

**BCMOE CSR**

## General Numerical Vapour Standards

## Schedule 3.3 Substance

MRL	Ag, UP, Res		Commercial		Industrial		Parkade	
	µg	µg/m <sup>3</sup>	min vol (L)	µg/m <sup>3</sup>	min vol (L)	µg/m <sup>3</sup>	min vol (L)	µg/m <sup>3</sup>

**Volatile Organic Compounds (VOCs) – Thermal Desorption (TD) Tube<sup>1</sup>**

Acetone	0.01	2,500	0.5	7,000	0.5	25,000	0.5	20,000	0.5
Acrylonitrile	0.001	0.5	2	0.5	2	1.5	0.7	1	1
Allyl chloride	0.001	1	1	3	0.5	9	0.5	8	0.5
Benzene	0.002	1.5	1.4	4	0.5	10	0.5	10	0.5
Bromobenzene	0.001	60	0.5	200	0.5	550	0.5	500	0.5
Bromodichloromethane	0.001	50	0.5	150	0.5	550	0.5	400	0.5
Bromoform	0.001	9	0.5	30	0.5	85	0.5	75	0.5
1,3-Butadiene	0.004	2	2	2	2	3	1.4	2.5	1.6
Carbon disulfide	0.01	700	0.5	2,000	0.5	6,500	0.5	5,500	0.5
Carbon tetrachloride	0.001	1.5	0.7	5	0.5	15	0.5	15	0.5
Chlorobenzene	0.001	10	0.5	30	0.5	90	0.5	80	0.5
Chloroethane	0.005	10,000	0.5	30,000	0.5	90,000	0.5	80,000	0.5
Chloroform	0.001	100	0.5	300	0.5	900	0.5	800	0.5
2-Chlorotoluene	0.002	50	0.5	150	0.5	550	0.5	400	0.5
n-Decane	0.003	2,500	0.5	8,000	0.5	25,000	0.5	20,000	0.5
1,2-Dibromo-3-chloropropane	0.001	1	1	1	1	2	0.5	1.5	0.7
Dibromochloromethane	0.001	50	0.5	150	0.5	550	0.5	400	0.5
1,2-Dibromoethane	0.0005	0.5	1	0.5	1	0.5	1	0.5	1
Dibromomethane	0.001	4	0.5	10	0.5	35	0.5	30	0.5
1,2-Dichlorobenzene	0.001	200	0.5	600	0.5	2,000	0.5	1,500	0.5
1,3-Dichlorobenzene	0.001	80	0.5	250	0.5	850	0.5	600	0.5
1,4-Dichlorobenzene	0.001	800	0.5	2,500	0.5	7,500	0.5	6,500	0.5
Dichlorodifluoromethane	0.002	100	0.5	300	0.5	900	0.5	800	0.5
1,1-Dichloroethane	0.001	500	0.5	1,500	0.5	4,500	0.5	4,000	0.5
1,2-Dichloroethane	0.001	5	0.5	15	0.5	45	0.5	40	0.5
1,1-Dichloroethylene	0.001	200	0.5	600	0.5	2,000	0.5	1,500	0.5
cis-1,2-Dichloroethylene	0.001	60	0.5	200	0.5	550	0.5	500	0.5
trans-1,2-Dichloroethylene	0.001	60	0.5	200	0.5	550	0.5	500	0.5
Dichloromethane	0.01	600	0.5	2,000	0.5	5,500	0.5	5,000	0.5
1,2-Dichloropropane	0.001	4	0.5	10	0.5	35	0.5	30	0.5
1,3-Dichloropropane	0.001	1.5	0.7	4	0.5	15	0.5	10	0.5
1,3-Dichloropropene, cis+trans	0.002	2.5	0.8	7.5	0.5	25	0.5	20	0.5
Diethyl ether	0.002	500	0.5	1,500	0.5	5,500	0.5	4,000	0.5
Ethyl acetate	0.005	70	0.5	200	0.5	650	0.5	550	0.5
Ethylbenzene	0.005	1,000	0.5	3,000	0.5	9,000	0.5	8,000	0.5
Ethyl methacrylate	0.001	300	0.5	900	0.5	2,500	0.5	2,500	0.5
Hexachlorobutadiene	0.001	1	1	1.5	0.7	4	0.5	3.5	0.5
Hexachloroethane	0.004	30	0.5	90	0.5	250	0.5	250	0.5
n-Hexane	0.01	700	0.5	2,000	0.5	6,500	0.5	5,500	0.5
Isopropylbenzene	0.001	400	0.5	1,000	0.5	3,500	0.5	3,000	0.5
Methacrylonitrile	0.001	30	0.5	90	0.5	250	0.5	250	0.5

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### Volatile Organic Compounds (VOCs) – Thermal Desorption (TD) Tube<sup>1</sup>

(CONTINUED FROM PAGE 1)

Methyl acrylate	0.005	20	0.5	60	0.5	200	0.5	150	0.5
Methyl cyclohexane	0.005	2,000	0.5	7,000	0.5	25,000	0.5	20,000	0.5
Methyl ethyl ketone (MEK)	0.005	5,000	0.5	15,000	0.5	45,000	0.5	40,000	0.5
Methyl isobutyl ketone (MIBK)	0.002	3,000	0.5	9,000	0.5	25,000	0.5	25,000	0.5
Methyl methacrylate	0.002	700	0.5	2,000	0.5	6,500	0.5	5,500	0.5
Methyl tert-butyl ether (MTBE)	0.002	3,000	0.5	9,000	0.5	25,000	0.5	25,000	0.5
Naphthalene	0.001	3	0.5	9	0.5	25	0.5	25	0.5
Nitrobenzene	0.001	1	1	1	1	2.5	0.5	2	0.5
Styrene	0.001	1,000	0.5	3,000	0.5	9,000	0.5	8,000	0.5
1,1,1,2-Tetrachloroethane	0.001	1.5	0.7	4	0.5	10	0.5	10	0.5
1,1,2,2-Tetrachloroethane	0.001	50	0.5	150	0.5	550	0.5	400	0.5
Tetrachloroethylene (PERC)	0.005	40	0.5	100	0.5	350	0.5	300	0.5
Tetrahydrofuran	0.001	3.5	0.5	10	0.5	30	0.5	25	0.5
Toluene	0.01	5,000	0.5	15,000	0.5	45,000	0.5	40,000	0.5
1,2,4-Trichlorobenzene	0.001	7	0.5	20	0.5	65	0.5	55	0.5
1,1,1-Trichloroethane	0.001	5,000	0.5	15,000	0.5	45,000	0.5	40,000	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	0.002	30,000	0.5	90,000	0.5	250,000	0.5	250,000	0.5
1,1,2-Trichloroethane	0.001	0.5	2	0.6	1.7	2	0.5	1.5	0.7
Trichloroethylene (TCE)	0.001	2	0.5	6	0.5	20	0.5	15	0.5
Trichlorofluoromethane	0.001	700	0.5	2,000	0.5	6,500	0.5	5,500	0.5
1,2,3-Trichloropropane	0.001	0.5	2	0.9	1.2	2.5	0.5	2.5	0.5
1,2,4-Trimethylbenzene	0.005	7	0.8	20	0.5	65	0.5	55	0.5
1,3,5-Trimethylbenzene	0.005	4.5	1.2	15	0.5	45	0.5	35	0.5
Vinyl Chloride	0.002	1	2	3.5	0.6	10	0.5	9	0.5
Xylenes, total	0.015	100	0.5	300	0.5	900	0.5	800	0.5
VPHv *	2	1,000	2	3,000	0.7	11,500	0.5	8,000	0.5

### Volatile Organic Compounds (VOCs) – Thermal Desorption (TD) Tube<sup>1</sup> Extended List

2-Chlorophenol	0.01	15	0.7	40	0.5	150	0.5	100	0.5
4-Chlorotoluene	0.002	N/A	0.5	N/A	0.5	N/A	0.5	N/A	0.5
Isopropanol	0.01								

Used as a tracer for leak checking soil vapour wells

### Other Schedule 11 Parameters – Specialized Tubes

Ammonia	1	100	10	300	3.4	900	1.2	800	1.3
Cyanide	0.1	2	50	4.5	23	15	6.7	10	10

<sup>1</sup>TD Tube Volume Maximum = 6 L, Minimum = 0.5 L

Recommended Flow Rate for Thermal Desorption (TD) Tubes is 100 mL/min (0.1 L/min)

- Maximum should not exceed 200 mL/min (0.2 L/min)
- Minimum should not be less than 20 mL/min (0.02 L/min)

\* VPHv = VHv6-13 – ∑ { n-Hexane + n-Decane + Benzene + Toluene + Ethylbenzene + Xylenes + Styrene }