Table 4-2
Seneca Meadows, Inc.
Landfill Expansion DGEIS
Worst-Case Emissions 2023 (All Sources)

	Seneca Meadows								*Seneca Energy*							
	NMOC TPY	VOC[7] TPY	CO TPY	NOx TPY	SO_2 TPY	PM-10 TPY	HAP TPY	HCl TPY	NMOC TPY	VOC[7] TPY	CO TPY	NOx TPY	SO_2 TPY	PM-10 TPY	HAP TPY	HCl TPY
Primary Emissions																
Flares Combustion Emissions[1]																
Emission Unit 1-LFGAS, Process ID GAS (flares)	6	2.3	189	78	6.2	4.4	4.8	3.8								
Engines Combustion Emissions[1]									26	10	568	275	0.3	3.1	3.6	3.0
Excess gas beyond current control capacity (engines or flares)	26	10	573	277	0.30	3.2	3.4	2.7								
Heating Equipment Emissions[2]																
Emission Unit E-I0001, Process ID E01		0.002		0.17	2.9	0.04	0.03									
Emission Unit E-I0001, Process ID E02			0.04	0.17	0.004	0.005										
Fugitive Landfill Gas Emissions (2023) (Existing, AB, SELF, and Exp.)																
Emission Unit 1-LFGAS, Process ID FUG[3] (fugitive emissions from the landfill areas)	88	34					15									
Emission Unit 1-SOILS, Process ID FG1[2]		4.2														
Storage Tank Emissions[2]																
Emission Unit 1-LEACH, Process ID EVP		0.44														
Emission Unit E-I0001, Process ID E03		0.03														
Emission Unit E-I0001, Process ID E04		0.72														
TO Combustion Emissions from Off-Gasing[4]																
Secondary & Non-Applicable Fugitive Emissions																
Mobile Source Combustion Emissions (Oper. & Constr.)[5]																
ORV Combustion Emissions (Oper.)[5]																
ORV Combustion Emissions (Constr.)[5]																
ORV PM Emissions (Oper.)[6]						142										
ORV PM Emissions (Constr.)[6]						3.6										
Road Dust Emissions (Oper.)[6]						37.0										
Road Dust Emissions (Constr.)[6]						11.7										

Notes:

[1] Data calculated based on 19,722 cfm of landfill gas; 6040 cfm going to the engines, and the remainder (13682 cfm) going to flares.
PM-10 calculated based on emission factor of 2.1 lb/MMSCF (same as 3520 engine).
HCl calculated based on emission factor of 2.61 lb/MMSCF.

[2] Values calculated based on 8760 hours of operation per year.

[3] NMOC calculated based on fugitive NMOC emissions of 684 ppm. VOCs calculated as 39% of NMOC.
HAP's calculated as follows: Fugitive LFG (m^3/yr) x 428.5 mg of HAP per m^3 of LFG x 2.2046×10^{-6} pounds per mg / 2000 pounds per ton.

[4] Thermal Oxidizer (TO) emissions are not included in the future potential, because they will not be in use. Any gas that would've gone to the TO was assumed to be going to the engines.

[5] Since PM emissions of equipment in the areas were calculated using AP-42 equation for bulldozing, based on upwind/downwind sampling done during development of the emission factors, individual combustion emissions for the equipment were not calculated.

[6] PM-10 emissions were calculated based on activities performed at the landfill (based on information provided by Seneca Meadows) and using equations in "AP-42, Fifth Edition, Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources," January 1995 plus updates.

[7] VOCs are calculated as 39% of NMOC when data not available, per AP-42.

CO	Carbon dioxide.	HCl	Hydrogen chloride.	Oper.	Operations	TO	Thermal oxidizer.
Constr.	Construction	LFG	Landfill gas.	PM	Particulate matter.	TPY	Tons per year.
Exp.	Expansion.	NMOC	Non-methane organic compounds.	SELF	Southeast Landfill	VOC	Volatile organic compounds.
HAP	Hazardous air pollutant.	NOx	Nitrogen oxides.	SO_2	Sulfur dioxide.		