TABLE J-3 ONTARIO COUNTY LANDFILL - PROJECT PTE EXPANSION LANDFILL FUGITIVE LANDFILL GAS POTENTIAL TO EMIT SUMMARY

LFG Generation/Collection PTE

 Maximum CH4 Generation Rate =
 4,809
 scfm

 Maximum LFG Generation Rate =
 9,618
 scfm

 Collection Efficiency =
 80%

 Total Fugitive CH4 =
 962
 scfm

 Total Fugitive LFG =
 1,924
 scfm

Influent LFG Data

NMOC Concentration = 1034 ppmv as hexane

Total Reduced Sulfur (TRS) Concentration = 266 ppmv (200% of measured as conservative est.)

Pollutant	Fugitive Emissions	
	ton/yr	lb/yr
NOx	0.0	0.0
CO	0.0	0.0
SO2	0.0	0.0
PM-10/PM-2.5	0.0	0.0
VOC	45.6	91,193.3
NMOC	116.9	233,828.9
HAPs	18.7	37,317.2
High Ind. HAP	5.9	11,700.5

Emission Factors		
Pollutar	t Emission Factor	Source
VOC	39% of NMOC	AP-42 Section 2.4 (11/98)
NMOC	231.3 lb/10 ⁶ scf LFG	NMOC ppmv * 86.18 lb/lb-mol /385.3 scf/lb-m

Sample Calculations

VOC (ton/yr) = NMOC ton/yr * 39%

mol NMOC (ton/yr) = EF (lb/106 scf LFG) * (Total Fugitive CH4 (scf/yr)) *(1-Collection Efficiency) * (1 ton/2000 lb)

HAPs: See Table J-4

Total Fugitive CH4 (scf/yr) = Total Fugitive CH4 (scfm) * 60 min/hr * 8760 hr/yr

Notes

- 1. Fugitive emission pollutants include VOCs, NMOCs and HAPs (total uncollected emissions)
- 2. NOx, CO, SO2, PM and HCl are combustion emissions and not included in fugitive emissions summary
- 3. Emissions based on total amount on the PTE landfill gas curve and 80% collection efficiency
- 4. Cover soil oxidation is not included in this estimate (typically estimated at 10% oxidation)