
25	1,3-Dichlorobenzene	8.6
26	1,4-Dichlorobenzene	7.9
27	n-Butylbenzene	2.3
28	1,2-Dichlorobenzene	6.7
29	1,2-Dibromo-3- chloropropane	79.1
30	1,2,3-trichlorobenzene	3.6
TOTAL VOC =		252.4



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WATER VOC ANALYSIS		
SAMPLING AREA:PATALGANGA. AREA,MAHARASHTRA		
SAMPLING SITE:RELIANCE INDUSTRIALS LTD		
SAMPLE DESCRIPTION:UTILITY ETP OLD HOLDING TANK WATER		
SAMPLING DATE:24.02.2014		
S.NO	PARAMETERS	RESULTS (mg/l)
1	1,1-Dichloroethylene	18.1
2	trans-1,2-Dichloroethylene	3.0
4	2,2-Dichloropropane	8.4
7	Bromochloromethane	12.3
9	1,1-Dichloropropene	8.4
10	Carbon tetrachloride	2.2
11	1,2-Dichloroethane	5.4
12	Benzene	6.2
13	Trichloroethylene	4.8
14	1,2-Dichloropropane	11.7
15	Bromodichloromethane	2.9
16	Dibromomethane	5.0
17	cis-1,3-Dichloropropene	4.1
19	o-Xylene	1.1
20	1,2,3-Trichloropropane	14.0
21	n-Propylbenzene	12.5
22	Bromobenzene	3.3
27	sec-Butylbenzene	14.1
28	1,3-Dichlorobenzene	18.9
29	1,4-Dichlorobenzene	17.0
30	n-Butylbenzene	3.0
31	1,2-Dichlorobenzene	3.1
32	1,2-Dibromo-3- chloropropane	161.5
33	1,2,3-trichlorobenzene	2.2
34	Naphthalene	8.3
TOTAL VOC =		351.7



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S.NO	WATER VOC ANALYSIS	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASHTRA	
	SAMPLING SITE:RELIANCE INDUSTRIALS LTD	
	SAMPLE DESCRIPTION:ENERGY CENTER PLANT-EFFLUENT SUMP OUTLET	
	SAMPLING DATE:24.02.2014	
	PARAMETERS	RESULTS (mg/l)
1	trans-1,2-Dichloroethylene	1.7
2	Carbon tetrachloride	5.3
3	1,2-Dichloroethane	3.2
4	Benzene	5.0
5	Trichloroethylene	4.1
6	1,2-Dichloropropane	6.6
7	Bromodichloromethane	8.3
8	Dibromomethane	1.9
9	cis-1,3-Dichloropropene	5.3
10	trans-1,3-Dichloropropene	18.9
11	1,1,2-Trichloroethane	10.3
12	1,3-Dichloropropane	10.5
13	Tetrachloroethylene	4.3
14	Dibromochloromethane	17.8
15	1,2-Dibromoethane	2.2
16	Chlorobenzene	8.3
17	1,1,1,2-Tetrachloroethane	2.5
18	Ethylbenzene	15.1
19	o-Xylene	7.4
20	1,1,2,2-Tetrachloroethane	9.5
21	1,3-Dichlorobenzene	1.4
22	1,4-Dichlorobenzene	3.1
23	n-Butylbenzene	3.1
24	1,2-Dichlorobenzene	1.7
25	1,2,3-trichlorobenzene	57.6
26	Naphthalene	3.0
TOTAL VOC =		218.3



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S.NO	WATER VOC ANALYSIS	
	SAMPLING AREA:PATALGANGA. AREA,MAHARASHTRA	
	SAMPLING SITE:PATALGANGA RIVER	
	SAMPLE DESCRIPTION:AFTER DISCHARGE POINT OF CETP	
	SAMPLING DATE:24.02.2014	
	PARAMETERS	RESULTS (mg/l)
1	1,1-Dichloroethylene	2.7
2	Methylene chloride	14.6
6	Bromochloromethane	3.8
8	1,2-Dichloroethane	3.5
9	Benzene	2.0
10	Trichloroethylene	1.8
11	1,2-Dichloropropane	3.7
12	Bromodichloromethane	2.0
13	Dibromomethane	5.3
14	trans-1,3-Dichloropropene	6.0
15	1,3-Dichloropropane	2.9
16	Tetrachloroethylene	7.3
17	Chlorobenzene	3.0
24	1,2-Dibromo-3- chloropropane	56.2
TOTAL VOC =		115.0