Appendix G Air Quality Modeling Tables

Alternative 1 - Percent Distribution, Patrons, and Vehicle Miles Travels per Year									
	Routes	Market and Destination Areas	Trip Distribution <sup>1</sup>	Average Distance	Proposed Project				
	Roules	Market and Destination Areas	Trip Distribution	(miles) <sup>2</sup>	Trips/Day	VMT/Year			
North on I-5		Tacoma	50%	25	15,298.0	139,594,250			
South on I-5		Olympia	50%	10	15,298.0	55,837,700			
Total			100%		30,596	195,431,950			

	Alternative 2 - Percent Distribution, Patrons, and Vehicle Miles Travels per Year									
	Routes	Market and Destination Areas	Thin Distribution1	Average Distance	Proposed Project					
	Roules Market and Destination Areas Trip		Trip Distribution <sup>1</sup>	(miles) <sup>2</sup>	Trips/Day	VMT/Year				
North on I-5		Tacoma	50%	25	11,015.0	100,511,875				
South on I-5		Olympia	50%	10	11,015.0	40,204,750				
Total			100%		22,030	140,716,625				

<sup>1</sup> Average distance between destination and source. Source: TranspoGroup TIA, 2023 (Appendix H)

### Tables 2a and 2b - Mobile Operations Criteria Pollutants and GHG Emissions

Table 2a           2028 Mobile Operations Criteria Pollutant and GHG Emissions										
Alterantive 1 Alterantive 2										
vmt/yr	195,431,950	140,716,625								
Criteria Pollutant Emissions (tpy)										
NOx	28.01	20.16								
VOC	2.15	1.55								
SO <sub>2</sub>	0.43	0.31								
со	148.64	107.03								
PM <sub>2.5</sub>	2.15	1.55								
PM <sub>10</sub>	8.62	6.20								
<b>Greenhouse Gas</b> CO <sub>2</sub>	68,074.88	49,015.87								

Criteria pollutant emissions were calculated using half summer/half winter emission factors. Source: MOVES3, 2022; AES, 2022.

Table 2b           2048 Mobile Operations Criteria Pollutant and GHG Emissions									
Alterantive 1 Alterantive 2									
vmt/yr	195,431,950	140,716,625							
Criteria Pollutant Emissions (tpy)									
NOx	23.70	17.06							
VOC	2.15	1.55							
SO <sub>2</sub>	0.43	0.31							
со	116.33	83.76							
PM <sub>2.5</sub>	2.15	1.55							
PM <sub>10</sub>	8.62	6.20							
Greenhouse Gas									
CO <sub>2</sub>	64,412.6	46,378.9							

Criteria pollutant emissions were calculated using half summer/half winter emission factors. Source: MOVES3, 2022; AES, 2022.

# Tables 3 a and b - Mobile Emission Factors

Table 3a							
2028 Operational Mobile Annual Average Emission Factors							
Criteria Pollutant	grams per mile						
NOx	0.13						
VOC	0.01						
SO <sub>2</sub>	0.002						
CO	0.69						
PM <sub>2.5</sub>	0.01						
PM <sub>10</sub>	0.04						
Greenhouse Gas							
CO <sub>2</sub>	316						
Source: MOVES3, 2022; AES, 2022	2.						

Table 3b							
2048 Operational Mobile Annua	2048 Operational Mobile Annual Average Emission Factors						
Criteria Pollutant	grams per mile						
NOx	0.11						
VOC	0.01						
SO <sub>2</sub>	0.002						
СО	0.54						
PM <sub>2.5</sub>	0.01						
PM <sub>10</sub>	0.04						
Greenhouse Gas							
CO <sub>2</sub>	299						
Source: MOVES3, 2022; AES, 20	022.						

Table 3c							
2028 Operational Start Annua	2028 Operational Start Annual Average Emission Factors						
Criteria Pollutant	grams per start						
NOx	0.2						
VOC	0.22						
SO <sub>2</sub>	0.0005						
СО	3.45						
PM <sub>2.5</sub>	0.004						
PM <sub>10</sub>	0.004						
Greenhouse Gas							
CO <sub>2</sub>	79.86						
Source: MOVES3, 2022; AES, 20	022.						

Table 3d						
2048 Operational Start Annual Average Emission Factors						
Criteria Pollutant	grams per start					
NOx	0.1					
VOC	0.19					
SO <sub>2</sub>	0.0005					
СО	2.17					
PM <sub>2.5</sub>	0.004					
PM <sub>10</sub>	0.004					
Greenhouse Gas						
CO <sub>2</sub>	73.56					
Source: MOVES3, 2022; AES, 202	22.					

Fugitive Dust Emissions fro	m Construction	
	Alternative 1	Alternative 2
Area to be Graded (acres)	174.00	160.00
Grading Duration (day)	90	83
PM <sub>10</sub> Emisson Factor (tons PM <sub>10</sub> /acre-day)	0.0191	0.0191
PM10 Emissions (tons/year)	3.323	3.056
PM <sub>2.5</sub> Emisson Factor (tons PM <sub>2.5</sub> /acre/day)	0.005	0.005
PM <sub>2.5</sub> Emissions (tons/year)	0.931	0.856
Source: OFFROAD air quality model, 2011.		_

 Table 4

 Fugitive Dust Emissions from Constructio

	Alternative 1 - Construction Emissions															
Pieces of to Hours in Use <sup>2</sup> Emission Factors (g/bhp/hr) <sup>5</sup> Ei											Em	isssion (tor	ns/vear)			
Equipment	Construction Equipment <sup>1</sup>	Horsepower <sup>2</sup>	Load Factor <sup>2</sup>	(hours/day)	со	VOC	NO <sub>2</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM 2.5	со	VOC	NO <sub>2</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM 2.5
Year 2026 Site	Preparation and Grading															
3	Bulldozer	247	0.4	8	1.78	0.39	4.09	0.01	0.18	0.17	1.21	0.27	2.79	0.00	0.12	0.12
2	Excavator	158	0.38	8	3.08	0.18	1.46	0.01	0.07	0.07	0.85	0.05	0.40	0.00	0.02	0.02
2	Scraper	367	0.48	8	1.96	0.25	2.67	0.01	0.11	0.10	1.59	0.20	2.17	0.00	0.09	0.08
3	Grader	187	0.41	8	1.25	0.28	3.44	0.01	0.11	0.10	0.66	0.15	1.82	0.00	0.06	0.05
4	Tractors/Loaders/Backhoes	97	0.37	8	3.56	0.24	2.43	0.01	0.12	0.11	1.18	0.08	0.80	0.00	0.04	0.04
Er	mployee Trips (miles) <sup>3</sup>		600		17.946	0.735	1.156	0.0078	0.0371	0.0215	0.01	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust (174 Acres)														3.323	0.931
Site Preparatio	on and Grading Emissions										5.50	0.75	7.98	0.01	3.66	1.24
Year 2027 Con	struction															
3	Crane	231	0.29	8	1.56	0.23	3.23	0.01	0.14	0.12	0.72	0.11	1.49	0.00	0.06	0.06
4	Rough Terrain Forklift	100	0.4	8	3.24	0.15	1.98	0.01	0.06	0.06	1.19	0.06	0.73	0.00	0.02	0.02
3	Tractors/Loader/Backhoe	97	0.37	8	3.56	0.24	2.43	0.01	0.12	0.11	0.88	0.06	0.60	0.00	0.03	0.03
2	Welder	46	0.45	8	4.60	0.70	3.89	0.010	0.15	0.15	0.44	0.07	0.37	0.00	0.01	0.01
3	Generator Set Paving	84	0.74	8	3.38	0.28	2.48	0.01	0.12	0.12	1.45	0.12	1.06	0.00	0.05	0.05
2	Paver	130	0.42	8	2.99	0.2	1.96	0.01	0.09	0.09	0.75	0.05	0.49	0.00	0.02	0.02
2	Paving Equipment	132	0.36	8	3.05	0.2	1.91	0.01	0.09	0.09	0.67	0.04	0.42	0.00	0.02	0.02
2	Rollers	80	0.28	8	3.45	0.3	3	0.01	0.17	0.15	0.36	0.03	0.31	0.00	0.02	0.02
	Architectural Coating															
4	Air Compressor	78	0.48	8	3.660	0.390	2.630	0.010	0.14	0.14	1.26	0.13	0.91	0.00	0.05	0.05
Fugit	tive VOC from Coatings <sup>6</sup>		1,649,500		0.0115							9.48				
Er	nployee Trips (miles) <sup>4</sup>		1,500		17.946	0.735	1.156	0.0078	0.0371	0.0215	0.03	0.00	0.00	0.00	0.00	0.00
Construction I	Emissions										7.72	10.15	6.38	0.02	0.29	0.28
Total Construe	Total Construction Emissions							13.22	10.90	14.37	0.04	3.95	1.52			

<sup>1</sup> Construction equipment list from USEPA approved EMFAC 2011

<sup>2</sup> Default load factors and hours per normal work day from OffRoad 2011. Based on the weighted average horsepower (by equipment population), load factors, and hours per normal work day from OFFROAD 2011.

<sup>3</sup> Based on 15 mile trip length, 40 trips per day, and EMFAC, 2011 emission factors (grams/mile).

<sup>4</sup> Based on 15 mile trip length, 100 trips per day, and EMFAC, 2011 emission factors (grams/mile).

<sup>5</sup> Emission factors provided by EPA approved OFFROAD 2011, based on equipment age distribution in the U.S. in g/bhp/hr = grams per brake horsepower per hour

<sup>6</sup>Based on 1,649,500 sqft and 0.0115 pounds per sqft (CalEEMod, 2016).

Source: EMFAC, 2011; AES, 2022

	Alternative 2 - Construction Emissions															
Pieces of	Pieces of Construction Equipment <sup>1</sup> Horsepower <sup>2</sup> Load Factor <sup>2</sup> Hours in Use <sup>2</sup> Emission Factors (g/bhp/hr) <sup>5</sup> Emission (tons/year)															
Equipment	Construction Equipment	Horsepower	Load Factor	(hours/day)	со	VOC	NO <sub>2</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM 2.5	со	VOC	NO <sub>2</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM 2.5
Year 2026 Site	Preparation and Grading															
3	Bulldozer	247	0.4	8	1.78	0.39	4.09	0.01	0.18	0.17	1.12	0.24	2.57	0.00	0.11	0.11
2	Excavator	158	0.38	8	3.08	0.18	1.46	0.01	0.07	0.07	0.78	0.05	0.37	0.00	0.02	0.02
2	Scraper	367	0.48	8	1.96	0.25	2.67	0.01	0.11	0.10	1.46	0.19	1.99	0.00	0.08	0.08
3	Grader	187	0.41	8	1.25	0.28	3.44	0.01	0.11	0.10	0.61	0.14	1.67	0.00	0.05	0.05
4	Tractors/Loaders/Backhoes	97	0.37	8	3.56	0.24	2.43	0.01	0.12	0.11	1.08	0.07	0.74	0.00	0.04	0.03
Er	nployee Trips (miles) <sup>3</sup>		570		17.946	0.735	1.156	0.0078	0.0371	0.0215	0.01	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust (160 Acres)														3.056	0.856
Site Preparatio	on and Grading Emissions										5.06	0.69	7.34	0.01	3.36	1.14
Year 2027 Con																
3	Crane	231	0.29	8	1.56	0.23	3.23	0.01	0.14	0.12	0.55	0.08	1.14	0.00	0.05	0.04
4	Rough Terrain Forklift	100	0.4	8	3.24	0.15	1.98	0.01	0.06	0.06	0.91	0.04	0.56	0.00	0.02	0.02
3	Tractors/Loader/Backhoe	97	0.37	8	3.56	0.24	2.43	0.01	0.12	0.11	0.68	0.05	0.46	0.00	0.02	0.02
2	Welder	46	0.45	8	4.60	0.70	3.89	0.010	0.15	0.15	0.34	0.05	0.28	0.00	0.01	0.01
3	Generator Set <b>Paving</b>	84	0.74	8	3.38	0.28	2.48	0.01	0.12	0.12	1.11	0.09	0.82	0.00	0.04	0.04
2	Paver	130	0.42	8	2.99	0.2	1.96	0.01	0.09	0.09	0.58	0.04	0.38	0.00	0.02	0.02
2	Paving Equipment	132	0.36	8	3.05	0.2	1.91	0.01	0.09	0.09	0.51	0.03	0.32	0.00	0.02	0.02
2	Rollers	80	0.28	8	3.45	0.3	3	0.01	0.00	0.15	0.27	0.02	0.24	0.00	0.01	0.01
	Architectural Coating															
4	Air Compressor	78	0.48	8	3.660	0.390	2.630	0.010	0.14	0.14	0.97	0.19	1.27	0.00	0.07	0.07
	ive VOC from Coatings <sup>6</sup>	10	1,319,600	0	0.0115	0.000	2.000	0.010	0.14	0.14	0.37	7.59	1.27	0.00	0.07	0.07
0	nployee Trips (miles) <sup>4</sup>		1,200			0.735	1.156	0.0078	0.0371	0.0215	0.02	0.00	0.00	0.00	0.00	0.00
Er	npioyee mps (miles)		1,200		17.946	0.735	1.100	0.0078	0.0371	0.0215	0.02	0.00	0.00	0.00	0.00	0.00
Construction I	Emissions										5.92	8.18	5.47	0.02	0.25	0.24
Total Construction Emissions							10.98	8.87	12.81	0.03	3.61	1.38				

Table 5 (cont.)

<sup>1</sup> Construction equipment list from USEPA approved EMFAC 2011

<sup>2</sup> Default load factors and hours per normal work day from OffRoad 2011. Based on the weighted average horsepower (by equipment population), load factors, and hours per normal work day from OFFROAD 2011.

<sup>3</sup>Based on 15 mile trip length, 40 trips per day, and EMFAC, 2011 emission factors (grams/mile).

<sup>4</sup>Based on 15 mile trip length, 100 trips per day, and EMFAC, 2011 emission factors (grams/mile).

<sup>5</sup> Emission factors provided by EPA approved OFFROAD 2011, based on equipment age distribution in the U.S. in g/bhp/hr = grams per brake horsepower per hour

<sup>6</sup>Based on 1,319,600 sqft and 0.0115 pounds per sqft (CalEEMod, 2016).

Source: EMFAC, 2011; AES, 2022

Table 6 - GHG	Construction	Emissions
---------------	--------------	-----------

Number of	4		Load	Hours in Use <sup>2</sup>	Emission Factors (g/bhp/hr)	Emisssion (tons/year)	
Pieces	Construction Equipment <sup>1</sup>	Horsepower	Factor	(hours/day)	CO <sub>2</sub>	CO <sub>2</sub>	
	Site Grading						
3	Bulldozer	247	0.40	8	474.60	323.77	
2	Excavator	158	0.38	8	472.28	130.53	
2	Scraper	367	0.48	8	473.18	383.71	
3	Grader	187	0.41	8	473.93	250.90	
4	Tractors/Loaders/Backhoes	97	0.37	8	476.43	157.42	
	Employee Trips		600		552.80	0.33	
	Construction						
3	Crane	231	0.29	8	472.97	218.78	
4	Rough Terrain Forklift	100	0.40	8	473.16	174.25	
3	Tractors/Loader/Backhoe	97	0.37	8	476.43	118.07	
2	Welder	46	0.45	8	568.30	54.15	
3	Generator Set	84	0.74	8	568.30	243.92	
	Paving						
2	Paver	130	0.42	8	472.72	118.81	
2	Paving Equipment	132	0.36	8	470.66	102.96	
2	Rollers	80	0.28	8	473.94	48.87	
	Architectural Coating						
4	Air Compressor	78	0.48	8	568.30	195.89	
	Employee Trips		1,500		552.80	0.83	
	Total GHG Construction Emissior	15				2,523.17	

Source: EmFac, 2011; AES, 2022

<sup>1</sup> Construction equipment list from USEPA approved EmFac 201 air model.

<sup>2</sup> Hours per normal work day.

				Table 6 (cont.)		
Number of	Construction Equipment <sup>1</sup>	Horsepower	Load Factor	Hours in Use <sup>2</sup>	Emission Factors (g/bhp/hr)	Emisssion (tons/year)
Pieces		-	Factor	(hours/day)	CO2	CO <sub>2</sub>
	Site Grading					
3	Bulldozer	247	0.40	8	474.60	248.10
2	Excavator	158	0.38	8	472.28	100.02
2	Scraper	367	0.48	8	473.18	294.03
3	Grader	187	0.41	8	473.93	192.26
4	Tractors/Loaders/Backhoes	97	0.37	8	476.43	120.63
	Employee Trips		570		552.80	0.32
	Construction					
3	Crane	231	0.29	8	472.97	167.64
4	Rough Terrain Forklift	100	0.40	8	473.16	133.52
3	Tractors/Loader/Backhoe	97	0.37	8	476.43	90.47
2	Welder	46	0.45	8	568.30	41.50
3	Generator Set	84	0.74	8	568.30	186.91
	Paving					
2	Paver	130	0.42	8	472.72	91.04
2	Paving Equipment	132	0.36	8	470.66	78.89
2	Rollers	80	0.28	8	473.94	37.45
	Architectural Coating					
4	Air Compressor	78	0.48	8	568.30	150.11
	Employee Trips		1,200		552.80	0.66
	Total GHG Construction Emission	ns				1,933.55

Table 6 - GHG Construction Emissions

Source: EmFac, 2011; AES, 2022

<sup>1</sup> Construction equipment list from USEPA approved EmFac 201 air model.

<sup>2</sup> Hours per normal work day.

Alternative 1								
Pollutant/GHG	MMscf/year	Emission Factors (Ib/MMscf)	Conversion factor (Ib/tons)	Emissions (tons)				
VOC	50	5.50	0.0005	0.14				
NOx	50	0.64	0.0005	0.02				
CO	50	11.00	0.0005	0.28				
SO <sub>2</sub>	50	0.60	0.0005	0.02				
PM <sub>10</sub>	50	5.70	0.0005	0.14				
PM <sub>2.5</sub>	50	1.90	0.0005	0.05				
Greenhouse Gas			lb/MT	MT				
CO <sub>2</sub>	50	120,000	0.00045	2,700.00				

Alternative 2								
Pollutant/GHG	MMscf/year	Emission Factors (Ib/MMscf)	Conversion factor (Ib/tons)	Emissions (tons)				
VOC	41	5.50	0.0005	0.11				
NOx	41	0.64	0.0005	0.01				
CO	41	11.00	0.0005	0.23				
SO <sub>2</sub>	41	0.60	0.0005	0.01				
PM <sub>10</sub>	41	5.70	0.0005	0.12				
PM <sub>2.5</sub>	41	1.90	0.0005	0.04				
Greenhouse Gas			lb/MT	МТ				
CO <sub>2</sub>	41	120,000	0.00045	2,214.00				

Stationary Sources include stoves, heating units, and other equipment. Source: EPA, AP 42, 1997; AES, 2022.

## Table 8 Energy GHG Emissions

Alternative 1

			<b>Emission Factors</b>		Use	Emissions
Sources	CO	2	CH₄	N <sub>2</sub> O		(MT of CO₂e)
	lbs of/MWh				MWh	
Electricity	921.	.1	0.022	0.014	9,000	3,779.07
		MT o	f CO <sub>2</sub> /MT of Solid Wa	aste	MT of Solid Waste	
Solid Waste			0.459		200.00	91.80
		Indoors		Outdoor		
Water/Wastewater	MWh/million Gallons				Million Gallons	
	0.57	0.63 %	6 0.33	0.37 %	200.00	83.98
Total						3,955

			Alte	rnative 2			
		Emi	ssion Factors		Use	Emissions	
Sources	CO <sub>2</sub>	<u>.</u>	CH <sub>4</sub>	N <sub>2</sub> O		(MT of CO <sub>2</sub> e)	
		lk	s of/MWh		MWh		
Electricity	921.	1	0.022	0.014	7,200	3,023.26	
	MT of CO <sub>2</sub> /MT of Solid Waste				MT of Solid Waste		
Solid Waste			0.459		160.00	73.44	
		Indoors		Outdoor			
Water/Wastewater	MWh/million Gallons				Million Gallons		
	0.57	0.63 %	0.33	0.37 %	160.00	67.18	
Total						3,164	

Sources: Electricity based on similar land use projects; Solid Waste CalRecycle, 2016; Water/Wastewater PDG, 2019.

		Table 9         Alternative 1		
Vegetation Land Use	Vegetation Sub-Type	CO2 Emissions Factor (MT CO2/acre)	Net Loss (acres)	Loss of Sequestered Carbon (MT CO2)
orest Land	Trees	111.00	92.09	10221.99
Vegetation	Vegetation	Alternative 2 CO2 Emissions Factor	Net Loss	Loss of Sequestered
Land Use	Sub-Type	(MT CO2/acre)	(acres)	Carbon (MT CO2)
orest Land	Trees	111.00	78.09	8667.99

#### Potential To Emit Calculator for Boilers and Emergency Engines

7/1/2016

This spreadsheet helps estimate a facility's potential to emit. It is provided for the convenience of the permittee community. Emission factor sources are subject to revision or correction. It is the permittee's responsibility to determine their emissions. The permittee should consult with the reviewing authority to determine the appropriateness of this calculator for its source.

If you have one or more of the following units that are exempt from the Indian Country Minor NSR Program, please contact your EPA Regional office before you use this calculator to determine whether you need to obtain a minor NSR permit: Internal combustion engines used for landscaping purposes; Emergency generators, designed solely for the purpose of providing electrical power during power outages; in nonattainment areas classified as Serious or lower, the total maximum manufacturer's site-rated hp of all units shall be below 1,000; Stationary internal combustion engines with a manufacturer's site-rated hp of all units shall be below 1,000; Stationary internal combustion engines with a manufacturer's site-rated hp of lass field as Serious or lower, the total maximum heat input (i.e., from all units combined) of in nonattainment areas classified as Serious or lower, 5 MMBtu/hr or less; and in attainment areas classified as Serious or lower, 5 MMBtu/hr or less; and in attainment areas, 10 MMBtu/hr or less.

#### Directions: Enter the facility's information below.

Write the letter "Y" or "N" next to each fuel type to indicate that the facility does or does not burn that type of fuel.

For **Total Boiler Heat Input** - only add together the heat input of those units that are rated at least 10.0 MMBtu/hr or larger, unless in a severe or extreme ozone nonattainment area. Include all units 2.0 MMBtu/hr and greater in severe or extreme ozone nonattainment areas.

For Total Small Boilers and Heaters Input - only add together the heat input of those boilers and heaters that are rated at less than 10.0 MMBtu/hr, unless in a severe or extreme ozone nonattainment area. Include all units less than 2.0 MMBtu/hr in severe or extreme ozone nonattainment areas.

For Emergency Generators/Engines - this calculator does not calculate emissions from non-emergency (prime) engines. If you have non-emergency engines please contact your reviewing authority

Facility Profile*				Converter
				Insert Value:
				Convert MMscf/yr to MMBtu/yr 345 MMscf 351900 MMBtu/yr
Total Boiler Heat Input -	0	(MMBtu/hr)	Total of boilers 10.0 MMBtu/hr and greater, unless in extreme ozone nonat 2.0 MMBtu/hr and greater.	tainment area then include 40.1712 MMBtu/hr
Fuels Used				
Natural Gas-	N	(Y or N)		
LPG	N	(Y or N)	Sulfur %	
Liquid Fuel (distillate, diesel, etc.)	N	(Y or N)	0.0015 Default = 0.0015	
Total Small Boilers and Heaters Input	0	(MMBtu/hr	Total of boilers less than 10.0 MMBtu/hr, unless in extreme ozone nonattai 2.0 MMBtu/hr.	ment area then less than
Fuels Used				
Natural Gas	Y	(Y or N)		
LPG	N	(Y or N)	Sulfur %	
Liquid Fuel (distiallate, diesel, etc.)	Ν	(Y or N)	0.0015 Defalut = 0.0015	
Emergency Generator/Engines -	400	(hp)		
Fuels Used			Sulfur %	
Diesel-	Y	(Y or N)	0.0015 Default = 0.0015	
Gasoline	N	(Y or N)		
Natural Gas/LPG	N	(Y or N)		
Ozone Attainment Status				
Severe or Extreme Ozone				
Nonattainment	N	(Y or N)		

\*The boiler and emergency engine permit and this calculator are not intened for use with non-emergency engines; for non-emergency engines sources should refer to the engines general permit.

# Potential To Emit Calculator for Boilers and Emergency Engines 7/1/2016

Adjusted to 84 hours/year.

PTE (ton/yr)

Process	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>X</sub>	CO	VOC	CO2	Single HAP	Combined HAP
Boilers	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00
Auxiliary Heaters	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Engine/Generator	0.04	0.04	0.04	0.03	0.52	0.11	0.04	19.32	0.02	0.06
Total PTE	0.04	0.04	0.04	0.03	0.52	0.11	0.04	19.32	0.02	0.06

# Potential To Emit Calculator for Gasoline Dispensing Facilities - Inputs

3/23/2015

#### This workbook is designed to calculate the potential to emit of your gasoline dispensing facility.

The gasoline dispensing facility (GDF) owner/operator shall provide two pieces of information. These include whether or not the GDF is in a designated ozone nonattainment area and the number of vehicle refueling positions at the GDF for both gasoline and diesel vehicles. Ozone attainment/nonattainment designation status can be found at

#### Directions - Enter the facility's information in the yellow-highlighted boxes below.

The facility wide emissions will be displayed on the "Output" sheet.

#### **Facility Profile - User Inputs**

#### What is the number of gasoline only refueling positions at your dispensing facility?

A vehicle refueling position is a single gasoline dispensing machine and its associated nozzle(s). The total number of vehicle refueling positions at your GDF is the number of gasoline-fueled vehicles that can be refueled simultaneously.

#### What is the number of automotive/ nonroad diesel only refueling positions at your facility?

A vehicle refueling position is a single diesel fuel dispenser and its associated nozzle(s). The total number of automotive/nonroad only diesel refueling positions at your facility is the number of automotive-type vehicles (passenger car, light truck)or nonroad equipment that can be refueled simultaneously. This count would include free standing aboveground tanks used to refuel nonroad equipment.

#### What is the number of dispensers capable of refueling with either gasoline or diesel?

These are normally multi-grade dispensers with separate gasoline and diesel fuel nozzles on the same dispenser. These are used primarily to refuel automotive and light truck type vehicles.

#### What is the number of heavy-duty (HD) truck diesel refueling positions at your facility?

A HD truck (e.g., over the road) refueling position is a single diesel fuel dispenser and its associated nozzle(s). The total number of HD truck refueling positions at your facility is the number of HD trucks that can be refueled simultaneously.

Ozone designation status can be found at http://www.epa.gov/oar/oaqps/greenbk/hindex.html or coattainment Enter either attainment or nonattainment.

#### What is the current year?

Enter the current year (a number between 2013 and 2030).

0

16

16

40		

2028

# Potential To Emit Calculator for Gasoline Dispensing Facilities - Outputs $_{3/23/2015}^{\mbox{\ }3/23/2015}$

Potential to Emit (tons VOC/year)

6.938

This facility is located in a ozone attainment area.