TABLE J-4
HAZARDOUS AIR POLLUTANTS CALCULATIONS - FUGITIVE EMISSIONS - PROJECT PTE
EXPANSION LANDFILL LFG FUGITIVE EMISSIONS

Calculation Inputs

Collection Efficiency =	80.0%	
CH4 concentration =	50.0%	
Total CH4 generation rate =	2,527,610,400	scf/yr (scfm * 525,600 min/yr)
Total CH4 generation rate =	71,573,949	m^3/yr

CAS No.	Pollutant	Molecular Weight (g/gmol)	Concentration (ppmv)	Data Source	Volumetric Generation (m^3/yr)	Mass Generation (ton/yr)	Fugitive Emissions (ton/yr)	Fugitive Emissions (lb/yr)
000056235	CARBON TETRACHLORIDE	153.84	0.004	AP-42	0.6	0.0	0.0	1.6
000067663	CHLOROFORM	119.39	0.03	AP-42	4.3	0.0	0.0	9.2
000071432	BENZENE	78.11	1.91	AP-42	273.4	1.0	0.2	385.1
000071556	ETHANE, 1,1,1-TRICHLORO	133.41	0.48	AP-42	68.7	0.4	0.1	165.3
000074873	METHYL CHLORIDE	50.49	1.21	AP-42	173.2	0.4	0.1	157.7
000075003	ETHANE, CHLORO	64.52	1.25	AP-42	178.9	0.5	0.1	208.2
000075014	VINYL CHLORIDE	62.50	1.077	WIAC	154.2	0.4	0.1	173.8
000075092	DICHLOROMETHANE	84.94	14.3	AP-42	2,047.0	7.8	1.6	3135.5
000075150	CARBON DISULFIDE	76.13	0.58	AP-42	83.0	0.3	0.1	114.0
000075343	ETHANE, 1,1-DICHLORO	98.97	2.35	AP-42	336.4	1.5	0.3	600.4
000075354	ETHENE, 1,1-DICHLORO	96.94	0.20	AP-42	28.6	0.1	0.0	50.0
000078875	PROPANE, 1,2-DICHLORO	112.99	0.18	AP-42	25.8	0.1	0.0	52.5
000078933	METHYL ETHYL KETONE	72.11	7.09	AP-42	1,014.9	3.3	0.7	1319.8
000079016	TRICHLOROETHYLENE	131.4	2.82	AP-42	403.7	2.4	0.5	956.5
000079345	1,1,2,2-TETRACHLOROETHANE	167.85	1.11	AP-42	158.9	1.2	0.2	480.9
000100414	ETHYLBENZENE	106.16	4.61	AP-42	659.9	3.2	0.6	1263.3
000106467	BENZENE, 1,4-DICHLORO	147	0.21	AP-42	30.1	0.2	0.0	79.7
000106934	ETHANE, 1,2-DIBROMO	187.88	0.001	AP-42	0.1	0.0	0.0	0.5
000107062	1,2-DICHLOROETHANE	98.96	0.41	AP-42	58.7	0.3	0.1	104.7
000107131	PROPENENITRILE	53.06	0.036	WIAC	5.2	0.0	0.0	4.9
000108101	2-PENTANONE, 4-METHYL	100.16	1.87	AP-42	267.7	1.2	0.2	483.5
000108883	TOLUENE	92.13	39.3	AP-42	5,625.7	23.4	4.7	9346.5
000108907	CHLOROBENZENE	112.56	0.25	AP-42	35.8	0.2	0.0	72.6
000110543	HEXANE	86.18	6.57	AP-42	940.5	3.7	0.7	1461.6
000127184	PERCHLOROETHYLENE	165.83	3.73	AP-42	533.9	4.0	0.8	1596.7
000463581	CARBONYL SULFIDE	60.07	0.49	AP-42	70.1	0.2	0.0	76.0
001330207	XYLENE, M, O & P MIXT.	106.16	12.1	AP-42	1,732.1	8.3	1.7	3315.9
007439976	MERCURY	200.61	0.000292	AP-42	0.0	0.0	0.0	0.2
007783064	HYDROGEN SULFIDE	34.08	133	SITE SPECIFIC	19,038.7	29.3	5.9	11700.5
007647010	HYDROGEN CHLORIDE	36.46	42	AP-42	-		0.0	0.0
						TOTAL HAPs =	*18.7*	*37317.2*
						High Individual HAP =	*5.9*	*11700.5*

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