

Annex D6

Ambient VOCs, Ammonia and H₂S Monitoring Results

Table D6.1 Ambient VOCs, Ammonia and H₂S Monitoring Results (February 2022)

Parameters	Limit Level	Monitoring Results (µg m ⁻³)			
		AM1	AM2	AM3	AM4
Ammonia	180	<10	<10	<10	<10
H ₂ S	42	<14	<14	<14	<14
Methane	NA ^(a)	0.00068% (v/v)	0.00031% (v/v)	0.00020% (v/v)	0.00020% (v/v)
1.1.1-Trichloroethane	5,550	<0.8	<0.8	<0.8	<0.8
1.2-Dibromoethane (EDB)	39	<1.0	<1.0	<1.0	<1.0
1.2-Dichloroethane	210	0.5	0.5	0.5	0.6
Benzene	33	2.0	1.5	1.2	1.5
Butan-2-ol	667	<0.6	<0.6	<0.6	<0.6
Butanethiol	4	<1.2	<1.2	<1.2	<1.2
Carbon Disulphide	150	1.8	1.2	0.8	1.2
Carbon Tetrachloride	64	0.7	0.8	0.7	0.8
Chloroform	99	<0.8	<0.8	<0.8	<0.8
Decanes	3,608	0.7	<0.7	1.8	<0.7
Dichlorobenzene	120	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoro-methane	NA ^(a)	1.3	1.8	1.3	1.9
Dimethylsulphide	8	<0.2	<0.2	<0.2	<0.2
Dipropyl ether	NA ^(a)	<0.8	<0.8	<0.8	<0.8
Limonene	212	0.8	<0.4	0.9	<0.4
Ethanethiol	13	<0.6	<0.6	<0.6	<0.6
Ethanol	19,200	8.2	<3.8	<3.8	<3.8
Ethyl butanoate	71	<1.0	<1.0	<1.0	<1.0
Ethyl propionate	29	<0.8	<0.8	<0.8	<0.8
Ethyl benzene	738	0.9	0.6	1.5	0.6
Heptane	2,746	<0.8	<0.8	<0.8	<0.8
Methanethiol	10	<0.4	<0.4	<0.4	<0.4
Methanol	2,660	13.3	29.9	37.2	22.0
Methyl butanoate	30	<0.8	<0.8	<0.8	<0.8
Methyl propionate	353	<0.7	<0.7	<0.7	<0.7
Methylene Chloride	3,530	2.4	3.0	2.9	3.2
Butyl acetate	76	<1.0	<1.0	<1.0	<1.0
Butyl benzene	47	<1.0	<1.0	<1.0	<1.0

Parameters	Limit Level	Monitoring Results ($\mu\text{g m}^{-3}$)			
		AM1	AM2	AM3	AM4
Nonane	11,540	<0.9	<0.9	<0.9	<0.9
Propyl benzene	19	<0.8	<0.8	<0.8	<0.8
Octane	7,942	<0.9	<0.9	<0.9	<0.9
Propyl propionate	276	<1.0	<1.0	<1.0	<1.0
Terpenes	NA ^(a)	2.3	0.9	0.9	<0.8
Tetrachloroethylene	1,380	0.7	0.7	0.7	<0.7
Toluene	1,244	1.7	1.5	2.8	1.9
Trichloroethylene	5,500	<1.1	<1.1	<1.1	<1.1
Undecane	5,562	<1.2	<1.2	<1.2	<1.2
Vinyl Chloride	26	<0.3	<0.3	<0.3	<0.3
Xylenes	534	2.3	1.6	3.5	1.0

Notes:

(a) No relevant WHO/USEPA/CARB's ambient criteria, odour thresholds and WEL available.

Table D6.2 Ambient VOCs, Ammonia and H₂S Monitoring Results (May 2022)

Parameters	Limit Level	Monitoring Results ($\mu\text{g m}^{-3}$)			
		AM1	AM2	AM3	AM4
Ammonia	180	<10	<10	<10	<10
H ₂ S	42	<14	<14	<14	<14
Methane	NA ^(a)	0.00019% (v/v)	0.00017% (v/v)	0.00041% (v/v)	0.00018% (v/v)
1.1.1-Trichloroethane	5,550	<0.8	<0.8	<0.8	<0.8
1.2-Dibromoethane (EDB)	39	<1.0	<1.0	<1.0	<1.0
1.2-Dichloroethane	210	0.9	0.9	0.4	1.0
Benzene	33	1.0	0.8	<0.5	0.9
Butan-2-ol	667	<0.6	<0.6	<0.6	<0.6
Butanethiol	4	<1.2	<1.2	<1.2	<1.2
Carbon Disulphide	150	0.8	<0.5	<0.5	1.1
Carbon Tetrachloride	64	0.7	0.6	<0.6	0.6
Chloroform	99	<0.8	<0.8	<0.8	<0.8
Decanes	3,608	0.7	<0.7	1.1	0.7
Dichlorobenzene	120	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoro-methane	NA ^(a)	1.0	1.1	<0.6	0.9
Dimethylsulphide	8	<0.2	<0.2	<0.2	<0.2
Dipropyl ether	NA ^(a)	<0.8	<0.8	<0.8	<0.8
Limonene	212	1.1	1.2	4.0	1.1
Ethanethiol	13	<0.6	<0.6	<0.6	<0.6
Ethanol	19,200	<3.8	<3.8	<3.8	<3.8
Ethyl butanoate	71	<1.0	<1.0	<1.0	<1.0
Ethyl propionate	29	<0.8	<0.8	<0.8	<0.8
Ethyl benzene	738	1.0	1.0	1.3	2.0
Heptane	2,746	<0.8	<0.8	<0.8	0.8
Methanethiol	10	<0.4	<0.4	<0.4	<0.4
Methanol	2,660	29.4	13.7	<2.6	31.3
Methyl butanoate	30	<0.8	<0.8	<0.8	<0.8
Methyl propionate	353	<0.7	<0.7	<0.7	<0.7
Methylene Chloride	3,530	4.5	5.4	0.6	5.5
Butyl acetate	76	1.1	<1.0	<1.0	1.7
Butyl benzene	47	<1.0	<1.0	<1.0	<1.0
Nonane	11,540	<0.9	<0.9	<0.9	<0.9

Parameters	Limit Level	Monitoring Results ($\mu\text{g m}^{-3}$)			
		AM1	AM2	AM3	AM4
Propyl benzene	19	<0.8	<0.8	<0.8	<0.8
Octane	7,942	<0.9	<0.9	<0.9	<0.9
Propyl propionate	276	<1.0	<1.0	<1.0	<1.0
Terpenes	NA ^(a)	1.0	<0.8	1.8	2.2
Tetrachloroethylene	1,380	<0.7	<0.7	<0.7	<0.7
Toluene	1,244	3.5	3.6	2.6	5.4
Trichloroethylene	5,500	<1.1	<1.1	<1.1	<1.1
Undecane	5,562	<1.2	<1.2	1.5	<1.2
Vinyl Chloride	26	<0.3	<0.3	<0.3	<0.3
Xylenes	534	3.0	3.0	5.9	6.3

Notes:

(a) No relevant WHO/USEPA/CARB's ambient criteria, odour thresholds and WEL available.

Table D6.3 Ambient VOCs, Ammonia and H₂S Monitoring Results (August 2022)

Parameters	Limit Level	Monitoring Results ($\mu\text{g m}^{-3}$)			
		AM1	AM2	AM3	AM4
Ammonia	180	18	19	25	26
H ₂ S	42	<15	<15	<15	<15
Methane	NA ^(a)	0.00023% (v/v)	0.00022% (v/v)	0.00036% (v/v)	0.00032% (v/v)
1.1.1-Trichloroethane	5,550	<0.9	<0.9	<0.9	<0.9
1.2-Dibromoethane (EDB)	39	<1.3	<1.3	<1.3	<1.3
1.2-Dichloroethane	210	<0.6	<0.6	<0.6	<0.6
Benzene	33	<0.5	<0.5	<0.5	<0.5
Butan-2-ol	667	<0.6	<0.6	<0.6	<0.6
Butanethiol	4	<1.2	<1.2	<1.2	<1.2
Carbon Disulphide	150	<0.5	<0.5	11.4	1.6
Carbon Tetrachloride	64	<1.0	<1.0	<1.0	<1.0
Chloroform	99	<0.8	<0.8	<0.8	<0.8
Decanes	3,608	1.3	<1.0	1.1	<1.0
Dichlorobenzene	120	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoro-methane	NA ^(a)	1.4	1.7	2.1	2
Dimethylsulphide	8	<0.4	<0.4	<0.4	<0.4
Dipropyl ether	NA ^(a)	<0.8	<0.8	<0.8	<0.8
Limonene	212	<0.9	<0.9	<0.9	<0.9
Ethanethiol	13	<0.6	<0.6	<0.6	<0.6
Ethanol	19,200	<3.8	<3.8	<3.8	25.4
Ethyl butanoate	71	<1.0	<1.0	<1.0	<1.0
Ethyl propionate	29	<0.8	<0.8	<0.8	<0.8
Ethyl benzene	738	<0.8	<0.8	<0.8	1.3
Heptane	2,746	<0.8	<0.8	<0.8	<0.8
Methanethiol	10	<0.4	<0.4	<0.4	<0.4
Methanol	2,660	13	<2.6	7.6	29.5
Methyl butanoate	30	<0.8	<0.8	<0.8	<0.8
Methyl propionate	353	<0.7	<0.7	<0.7	<0.7
Methylene Chloride	3,530	<0.6	<0.6	2.7	4
Butyl acetate	76	<1.0	<1.0	<1.0	<1.0
Butyl benzene	47	<1.0	<1.0	<1.0	<1.0
Nonane	11,540	<0.9	<0.9	<0.9	<0.9

Parameters	Limit Level	Monitoring Results ($\mu\text{g m}^{-3}$)			
		AM1	AM2	AM3	AM4
Propyl benzene	19	<0.8	<0.8	<0.8	<0.8
Octane	7,942	<0.9	<0.9	<0.9	<0.9
Propyl propionate	276	<1.0	<1.0	<1.0	<1.0
Terpenes	NA ^(a)	1	<0.8	1.1	1.4
Tetrachloroethylene	1,380	<1.2	<1.2	<1.2	<1.2
Toluene	1,244	<0.6	<0.6	0.7	2.7
Trichloroethylene	5,500	<1.1	<1.1	<1.1	<1.1
Undecane	5,562	<1.2	<1.2	<1.2	<1.2
Vinyl Chloride	26	<0.4	<0.4	<0.4	<0.4
Xylenes	534	<0.5	<0.5	<0.5	2.5

Notes:

(a) No relevant WHO/USEPA/CARB's ambient criteria, odour thresholds and WEL available.

Table D6.4 Ambient VOCs, Ammonia and H₂S Monitoring Results (November 2022)

Parameters	Limit Level	Monitoring Results ($\mu\text{g m}^{-3}$)			
		AM1	AM2	AM3	AM4
Ammonia	180	43	23	22	23
H ₂ S	42	<15	<15	<15	<15
Methane	NA ^(a)	0.0003 %(v/v)	0.0003 %(v/v)	0.00024 %(v/v)	0.00017 %(v/v)
1.1.1-Trichloroethane	5,550	<0.8	<0.8	<0.8	<0.8
1.2-Dibromoethane (EDB)	39	<1.0	<1.0	<1.0	<1.0
1.2-Dichloroethane	210	1.3	1.6	1.3	1.4
Benzene	33	0.9	1	0.8	0.9
Butan-2-ol	667	<0.6	<0.6	<0.6	<0.6
Butanethiol	4	<1.2	<1.2	<1.2	<1.2
Carbon Disulphide	150	<0.5	<0.5	<0.5	0.5
Carbon Tetrachloride	64	<0.6	<0.6	<0.6	<0.6
Chloroform	99	<0.8	<0.8	<0.8	<0.8
Decanes	3,608	<0.7	<0.7	<0.7	<0.7
Dichlorobenzene	120	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoro-methane	NA ^(a)	1.3	1.9	0.9	1.2
Dimethylsulphide	8	<0.2	<0.2	<0.2	<0.2
Dipropyl ether	NA ^(a)	<0.8	<0.8	<0.8	<0.8
Limonene	212	<0.4	<0.4	<0.4	<0.4
Ethanethiol	13	<0.6	<0.6	<0.6	<0.6
Ethanol	19,200	<3.8	<3.8	<3.8	4.1
Ethyl butanoate	71	<1.0	<1.0	<1.0	<1.0
Ethyl propionate	29	<0.8	<0.8	<0.8	<0.8
Ethyl benzene	738	0.8	1	1.4	0.6
Heptane	2,746	<0.8	<0.8	<0.8	<0.8
Methanethiol	10	<0.4	<0.4	<0.4	<0.4
Methanol	2,660	15.8	<2.6	<2.6	18.3
Methyl butanoate	30	<0.8	<0.8	<0.8	<0.8
Methyl propionate	353	<0.7	<0.7	<0.7	<0.7
Methylene Chloride	3,530	4.6	6.1	5.7	4.6
Butyl acetate	76	<1.0	<1.0	<1.0	<1.0
Butyl benzene	47	<1.0	<1.0	<1.0	<1.0
Nonane	11,540	<0.9	<0.9	<0.9	<0.9

Parameters	Limit Level	Monitoring Results ($\mu\text{g m}^{-3}$)			
		AM1	AM2	AM3	AM4
Propyl benzene	19	<0.8	<0.8	<0.8	<0.8
Octane	7,942	<0.9	<0.9	<0.9	<0.9
Propyl propionate	276	<1.0	<1.0	<1.0	<1.0
Terpenes	NA ^(a)	0.9	<0.8	1.2	<0.8
Tetrachloroethylene	1,380	<0.7	<0.7	<0.7	<0.7
Toluene	1,244	2.6	3	3.6	2.6
Trichloroethylene	5,500	<1.1	<1.1	<1.1	<1.1
Undecane	5,562	<1.2	<1.2	<1.2	<1.2
Vinyl Chloride	26	<0.3	<0.3	<0.3	<0.3
Xylenes	534	0.7	1.1	3.3	0.6

Notes:

(a) No relevant WHO/USEPA/CARB's ambient criteria, odour thresholds and WEL available.