L01 - LANDFILL GAS DEFAULT COMPOSITION (NO CO-DISPOSAL)

CALCULATION METHODS

Ea = L x R x (e^(-kc) - e^(-kt)) x Ci

Eh = Ea / H

NOTES:

- Above calculation does not account for extracted gas incinerated in control or cogen equipment.

- Generation rate L varies from 0.01 (dry sites) to 0.04 (wet sites).

- Average refuse acceptance rate R base on tons in place divided by years of operation..

- The TOG factor is based on an average 40% methane content in the raw gas.

- The ROG factor is based on the EPA AP-42 assumption of 595 ppmv NMHC as hexane in the raw gas.

- Individual pollutant factors are estimated using AP-42 Section 2.4 raw gas speciation (9/97).

POLLUTANT	District Emission Factor	EPA REFERENCE	EPA	(UNITS)	COMMENTS
	(ppmv or ppmw)	DOCUMENT	FACTOR		
NOX					
CO	141.00	AP-42, Sect.2.4, 9/97, Table 2.4-1	141.00	ppmv	
SOX					
TOG	400000.00				ASSUMES 40% AVERAGE METHANE CONTENT OF LANFILL GAS.
ROG	595.00	AP-42, Sect.2.4, 9/97, Table 2.4-2	595.00	ppmv as hexane	
TSP	1000000.00			ppmw	ASSUME ALL PARTICULATE EMISSIONS ARE PM10 AND TSP.
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ACETONE	7.01	AP-42, Sect.2.4, 9/97, Table 2.4-1	7.01	ppmv	
ACRYLONITRILE	6.33	AP-42, Sect.2.4, 9/97, Table 2.4-1	6.33	ppmv	
ARSENIC	20.00	APCD Local haul road sample results	20.00	ppmw	
BENZENE	1.91	AP-42, Sect.2.4, 9/97, Table 2.4-2	1.91	ppmv	
BERYLLIUM	1.00	APCD Local haul road sample results	1.00	ppmw	
CADMIUM	1.00	APCD Local haul road sample results	1.00	ppmw	
CARBON DISULFIDE	0.58	AP-42, Sect.2.4, 9/97, Table 2.4-1	0.58	ppmv	
CARBONYL SULFIDE	0.49	AP-42, Sect.2.4, 9/97, Table 2.4-1	0.49	ppmv	
CHLOROBENZENE	0.25	AP-42, Sect.2.4, 9/97, Table 2.4-1	0.25	ppmv	
CHLOROFORM	0.03	AP-42, Sect.2.4, 9/97, Table 2.4-1	0.03	ppmv	
CHLOROFLUOROCARBONS	1.30	AP-42, Sect.2.4, 9/97, Table 2.4-1	1.30	ppmv	
CHROMIUM (hexavalent)					All haul road samples were nondetect for Cr+6, assume 0 ppmw.
		APCD Local haul road sample			

CHROMIUM (total)	50.00	results	50.00	ppmw	
COPPER	100.00	APCD Local haul road sample results	100.00	ppmw	
DIMETHYL SULFIDE	7.82	AP-42, Sect.2.4, 9/97, Table 2.4-1	7.82	ppmv	
ETHYL BENZENE	4.61	AP-42, Sect.2.4, 9/97, Table 2.4-1	4.61	ppmv	
ETHYLENE DIBROMIDE					NO VALUE REPORTED IN THE REVISED AP-42 (9/97).
ETHYLENE DICHLORIDE	0.41	AP-42, Sect.2.4, 9/97, Table 2.4-1	0.41	ppmv	
HEXANE	6.57	AP-42, Sect.2.4, 9/97, Table 2.4-1	6.57	ppmv	
HYDROGEN SULFIDE	35.50	AP-42, Sect.2.4, 9/97, Table 2.4-1	35.50	ppmv	
LEAD	50.00	APCD Local haul road sample results	50.00	ppmw	
MANGANESE	500.00	APCD Local haul road sample results	500.00	ppmw	
MERCURY	5.00	APCD Local haul road sample results	5.00	ppmw	
METHYLENE CHLORIDE	14.30	AP-42, Sect.2.4, 9/97, Table 2.4-1	14.30	ppmv	
METHYL ISOBUTYL KETONE	1.87	AP-42, Sect.2.4, 9/97, Table 2.4-1	1.87	ppmv	
METHYL ETHYL KETONE	7.09	AP-42, Sect.2.4, 9/97, Table 2.4-1	7.09	ppmv	
NICKEL	20.00	APCD Local haul road sample results	20.00	ppmw	
PERCHLOROETHYLENE	3.73	AP-42, Sect.2.4, 9/97, Table 2.4-1	3.73	ppmv	
SELENIUM	5.00	APCD Local haul road sample results	5.00	ppmw	
SILICA (crystalline)	100000.00	APCD Local haul road sample results	100000.00	ppmw	
TOLUENE	39.30	AP-42, Sect.2.4, 9/97, Table 2.4-2	39.30	ppmv	
1,1,1-TRICHLOROETHANE	0.48	AP-42, Sect.2.4, 9/97, Table 2.4-1	0.48	ppmv	
TRICHLOROETHYLENE	2.82	AP-42, Sect.2.4, 9/97, Table 2.4-1	2.82	ppmv	
VINYL CHLORIDE	7.34	AP-42, Sect.2.4, 9/97, Table 2.4-1	7.34	ppmv	
VINYLIDENE CHLORIDE	0.20	AP-42, Sect.2.4, 9/97, Table 2.4-1	0.20	ppmv	
XYLENES	12.10	AP-42, Sect.2.4, 9/97, Table 2.4-1	12.10	ppmv	
ZINC	200.00	APCD Local haul road sample results	200.00	ppmw	

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