

**Table 1-2. Summary of Estimated Potential Emissions in Tons per Year**

Pollutant	Existing Facility PTE, tpy	Proposed CHP Units, PTE, tpy		Proposed Biomethane Utilization Units PTE, tpy Scenarios 3A/3B	Total Facility with CHP project addition PTE, tpy		Total Facility with Biomethane Utilization project addition PTE, tpy Scenarios 3A/3B	Title V/Major Stationary Source Threshold, tpy <sup>3,4</sup>
		Without Controls Scenarios 1A/B/C and 2A/2B	With Controls Scenarios 4A/B/C and 5A/5B <sup>1</sup>		Without Controls Scenarios 1A/B/C and 2A/2B	With Controls Scenarios 4A/B/C and 5A/5B <sup>1</sup>		
Carbon Monoxide (CO)	33.3	94.9	37.0	26.8	<b>128.2</b> <sup>(2)</sup>	70.3	62.3	100
Nitrogen Oxides (NOx)	25.2	19.1	9.6	5.4	44.2	34.7	32.5	100
Sulfur Dioxide (SO <sub>2</sub> )	6.1	3.7	3.7	3.6	9.8	9.8	9.7	100
Inhalable Particulate Matter (PM <sub>10</sub> )	8.0	5.1	2.8	1.7	13.1	10.8	9.7	100
Fine Particulate Matter (PM <sub>2.5</sub> )	8.0	5.1	2.8	1.7	13.1	10.8	9.7	100
Volatile Organic Compounds (VOC)	4.3	11.5	11.5	7.0	15.8	15.8	11.3	100

Source: CDM Smith, 2017

Key: PTE= potential to emit; tpy = tons per year; CHP = combined heat and power; WGB = waste gas burner

Notes:

- 1) Potential controls are discussed in Section 4.2 of this report; and represent reductions of approximately 85% for CO, 70% for NOx and 67% for PM<sub>10</sub> and PM<sub>2.5</sub> emissions from the CHP engines.
- 2) Exceeds major source threshold for combined existing and new units. Although this is a conservative scenario in that assumes full year operation of two CHP engines and the WGB, removing the WGB would result in CO emissions that still exceed the threshold.
- 3) Title V/Major source thresholds obtained from: <http://www.deq.virginia.gov/Portals/0/DEQ/Air/Regulations/801.pdf> page 8:1-9 Definition of "Major Source" (c) that states "For ozone nonattainment areas, any stationary source with the potential to emit 100 tons per year or more of VOC or NOx in areas classified as "marginal" or "moderate," 50 tons per year or more in areas classified as "serious," 25 tons per year or more in areas classified as "severe," and 10 tons per year or more in areas classified as "extreme"
- 4) Arlington County Attainment Status, Marginal for 8-Hr Ozone (2008), as of 12/7/17: [https://www3.epa.gov/airquality/greenbook/hbca.html#Ozone\\_8-hr](https://www3.epa.gov/airquality/greenbook/hbca.html#Ozone_8-hr).2008.Washington