

AECOM

SEPTA

Attachment D – Emissions Estimates

Table 2 - Facility Total PTE

Source	Annual Emissions (tpy)									
	NO _x	VOC	TSP	PM ₁₀	CO	SO ₂	Pb			
New Sources PTE	23.61	17.71	0.10	0.10	29.51	0.19	0.00			
G-01 & G-02 - Two (2) GE Generator Engines	23.61	17.71	0.10	0.10	29.51	0.19	0.00			
Current PTE	31.15	3.46	3.26	3.75	13.24	37.61	1.67E-03			
COMB-01 - Boiler No. 1	2.68	0.05	0.27	0.32	0.67	3.80	1.69E-04			
COMB-02 - Boiler No. 2	5.35	0.09	0.54	0.64	1.34	7.60	3.37E-04			
COMB-03 - Boiler No. 3	5.35	0.09	0.54	0.64	1.34	7.60	3.37E-04			
COMB-04 - Boiler No. 4	0.33	0.01	0.03	0.04	0.08	0.47	2.10E-05			
COMB-05 - Boiler No. 5	0.31	0.02	0.02	0.02	0.26	0.00	1.55E-06			
COMB-06 - Boiler No. 6	0.31	0.02	0.02	0.02	0.26	0.00	1.55E-06			
COMB-07 - Boiler No. 7 w/ FGR	6.33	0.23	0.63	0.75	3.57	8.99	3.99E-04			
COMB-08 - Boiler No. 8 w/ FGR	6.33	0.23	0.63	0.75	3.57	8.99	3.99E-04			
COMB-09 - Boiler No. 9	0.15	0.01	0.01	0.01	0.13	0.00	7.71E-07			
COMB-10 - Boiler No. 10	0.15	0.01	0.01	0.01	0.13	0.00	7.71E-07			
COMB-11 - Pressure Washer	0.28	0.02	0.02	0.02	0.24	0.00	1.41E-06			
COMB-12 - Space Heater No. 1	0.17	0.01	0.01	0.01	0.14	0.00	8.59E-07			
COMB-13 - Space Heater No. 2	0.17	0.01	0.01	0.01	0.14	0.00	8.59E-07			
COMB-14 - Space Heater No. 3	0.17	0.01	0.01	0.01	0.14	0.00	8.59E-07			
COMB-15 - Space Heater No. 4	0.17	0.01	0.01	0.01	0.14	0.00	8.59E-07			
COMB-16 - Space Heater No. 5	0.17	0.01	0.01	0.01	0.14	0.00	8.59E-07			
COMB-17 - Space Heater No. 6	0.17	0.01	0.01	0.01	0.14	0.00	8.59E-07			
EG-01 - Emergency Generator	1.62	0.04	0.04	0.03	0.43	0.10	0.00E+00			
WE-01 - Welder Engine	0.49	0.04	0.03	0.03	0.11	0.03	0.00E+00			
AC-01 & BLAST-01 - Sand Blasting Operations	0.17	0.01	0.36	0.35	0.04	0.01	0.00E+00			
Stage 2-01 - Stage 2 Vapor Recovery / Gas Dispensing		0.01								
PW-01 - Five (5) Parts Washers / Degreasers		0.65								
SB-01 - Spray Booth		1.86	1.63E-03	1.63E-03						
CU-SB - Spray Booth Burner	0.26	0.01	0.02	0.02	0.22	0.00	1.30E-06			
TANK-01 - Windshield Washer Fluid Tank		0.01								
Unrestricted PTE	54.76	21.17	3.36	3.85	42.76	37.80	1.67E-03			
Restricted PTE - GE Engines	<25				<100					

NORESCO / SEPTA
Midvale Bus Facility

Table 1 - GE Engine

Horsepower 6113 HP
Total Heat Input 36.20 MMBtu/hr
Operating Hours 8760 hr/yr
Natural Gas Heat Content 1020 Btu/scf
Fuel Consumption 310.89 MMscf/yr
Quantity 2

Pollutant	Emission Factor		Emission Rate			Emission Factor Reference
	g/bhp-hr	lb/MMBtu	lb/hr	ton/yr (1 engine)	ton/yr (2 engines)	
NOx	0.20		2.695	11.81	23.61	Vendor Guarantee
CO	0.25		3.369	14.76	29.51	Vendor Guarantee
CO ₂ e		117.1	4.239	18.567	37.133	40 CFR 98 Subpart C
PM ₁₀		3.04E-04	0.011	0.05	0.10	EPA's "Emission Factors for PM from NG Combustion"
PM _{2.5}		1.86E-04	0.007	0.03	0.06	EPA's "Emission Factors for PM from NG Combustion"
VOC	0.15		2.022	8.85	17.71	Vendor Guarantee
SO ₂		5.88E-04	0.02	0.09	0.19	AP-42 Table 3.2-2 (7000) - 4SLB
Formaldehyde	0.05		0.674	2.95	5.90	Vendor Guarantee
Total HAPs (Not including Formaldehyde)		1.94E-02	0.70	3.08	6.15	AP-42 Table 3.2-2 (7000) - 4SLB
Total HAPs (Including Formaldehyde)			1.38	6.03	12.05	Vendor Guarantee + AP-42 Table 3.2-2 (7000) - 4SLB

Note: Particulate matter emission factors from EPA's 2014 National Emissions Inventory Documentation located at <https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventories-nei-documentation>