

TABLE J-6
HAZARDOUS AIR POLLUTANTS CALCULATIONS - FUGITIVE EMISSIONS - FACILITY PTE AFTER PROJECT
FACILITY PEAK LFG FUGITIVE EMISSIONS

Calculation Inputs

Collection Efficiency =	80.0%
CH4 concentration =	50.0%
Total CH4 generation rate =	3,304,961,765 scf/yr (scfm * 525,600 min/yr)
Total CH4 generation rate =	93,586,087 m ³ /yr

CAS No.	Pollutant	Molecular Weight	Concentration	Data Source	Volumetric Generation	Mass Generation	Fugitive Emissions	
		(g/gmol)	(ppmv)		(m ³ /yr)	(ton/yr)	(ton/yr)	(lb/yr)
000056235	CARBON TETRACHLORIDE	153.84	0.004	AP-42	0.7	0.0	0.0	2.1
000067663	CHLOROFORM	119.39	0.03	AP-42	5.6	0.0	0.0	12.1
000071432	BENZENE	78.11	1.91	AP-42	357.5	1.3	0.3	503.6
000071556	ETHANE, 1,1,1-TRICHLORO	133.41	0.48	AP-42	89.8	0.5	0.1	216.1
000074873	METHYL CHLORIDE	50.49	1.21	AP-42	226.5	0.5	0.1	206.2
000075003	ETHANE, CHLORO	64.52	1.25	AP-42	234.0	0.7	0.1	272.2
000075014	VINYL CHLORIDE	62.50	1.077	WIAC	201.6	0.6	0.1	227.2
000075092	DICHLOROMETHANE	84.94	14.3	AP-42	2,676.6	10.2	2.0	4099.8
000075150	CARBON DISULFIDE	76.13	0.58	AP-42	108.6	0.4	0.1	149.0
000075343	ETHANE, 1,1-DICHLORO	98.97	2.35	AP-42	439.9	2.0	0.4	785.0
000075354	ETHENE, 1,1-DICHLORO	96.94	0.20	AP-42	37.4	0.2	0.0	65.4
000078875	PROPANE, 1,2-DICHLORO	112.99	0.18	AP-42	33.7	0.2	0.0	68.6
000078933	METHYL ETHYL KETONE	72.11	7.09	AP-42	1,327.1	4.3	0.9	1725.6
000079016	TRICHLOROETHYLENE	131.4	2.82	AP-42	527.8	3.1	0.6	1250.7
000079345	1,1,2,2-TETRACHLOROETHANE	167.85	1.11	AP-42	207.8	1.6	0.3	628.9
000100414	ETHYL BENZENE	106.16	4.61	AP-42	862.9	4.1	0.8	1651.9
000106467	BENZENE, 1,4-DICHLORO	147	0.21	AP-42	39.3	0.3	0.1	104.2
000106934	ETHANE, 1,2-DIBROMO	187.88	0.001	AP-42	0.2	0.0	0.0	0.6
000107062	1,2-DICHLOROETHANE	98.96	0.41	AP-42	76.7	0.3	0.1	136.9
000107131	PROPENENITRILE	53.06	0.036	WIAC	6.7	0.0	0.0	6.4
000108101	2-PENTANONE, 4-METHYL	100.16	1.87	AP-42	350.0	1.6	0.3	632.2
000108883	TOLUENE	92.13	39.3	AP-42	7,355.9	30.6	6.1	12220.9
000108907	CHLOROBENZENE	112.56	0.25	AP-42	46.8	0.2	0.0	95.0
000110543	HEXANE	86.18	6.57	AP-42	1,229.7	4.8	1.0	1911.1
000127184	PERCHLOROETHYLENE	165.83	3.73	AP-42	698.2	5.2	1.0	2087.8
000463581	CARBONYL SULFIDE	60.07	0.49	AP-42	91.7	0.2	0.0	99.3
001330207	XYLENE, M, O & P MIXT.	106.16	12.1	AP-42	2,264.8	10.8	2.2	4335.7
007439976	MERCURY	200.61	0.000292	AP-42	0.1	0.0	0.0	0.2
007783064	HYDROGEN SULFIDE	34.08	133	SITE SPECIFIC	24,893.9	38.2	7.6	15299.0
007647010	HYDROGEN CHLORIDE	36.46	42	AP-42	-	0.0	0.0	0.0
							TOTAL HAPs =	24.4
							High Individual HAP =	7.6
								48793.9
								15299.0

Sample Calculations:

Volumetric Generation Calculation - per AP-42, Section 2.4

Mass Generation Calculation - per AP-42, Section 2.4

Fugitive Emission (ton/yr) = Uncontrolled Mass Emissions * (1 - Collection Efficiency)

Notes:

1. Molecular weight and concentration of HAPs from AP-42, Section 2.4 (11/98), and/or WIAC Guidance.
2. Chlorine is converted to HCl during combustion; there are no fugitive emissions of HCl
3. Hydrogen sulfide (H2S) concentration per site specific sample