Regulatory Order Worksheet

PUGET SOUND Clean Air Agency

Source: Joint Base Lewis-McChord	**Reg Order Number:** 12131
Installation Address: IMCOM | Fort Lewis, WA 98433	**Registration Number:** 21277
Contact Name: Diane Roberts	**Contact Email:** diane.e.roberts2.civ
Applied Date: 04/23/2021	**Contact Phone:** (253) 966-1768
Engineer: Maggie Corbin	**Inspector:** Manolo Zaldivar

A. DESCRIPTION

For the General Order:

Facility-wide synthetic minor emission limit of NOx, CO, and VOC emissions.

Additional Information (if needed):

Facility-wide emissions from JBLM are currently limited under Regulatory Order No. 11247 which was issued under PSCAA Reg I 3.03(f):

"When an applicant requests a federally enforceable regulatory order to limit the potential to emit any air contaminant or contaminants pursuant to WAC 173-400-091, or requests a modification to such an order, the Control Officer or a duly authorized representative may issue such order consistent with the requirements of WAC 173-400-091 and 173-400-171 and Section 3.03(e) above. Regulatory orders issued pursuant to this section are effective the day the Control Officer or representative approves the order and may be appealed to the Pollution Control Hearings Board pursuant to Section 3.17 of Regulation I and RCW 43.21B.310."

Facility-wide emissions are limited to:

- 9.9 tons of any single listed hazardous air pollutants in Section 112(b) of the federal Clean Air Act (HAP),
- 24.9 tons of any combination of HAP,
- 99.0 tons of each of carbon monoxide (CO),
- 99.0 tons oxides of nitrogen (NO_X),
- 99.0 tons of particulate matter (PM),
- 99.0 tons of sulfur dioxide (SO_2), and
- 99.0 tons of volatile organic compounds (VOC).

Compliance monitoring methods were established based on operations at the facility in 2005 (original Reg Order 9185 issued 7/28/05). The methods include limits on natural gas combustion, fuel oil combustion, WWTP gas flaring, gasoline station throughput and emergency generator usage as an alternative to calculating detailed emissions. It also provides a set value of PM emissions for existing wood working and abrasive blasting. However, Condition 3(d) of the permit requires JBLM maintain a rolling 12-month calculation of CO, NOx, PM, SO2, VOC, each HAP and total HAP which appears in conflict with the limitations in Condition 4.

JBLM submitted a request to update Condition 3(d) of General Order 11247 which requires JBLM to perform a rolling 12-month calculation of base-wide emissions within 30 days of the end of each month. An accurate calculation is not feasible since JBLM is using actual emission factors for over 600 types of natural gas external combustion equipment and usage is not provided until 45 days following the end of the month.

Proposed Emission Limitations

The applicant is not requesting a change to facility-wide emission limits:

- 9.9 tons of any single listed hazardous air pollutants in Section 112(b) of the federal Clean Air Act (HAP),
- 24.9 tons of any combination of HAP,
- 99.0 tons of each of carbon monoxide (CO),
- 99.0 tons oxides of nitrogen (NO_X),
- 99.0 tons of particulate matter (PM),
- 99.0 tons of sulfur dioxide (SO_2), and
- 99.0 tons of volatile organic compounds (VOC).

Permit History

Regulatory Order 9185 was issued to US Army Fort Lewis on July 28, 2005 to limit emissions of criteria pollutants and HAPs below major source thresholds. According to the worksheet, the facility emissions of CO and NOx were reduced significantly with the removal of family housing combustion units from emission totals since these units were privatized in 2003. A majority of the NO_X, SO_2, CO and PM emissions at Fort Lewis were generated by combustion sources (boilers, generators and incinerators). VOC emissions were primarily from fuel storage and treatment. Emissions of lead were determined to be insignificant. HAP emissions were primarily attributed to fuel transfer and storage sources.

In 2012, the Agency merged the US Army Fort Lewis (Reg 21277) with US Air Force McChord (Reg 21276). As part of this merger, all equipment previously listed under Reg 21276 was moved to Reg 21277. No changes were made to their synthetic minor permit, but the two bases were merged under the Army's synthetic minor permit.

In 2016, JBLM requested the language in their synthetic minor be updated to clarify the 99 ton/year limit was on each listed criteria pollutant, not the total. This was clearly the intent of the synthetic minor permit as reflected in the NOC 9185 worksheet and the corresponding conditions. The problematic language was identified during an inspection by Army Environmental Command. Regulatory Order 11247 was issued on 11/22/2016 with updated language to make it clear that the 99 ton/year limit was on each listed criteria pollutant.

B. FEES AND ANNUAL REGISTRATION FEES

Fees:

Fees have been assessed in accordance with PSCAA Regulation I, 3.03(e) for Regulatory Orders: per Regulation I 3.03(e): "When a regulatory order is requested by an applicant, the Agency shall assess a fee of $4,000 to cover the costs of processing and issuing a regulatory order under this section. The Agency shall also assess a fee equal to the cost of providing public notice in accordance with Section 3.03(b) of this regulation. These fees shall be due and payable within 30 days of the date of the invoice and shall be deemed delinquent if not fully paid within 90 days of the invoice."

Fee Description	Cost	Amount Received (Date)
Reg I 3.03(e)	$4,000	
Public Notice*		
Initial fee received		$4,000 (4/23/2021)
Public comment fee received		(TBD)
Total		

*Publication fees to be invoiced following public comment period

Registration Fees:
Registration fees are assessed to the facility on an annual basis. Fees are assessed in accordance with Regulation I, Section 5.07. The 2021 JBLM Invoice is shown below for reference.

PUGET SOUND
Clean Air Agency

Invoice for Year 2022 Registration Fees

Bill To:
Joint Base Lewis-McChord
Public Works - Env. Div.
BOX 339500, MS 17
Joint Base Lewis-McChord, WA 98433-9500

Invoice Date:	Invoice #:
November 19, 2021	20220055
Due Date:	**Terms:**
January 03, 2022	Net 45 Days
Facility ID (Registration #):	
21277	

Site Address: ***Joint Base Lewis-McChord***
IMCOM, Fort Lewis, WA 98433

The annual registration fee is required by Washington State law and Puget Sound Clean Air Agency's Regulation I.

Facility Fees and Applicable Regulations			Charges
Base Fee for Registered Sources. Reg I, 5.07(c)			$ 1,150.00
Reg I, 5.03(a)(1) - Facilities subject to federal emission standards (Title 40 CFR)			
Reg I, 5.03(a)(3) - Facilities with annual emissions that meet or exceed thresholds			
Reg I, 5.03(a)(4)(C) - Facilities with fuel burning equipment			
Reg I, 5.03(a)(4)(D) - Facilities with spray coating operations			
Reg I, 5.03(a)(5) - Facilities with gas or odor control equipment (>= 200 cfm)			
Reg I, 5.03(a)(6) - Facilities with particulate control equipment (>= 2,000 cfm)			
Reg I, 5.03(a)(8)(C) - Facilities with coffee roasters			
Additional Fees:			
Reg I, 5.07(c)(1) - 40 CFR 60 Subpart Dc			$ 2,100.00
Reg I, 5.07(c)(1) - 40 CFR 63 Subpart GG			$ 2,100.00
Reg I, 5.07(c)(2) - Facilities with annual emissions that meet or exceed thresholds			$ 2,300.00
			$ 7,650.00
Emission Surcharges - Reg I, 7.07(b)(2)	**Tons in 2020**	**Per Ton**	
CO (Carbon Monoxide)	44	$ 30	$ 1,320.00
HAP (Hazardous Air Pollutants)	4	$ 60	$ 240.00
NOx (Nitrogen Oxides)	49	$ 60	$ 2,940.00
PM10 (Particulate Matter < 10 microns)	4	$ 60	$ 240.00
VOC (Volatile Organic Compounds)	29	$ 60	$ 1,740.00
			$ 6,480.00
Fee Totals			
TOTAL REGISTRATION FEE			**$ 14,130.00**
The Total Registration Fee is due by January 03, 2022. If unpaid after January 03, 2022, the facility may be subject to enforcement action with civil penalties (Reg I, 5.07(b)).			

These fees will change for 2023 since the coffee roaster has been removed and the odor control equipment was associated with the wastewater treatment plant which will now be charged a registration fee as a separate source (See discussion in Section F).

Since this is a revision to the existing federally enforceable limit in Reg I 5.07(c)(2), there is no change to the fee structure that applies to this facility.

C. STATE ENVIRONMENTAL POLICY ACT (SEPA) REVIEW

State Environmental Policy Act (SEPA) review was not conducted for the issuance of this Regulatory Order. In this case, the Regulatory Order does not include the establishment of any new source of emissions.

Regulation I, Article 2. The SEPA review is undertaken to identify and help government decision-makers, applicants, and the public to understand how a project will affect the environment. A review under SEPA is required for projects that are not categorically exempt in WAC 197-11-800 through WAC 197-11-890. A new source review action which requires a NOC application submittal to the Agency is not categorically exempt. A SEPA determination was made for actions that triggered a Notice of Construction permit.

D. TRIBAL CONSULTATION

On November 21, 2019, the Agency's Interim Tribal Consultation Policy was adopted by the Board. Criteria requiring tribal consultation are listed in Section II.A of the policy and include establishment of a new air operating permit source, establishment of a new emission reporting source, modification of an existing emission reporting source to increase production capacity, or establishment or modification of certain equipment or activities. In addition, if the Agency receives an NOC application that does not meet the criteria in Section II.A but may represent similar types and quantities of emissions, the Agency has the discretion to provide additional consultation opportunities.

This project does not meet any of the criteria for consultation listed in Section II.A of the Agency's Interim Tribal Consultation Policy. This order does not authorize an increase in emissions or new equipment. The intent of this Order is to revise but not increase already established federally enforceable limits on potential emissions.

E. EMISSION ESTIMATES

Facility-wide Emissions

Without the federally enforceable limits of this Order, the facility PTE would exceed major source thresholds for NOx, SO2 and VOCs.

The original evaluation of potential emissions was conducted in 2005 prior to the merger of Fort Lewis and McChord. The worksheet for the synthetic minor permit (Regulatory Order 9185) included the following analysis for emissions at Fort Lewis Army Base:

- The 1998 PTE calculations for Fort Lewis were included in the application and showed potential emissions were above major source levels for NOx, SO2, CO, VOC, PM and HAPs. The primary source of NOx, SO2, CO and PM emissions was fuel combustion in the boilers. Spray coating operations and fuel transfer were the primary sources of VOC and HAP emissions. The wastewater treatment plant contributed less than 1 ton/year to VOC emissions.
- In the 2005 application for the synthetic minor permit, the applicant provided a detailed evaluation of actions Fort Lewis had taken to reduce emissions. This included using cleaner fuels in the boilers,

replacing No. 6 and No. 4 fuel oils with No. 2 distillate oil, removing the solid waste incinerator, reducing the number of fueling operations, and employing Stage I and Stage II vapor recovery on all AAFES gasoline refueling operations, replacing high VOC and high coatings and solvents with more environmentally friendly products, upgrading particulate controls on woodworking and media blasting operations. Based on the updated calculations, Fort Lewis was able to show they could comply with the synthetic minor permit.

Fort Lewis and, after the merger, JBLM has been able to operate within the limits set in the synthetic minor. Emission estimates are provided to the Agency annually in accordance with the requirements in Regulation I, Section 5.05 and are summarized below.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2016	2017	2018	2019	2020
CO	65.1	63.7	65.9	65.6	63.9	60.0	74.2	55.2	53.6	48.3	44.9	38.9	45.3	45.7	44.0
HAP	6.4	6.5	4.5	4.7	4.5	4.7	5.5	5.0	3.9	2.4	2.7	2.4	2.0	3.9	4.0
NO2	51.3	50.4	56.6	56.1	55.1	93.8	99.7	81.7	80.5	73.5	52.4	56.5	51.5	51.3	49.1
PM10	5.1	4.7	5.2	5.2	5.1	4.8	6.2	5.2	5.1	4.9	4.4	4.7	4.4	4.4	4.2
PM2.5	4.9	4.7	5.1	5.1	5.0	4.7	5.1	5.1	5.0	4.7	4.3	4.5	4.3	4.3	4.1
SO2	9.9	4.5	7.2	5.3	5.7	2.6	3.6	2.0	1.9	0.7	0.5	0.5	0.5	0.4	0.4
TAC	17.8	11.7	12.4	9.6	9.8	8.4	9.5	7.6	6.7	3.0	2.9	2.6	2.3	4.6	4.7
VOC	46.3	42.1	29.6	37.6	34.8	35.1	51.2	42.6	34.6	24.7	24.7	20.3	20.8	41.2	29.1

JBLM submitted potential emissions in their original application, an updated version on 5/9/2022, and revisions on 6/21/22 and 7/17/22. The electronic NOC folder includes all versions submitted, but only the most recent version is embedded below:

2021
PTE_Revised_v4.pdf

Summaries of criteria pollutant PTE are shown in Table 3-1 of the document:

Table 3-1 PTE Criteria Pollutants by Source, tons per year

Source	CO	NOx	SOx	VOC	Lead	PM
External Combustion Equipment	285.02	250.89	2.18	18.64	0.01	26.08
Fuel Cell Maintenance	0.00	0.00	0.00	1.36	0.00	0.00
Generators, Diesel	28.00	73.09	0.042	5.02	0	4.12
Fuel Dispensing	0.00	0.00	0.00	39.73	0.00	0.00
Fire Training	0.23	0.086	.0003	0.1425	0.00	0.36
Degreasing and General Solvent Use	0.00	0.00	0.00	45.64	0.00	0.00
Jet Engine Testing	0.79	1.61	0.16	0.10	0.00	0.29
Landfill (Closed)	0.37	0.00	0.00	0.00	0.00	0.00
Surface Coating Operations	0.00	0.00	0.00	7.37	0.00	1.25
Woodworking and Abrasive Blasting	0.00	0.00	0.00	0.00	0.00	12.76
Total	314.41	325.68	2.38	118.02	0.01	46.86

Summaries of PTE for Hazardous Air Pollutants (HAP) are shown in Table 3-2 of the document. The highest PTE for a single HAP is 3.1 ton/year for toluene. Total HAP is less than 10 ton/year.

A discussion of potential emissions for each type of source is included below:

1. Abrasive Blasting and Woodworking: The applicant reviewed highest annual usage from 2016-2020 for each individual source to determine the highest historic usage for the various equipment in the 2080-hour work year. There are currently 11 pieces of equipment on-site. The applicant pro-rated hours for each piece of equipment based on maximum historic usage reviewed by multiplying by 4.21 (8760 hours/2080 hours). This provided a total of 5102.73 hours of woodworking/abrasive blasting. The baghouse regulated under NOCOA 9566 has not been used since 2011 and is not anticipated to be in use until 2024 or 2025. Usage was estimated to be the same as that at Bldg 1401 under NOCOA 12145.

   There is also a blasting operation permitted under NOCOA 11750, but JBLM does not anticipate using as their mission set changed (per 6/6/22 e-mail from applicant). However, the equipment is still at the site. Another operation permitted under NOCOA 9566 has been inactive for 3 years, but the facility is being reconstructed and JBLM may use in the future. Both of these have been included in my updated PTE estimate.

   The applicant applied an emission factor of 5 lb/hour PM from Table 4-3 of AP-42, Table 10.4.1. PTE was determined to be 12.76 tpy but the emission factor assumes cyclones are the only particulate control. This would greatly overestimate emissions. Instead, I looked at grain loadings included in each of the permits (if applicable) which were typically 0.01 gr/dscf for older permits and of 0.005 gr/dscf for new permits. If no limit, I defaulted to the regulatory requirement of 0.05 gr/dscf for other equipment in Regulation I, Section 9.09. Based on this analysis, PTE was 2.2 tons/year. Therefore, the 12.76 used by the applicant is an overestimate PTE for this equipment. Particulate matter is not limited in this Order since PTE is below major source thresholds.

BLDG	NOC	CFM	Max Actual Hours	Max Potential Hours	Permitted gr/dscf	Default	PTE (lb/yr)
1401	12145	4800	133	560	0.005		115.2
2044	8530	6827	3	13	0.01		7.607229
1325	9566	10600	133	560		0.05	2544
3098	7057	18000	77	325		0.05	2507.143
4076	12102	3600	297	1250	0.005		192.8571
9630	12247	3600	618	2601	0.005		401.2971
9985	8424	5760	20	84	0.01		41.472
J00545	cyclone	2000	6	25		0.05	21.429
J00745	7723	20000	5	20	0.01		34.28571
J01422	Exempt	2000	53	223		0.05	191.1429
9705	11750	24500		2000	0.002		840
							6896 lb/yr
							3.4 tpy

For this Order, potential PM emissions are less than major source levels, so I have not specified an acceptable emission factors. However, the facility can use the grain loading limits set on each dust collector (if applicable) and actual hours of operation to calculate annual emissions from these operations. If there is no enforceable limit, the 0.05 grain loading limit would apply.

2. Natural Gas and Fuel Oil Combustion: The majority of emission- generating equipment located at JBLM is attributable to natural gas and fuel oil combustion in boilers, heaters and furnaces (external combustion units). The applicant provided a PTE in Table 5-3. JBLM currently uses an emission trigger of 15,000,000 therms as a limit since that is included in the Regulatory Order as a screening level for determining if a more refined emissions calculation is necessary. With this screening level, PTE for CO is 65 tons/year and NOx is 63 tons/year. Using a PTE of 8760, both CO and NOx would be over major source thresholds. Emission factors used are consistent with Air Emissions Guide for Air Force Stationary Sources, June 2020 (included in electronic NOC file). Based on a review of these emission factors, this is an acceptable source of emission factors. I verified CO, NOx and VOC are consistent with EPA AP-42. For this Order, emissions are based on therms or gallons of diesel used and emission factor either from the Air Emission Guide for Air Force Stationary Sources/EPA AP-42 or if there is source specific data based on source test conducted with EPA Reference Test methods, those emission factors can be substituted (if approved by the Agency). If actual emissions remain well below major source levels, the source can allot a worst-case amount of therms and/or gallons for their monthly calculations and include worst-case emissions in their monthly records which are consistent with this “screening” usage. Then records would need to adequately support therms and/or gallons were below that screening value for the month.

   The following sources listed in Condition 5 of the Order are acceptable for obtaining emission factors for this source category:

- Source test data for specific equipment if the test was conducted using EPA Reference Test Methods and emission factors are reviewed by the Agency to verify representative. This is the preferred method.
- The Air Emissions Guide for Air Force Stationary Sources, June 2020 which are consistent with EPA's AP-42 for the pollutants limited in this Order. Future updates would have to be reviewed with acknowledgement by the Agency in writing that the emission factors in the updated version was acceptable.
- EPA AP-42
- Use of other emission factors would have to be reviewed prior to use by JBLM.

3. Internal Combustion Emergency Generators: JBLM has 127 emergency generators with a rated capacity <450 kWh and 20 that are ≥450 kWh. The applicant calculated PTE for emergency generators based on the standard 500-hour per generator assumption for emergency generators (John Seitz memo, EPA, 1995). This memo recognizes that emissions consist primarily of CO and NOx. Emissions occur only during emergency situations and for short time periods to perform maintenance checks and operator training. The hours of operation are constrained in operation, in the sense that, by definition and design, they are used only during periods where electric power is unavailable. Based on this, EPA recommended a default of 500 hours per year in determining potential emissions.

   The applicant uses the methodology in the Air Emission Guide for Air Force Stationary Sources for determining appropriate emission factors. For non-NSPS engines up to 600 hp, NOx, CO and VOC emissions are based on EPA AP-42 emission factors in Section 3.3, Table 3.3-1. For non-NSPS engines > 600 hp, NOx, CO and VOC emissions are based on EPA AP-42 emission factors in Section 3.4, Table 3.4-1. There are slight differences from the lb/hp-hr in AP-42 since JBLM uses 8089 BTU/hp-hr to convert from lb/MMBtu to lb/hp-hr instead of the default 7000 BTU/hp-hr. This number better reflects the inefficiencies of generators. For engines subject to the NSPS, the applicant used the standards in Part 60, Subpart IIII – Standards for Performance for Stationary Compression Ignition Internal Combustion Engines. Where thresholds of NOx + NMHC or NOx + THC are in the NSP, the NOx emission factor was calculated using the NOx to NMHC or NOx to THC ratio as determined by the emission factors provided in AP-42.

   Under this Order, JBLM can calculate monthly emissions based on actual hours of operation or calculate the previous 12 months of emissions using the default of 500 hours.

   If an emergency generator operates more than 500 hours/year, it is no longer classified as an emergency engine and would need to obtain a Notice of Construction Order of Approval. Historically, this has not been a concern for emergency engines located at JBLM.

   The following sources listed in Condition 5 of the Order are acceptable for obtaining emission factors for this source category:

   - The Air Emissions Guide for Air Force Stationary Sources, June 2020 which are consistent with EPA's AP-42 for the pollutants limited in this Order and the limitations in the NSPS

for RICE. Future updates would have to be reviewed with acknowledgement by the Agency in writing that the emission factors in the updated version was acceptable.
- AP-42
- Use of other emission factors would have to be reviewed prior to use by JBLM.

4. Solvent Cleaning and Cleaning Tanks: To determine potential emissions, the applicant reviewed highest annual solvent usage from 2016-2020 for each individual source to determine the highest historic solvent usage for degreasing tanks and general solvent use in the 2080-hour work year. The applicant pro-rated solvent usage based on maximum historic usage reviewed by multiplying by 4.21 (8760 hours/2080 hours) and multiplied this by VOC content to determine potential emissions of VOCs. Potential emissions are 20 tons/year. There are no vapor degreasers located at the installation, only cold solvent tanks.

   Under this Order, JBLM must use a material balance method to calculate emissions of VOCs from coating operations. VOC content must be based on the individual products VOC content or a worst-case VOC content if grouping solvents under a single category.

5. Surface Coating: To determine potential emissions, the applicant reviewed highest annual individual coating usage from 2016-2020 for each individual source to determine the highest historic coating usage for degreasing tanks and general solvent use in the 2080-hour work year. The applicant pro-rated solvent usage based on maximum historic usage reviewed by multiplying by 4.21 (2080 hours/8760 hours) and multiplied this by VOC content to determine potential emissions of VOCs. Potential emissions are 7.4 tons/year.

Bldg	NOC	CFM	Type of Coating
1325	7780	125	Aerosol spray can, roll on, Wood furniture
1401	5438	13800	No longer in use - only aerosol spray cans
3035	3240	87500	Aerospace
3098	4367	14000	Only aerosol spray can, brush
9040	8065	2267	no longer in use
9580	4074	3000	Military equipment/vehicle painting
9580	4074	8300	Military equipment/vehicle painting
9580	5810	39600	Military equipment/vehicle painting
J00745	7723	40824	Aerospace - NESHAP limits in permit
J00745	8681	12600	Aerospace - NESHAP filter limits only
J01160	7184	400000	Aerospace - NESHAP limits in permit
4081	9954	12600	Automotive. Not currently in use

Under this Order, JBLM must use a material balance method to calculate emissions of VOCs from degreasing tanks and general solvent use. VOC content must be based on the individual products VOC content or a worst-case VOC content if grouping solvents under a single category.

6. Fire Training: The fire training facility is permitted under Order of Approval No. 6130. Only propane fuel can be used in the fire training facility and the fuel usage is limited to 30,000 gallons annually. Emission factors are fuel specific and based on limited information available for fire training. Based on this, the potential emissions in tons per year are 0.23 for CO, 0.09 for NOx, and 0.36 for VOC.

   The following sources listed in Condition 5 of the Order are acceptable for obtaining emission factors for this source category:

   - The Air Emissions Guide for Air Force Stationary Sources, June 2020. Future updates would have to be reviewed with acknowledgement by the Agency in writing that the emission factors in the updated version was acceptable.
   - Use of emission factors used in the Notice of Construction review
   - Use of other emission factors would have to be reviewed prior to use by JBLM.

7. Engine Test Stand: The engine test stand was permitted under Order of Approval No. 12012. Operations are anticipated to start during summer of 2022. PTE was evaluated for this project as part of the project review. PTE in tons/year are 0.79 for CO, 1.61 for NOx, and 0.10 for VOC. Emissions are calculated using the emission factors reviewed in Order 12012 and multiplying by minutes per mode to determine potential emissions from each test. The number of engines to be tested is limited to 260 during any consecutive 12-month period.

   The following sources listed in Condition 5 of the Order are acceptable for obtaining emission factors for this source category:

   - The Air Emissions Guide for Air Force Stationary Sources, June 2020 using surrogate engines reviewed under Order of Approval No. 12012. Future updates would have to be reviewed with acknowledgement by the Agency in writing that the emission factors in the updated version was acceptable.
   - Emission factors reviewed under the NOC.
   - Use of other emission factors would have to be reviewed prior to use by JBLM.

8. Refueling: JBLM currently has eight refueling stations with Stage I and Stage II equipment and three uncontrolled gasoline dispensing operations. I verified the uncontrolled gasoline dispensing operations are not required to install Stage I since they are exempt from this requirement in accordance with Regulation II, Section 2.07. Eagles Pride Golf Course has a 2000 gallon AST with Stage I, but it only fuels golf carts so is not regulated under Regulation II, Section 2.07. Potential emissions are based on maximum estimated throughput and the Air Emissions Guide for Air Force Stationary Sources, June 2020. The Agency uses the CARB Revised Emission Factors for Gasoline Marketing Operations at California Gasoline Dispensing Facilities (December 23, 2013). The Order requires use of these emission factors and actual throughput in calculating monthly VOC emissions associated with gasoline refueling.

9. Fuel Cell Maintenance: JBLM performs fuel cell maintenance on fuel tanks removed from aircraft. Potential emissions were calculated using the maximum number of tanks that can be

maintained under current staffing levels. Emissions are calculated using the Air Emissions Guide for Air Force Stationary Sources, June 2020 which is an acceptable method for calculating these emissions. Potential emissions of VOC are 1.4 tons/year.

10. Landfill: JBLM has one landfill consisting of six cells with a total of 780,843 metric tons of municipal waste mixed with construction and demolition debris. This landfill was fully closed in 2004. PTE was based on AP-42 Section 2.4.4.1 and LANDGEM with potential emissions expected to continue to degrease over time. Potential VOC emissions in 2020 were 7.4 tons/year. The current methodology is acceptable for calculating potential emissions of VOC from the landfill.

F. LIMIT EVALUATION

Based on an evaluation of potential emissions, combustion sources (boilers and generators) are responsible for the majority of the NOx, SO2, CO and PM emissions. VOCs are primarily generated by fuel storage and transfer, but also attributable to coating and cleaning operations. HAP emission sources are primarily attributable to fueling operations, spray coating operations and combustion sources.

In the original synthetic minor application, the applicant included an evaluation of the following sources:

- WWTP methane in Flare
- Diesel Generators
- Spray Coating operations
- Degreasing operations
- Solid Waste Incinerator (no longer in operation and not permitted to operate)
- Fuel storage and transfer of gasoline and AvGas
- Wood & Material working, including Abrasive Blasting
- Landfill gas flare

I have reviewed the current limits and structure and updated the limits, monitoring, recordkeeping and reporting as discussed in this section.

Tiered Approach: The original synthetic minor was set up using a two-tiered process for calculating emissions. The permit conditions specified that monthly emissions of criteria pollutants and HAP had to be calculated, but also included screening limits on natural gas combustion, fuel oil combustion, wastewater treatment plant flare emissions, emergency generator kWh, and gasoline throughput. If the screening limits are exceeded, a more detailed emission analysis is required. The screening limits are set based on the following:

- Natural gas – assumes all natural gas used on base is consumed in small industrial boilers and emission factors are from AP-42 which will overpredict emissions for newer boilers.
- For oil-fired combustion in boilers, assumes worst-case sulfur content allowable.
- For emergency generators, a limit on kWh based on AP-42 emission factors.
- Gasoline throughput screening limit based on a certain number of fueling stations and AP-42 emission factors.

This approach assumes that operations do not change over time at the military installation and that the significance of specific sources remain the same. Although JBLM can adjust their emission methodology and set up a tiered approach based on current operations using worst case emission factors, these screening levels have not been specifically incorporated into the updated Order since they do not adequately assure compliance if there are changes in operation over time. For example, the merging of Fort Lewis and McChord could have resulted in a different apportionment of emission sources. The existing Order does specify that JBLM can continue to use a "screening" value for external and internal combustion sources and estimate monthly emissions using this worst-case fuel usage for external combustion units or 500 hours/year for emergency engines. If this screening method is used, JBLM would have to verify that natural gas and fuel usage in external combustion units remains below the screening values. This would overestimate monthly and 12-month rolling total emissions.

Fugitive Emissions: The synthetic minor permit in place did not require an accounting of fugitive emissions which is consistent with the regulatory determination of major source applicability. A "major source," for the purpose of determining Title V applicability, is defined in WAC 173-401-200(19). Paragraph (b) of that definition states: "The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of this section, unless the source belongs to one of the following categories of stationary source:" Military installations are not included on this list so fugitive emissions do not need to be included under the synthetic minor permit. There is no change with this Order.

Sources Not Included under Synthetic Minor: Non-road engines, including ground support equipment, landing and takeoff operations, and other mobile sources are not considered stationary sources and emissions do not need to be accounted for under the synthetic minor permit. There is no change under this Order. The original synthetic minor permit also specified that insignificant emission units under WAC 173-401-530. This exemption was too broad and not accurate for major source applicability. The list of categorical exemption in WAC 173-401-532 can be used as guidance for determining activities that do not need to be included in emissions accounting for the synthetic minor permit.

Non-routine sources that are irregular, non-continuous, and/or infrequent sources of emissions such as bulk storage tank cleaning, fuel spills, prescribed burning, and wildfires do not have to be accounted for under the synthetic minor permit.

Aerospace NESHAP: 40 CFR 63 Subpart GG – Aerospace Manufacturing and Rework Operations applied to Fort Lewis and McChord since they were both major sources. At the time of issuance of the synthetic minor, EPA had a once-in, always in policy so JBLM would have to comply with a NESHAP even after the source became a minor source under the synthetic minor permit. EPA has since finalized regulatory text to implement the plain language of the Clean Air Act that allows major sources of HAP to reclassify as area sources at any time provided the facility reduces HAP emissions. Although this is an option for JBLM, the Agency would not allow if there is backsliding of requirements that would result in an emission increase. In this case, the inclusion of the NESHAP provides very little value since the NESHAP has significantly changed since the regulation in place in 2005 when JBLM first became a synthetic minor source. This makes it confusing to determine compliance with the broad regulatory requirements. Instead, I have evaluated substantive requirements that were in place in the version of the regulation in place in 2005:

Citation	Standard	Impact
40 CFR 63.743	Standards: General	JLBM does not use an air pollution control device or averaging to comply with the NESHAP so no substantive impact. Section (e) was not in the version of the rule in place in 2005.
40 CFR 63.744	Standards: Cleaning operations	Similar housekeeping measures would continue to apply through Reg II, Section 3.09. Hand-wipe cleaning requirements in (b) are only included in one NOCOA for aerospace operations, but are standard practice for JBLM. Include in VOC calculations. Similar spray gun cleaning requirements would continue to apply through Reg II, Section 3.09 Similar flush cleaning requirements would continue to apply through Reg II, Section 3.09
40 CFR 63.745	Standards: Primer, Topcoat, and Specialty Coating Application Operations	The version of the rule in place in 2005 did not include specialty coatings. JBLM has consistently reported only using specialty coatings in semi-annual reporting. However, there is a VOC limit in place in Reg II, Section 3.09 that would apply to military topcoats and primers that are as stringent as the NESHAP (specific military specifications). In addition, a majority of the permits for booths that have been permitted for aerospace coatings do include NESHAP specific requirements (NOCOA 7723, 7184, 8681) that pertain to VOC coatings of primers and topcoats.
40 CFR 63.746	Standards: Depainting Operations	JBLM has not depainted more than 6 completed aerospace vehicles since the synthetic minor permit was put in place, so these requirements have not applied. The Agency has permitted smaller depainting operations for aerospace components and the NESHAP was used in determining BACT/tBACT. NOCOA 7057 requires JBLM to comply with applicable requirements for depainting operations in the NESHAP for the blasting operation in Bldg. 3098. If there were new operations that resulted in an increase in depainting operations and increased emissions, a Notice of Construction Order of Approval would be required and BACT/tBACT would be no less stringent than the NESHAP.
40 CFR 63.747	Standards: Chemical Milling Maskant Application Operations	This is not applicable to operations at JBLM. A new operation would be subject to Notice of Construction permitting requirements.
40 CFR 63.748	Standards: Handling and Storage of Waste	The regulation in place at the time the synthetic minor was put in place just addressed housekeeping measures to minimize emissions from handling, transfer and storage of organic wastes. The newer regulations clarify which operations these requirements apply. General housekeeping measures in Reg II, Section 3.09 provide equivalent emission reductions.

Based on this analysis, retaining the high-level citation to the full aerospace NESHAP that was in place in 2005 is confusing and does not result in emission reductions since Regulation II, Section 3.09 and the NOCOA's already in place have similar requirements that would more clearly apply to this operation. New aerospace coating operations would be required to obtain an NOC permit which would have BACT/tBACT which is at least as stringent as the NESHAP. Therefore, I am recommending we no longer include the reference to 40 CFR Part 63, Subpart GG. However, there is a provision in the permit that specifies hand-wipe cleaning operations must comply with 40 CFR 63.744(b).

Wastewater Treatment Plant Privatization: As part of this review, the applicant requested the Agency disaggregate the wastewater treatment plant. Instead, the wastewater treatment plant would be registered as a separate registered source. The Agency has reviewed the analysis submitted by the

applicant on 11/19/2021 and concurs that this facility should be a separate source. A summary of the key points in the analysis include:

- JBLM no longer has direct control over processes causing emissions at these utility systems. JBLM supplied the contract which transferred all rights, title and interest of the wastewater and drinking water utility systems from the government to a private company, American Waters, who will become the owners of the systems. That includes all the equipment permitted under Order of Approval No. 11032. Any additional air emission sources added to the facility in the future will be permitted by American Waters and it is their sole responsibility to maintain compliance with all air regulations.

- The applicant cited EPA guidance in the EPA guidance memo: Major Source Determinations for Military Installations under the Air Toxics, New Source Review, and Title V Operating Permit Program of the Clean Air Act (August 2, 1996, Seitz memo). This document is included in the electronic worksheet folder and remains the primary guidance for evaluating possible disaggregation of sources at military installations.

- The wastewater treatment plan will remain within the JBLM fence line, so the pollutant-emitting activities are located on the property. The property itself will be leased to American Waters for 50 years. This is consistent with similar leases to the Washington Army National Guard and American Lake Veteran's Medical Center that PSCAA previously determined to be separate registered sources.

- The pollutant emitting activities will be owned and operated by American Waters. This is consistent with pages 2-3 of the Seitz Memo which states that activities owned and operated by different entities, such as two different military services, are properly considered to be under separate control of each entity. Although EPA guidance originally cited multiple factors in determining common control, this criterion was narrowed in a letter from William Wehrum, Assistant Administrator, OAR, EPA, addressed to Honorable Patrick McDonnel, Secretary of the Pennsylvania DEP (April 30, 2018, Wehrum Letter). In the Wehrum letter, EPA indicated the determination of common control hinges on whether one entity has the power or authority to dictate the decisions that affect the applicability of, or compliance with, relevant air pollution regulatory requirement. JBLM and American Water will not share common work forces, administrative functions, buildings or equipment, and the contract specifies that American Waters is solely responsible for compliance with environmental laws.

- American Waters is not in a support/dependency relationship with JBLM in that it serves other entities – Clover Park School District, AAFES, Washington Army National Guard at Camp Murray, American Lakes VA Medical Center, Defense Logistics Agency, Defense Commissary Agency and defense Health Agency. Even if all military activities were to cease, American Waters would continue to provide service to these other entities. This supports the criteria in the Seitz memo for separating sources (page 3).

- Although use of the industrial groupings (SIC codes) has also been historically used in separating sources, the Seitz memo clarified that SIC Code 97 for National Security wasn't appropriate for major source determinations for military installations since there can be numerous functionally

distinct operations taking place. When JBLM owned and operated the wastewater treatment plant, it was appropriate to maintain the 2-digit SIC code. American Waters will have a different SIC code since it is not operated as a support facility under JBLM.

A separate registration number 30397 has been set up for American Waters and the equipment associated with Order of Approval No. 11032 has been moved from JBLM to American Waters. The Agency does not reissue the Order of Approval, but it has been transferred to the new registered source.

Limits: The federally enforceable limits for this regulatory order must meet the requirements of WAC 173-400-091.

EPA has provided guidance for federally enforceable permit limits in several documents which were utilized in the development of the limits, compliance demonstration, monitoring recordkeeping and reporting requirements of this Order (PDF copies are located in the "NOC Worksheet References" sub-folder of this project folder).

- Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act (Act), 1/25/1995
- Guidance on Enforceability Requirements for Limiting Potential to Emit through SIP and §112 Rules and General Permits, 1/25/1995
- Approaches to Creating Federally-Enforceable Emissions Limits, 11/3/1993
- EPA comments on Lockwood Regional Landfill March 29, 2011

Per EPA guidance (example from EPA comments on Lockwood Regional Landfill March 29, 2011, which can be found in the project folder file "March 29 2011 Lockwood Landfill" PDF) "EPA encourages a 5-10% buffer between the permitted emission limits and the federal threshold". A 5% buffer will be used for the synthetic minor emission limits. JBLM has operated under a synthetic minor permit since 2005 and they have consistently shown emissions are below major source levels. A majority of emissions are associated with combustion sources and the emission factors used provide an adequate assurance of compliance with the permit limits. Therefore, the 5% provides an adequate buffer for assuring JBLM remains below major source levels.

The recommended facility-wide emissions limits are included below:

- 9.5 tons of any single listed hazardous air pollutants in Section 112(b) of the federal Clean Air Act (HAP),
- 23.75 tons of any combination of HAP,
- 95.0 tons of each of carbon monoxide (CO),
- 95.0 tons oxides of nitrogen (NO_X),
- 95.0 tons of particulate matter (PM),
- 95.0 tons of sulfur dioxide (SO_2), and
- 95.0 tons of volatile organic compounds (VOC).

Actual emissions are 2019 as provided in the application are as follows:

- Highest single HAP (Toluene): 0.33 ton
- Total HAP: 1.69 tons
- CO: 37.95 tons
- NOx: 51.33 tons
- PM: 4.42 tons
- SOx: 0.43 tons
- VOC: 34.91 tons

Monitoring, Recordkeeping and Reporting Requirements

WAC 173-400-091(3) requires that any order issued include monitoring, recordkeeping and reporting requirements sufficient to ensure that the source or stationary source complies with the conditions of the order. Compliance is to be determined on a monthly basis (12-month rolling). Because the monitoring is based on equipment specific emission factors, EPA emission factors or material balance methods, this monitoring structure is sufficient to ensure that the facility remains below Title V permitting thresholds.

The permit does specify certain categories of equipment and how emissions will be calculated for those categories (i.e. combustion sources, coating operations). However, this does not preclude the base from adding new sources of emissions in the future. The intent is that all emission units at the source that would be considered in determining major source status for WAC 173-401. It does not include non-road sources. Guidance for the types of equipment and activities that do not have to be included can also be found listed as categorically exempt insignificant emission units listed in WAC 173-401-532.

The existing Order is being changed to allow the facility 60 days from the end of the month to calculate emissions since performing an accurate calculation within 30 days was not feasible. JBLM track over 600 types of natural gas combustion equipment and was performing data entry on each unit. The 60 days gives them adequate time to obtain records and also clarifies that similar equipment can be grouped for easier tracking and recordkeeping purposes.

G. OPERATING PERMIT

The Title V Air Operating Permit (AOP) program applicability for the entire source has been reviewed.

The facility is not a Title V air operating permit source because post project PTE remains below Title V applicability thresholds and criteria due to federally enforceable limits in Regulatory Order 11247 was issued on 11/22/2016. This Regulatory Order will cancel and supersede the existing Order upon issuance. The source is considered a "**synthetic minor**".

H. APPLICABLE RULES & REGULATIONS

This section lists regulations applicable to the issuance of General Orders. The worksheet for NOC 11769 lists applicable regulations for Starbucks Kent more broadly.

Puget Sound Clean Air Agency Regulations

> ***SECTION 3.03*** GENERAL REGULATORY ORDERS
> (f) When an applicant requests a federally enforceable regulatory order to limit the potential to emit any air contaminant or contaminants pursuant to WAC 173-400-091, or requests a modification to such an order, the Control Officer or a duly authorized representative may issue such order consistent with the requirements of WAC 173-400-091 and 173-400-171 and Section 3.03(e) above. Regulatory orders issued pursuant to this section are effective the day the Control Officer or representative approves the order and may be appealed to the Pollution Control Hearings Board pursuant to Section 3.17 of Regulation I and RCW 43.21B.310.

Washington State Administrative Code

WAC 173:400-091: Voluntary limits on emissions.

(1) Upon request by the owner or operator of a new or existing source or stationary source, the permitting authority with jurisdiction over the source shall issue a regulatory order that limits the potential to emit any air contaminant or contaminants to a level agreed to by the owner or operator and the permitting authority with jurisdiction.

(2) A condition contained in an order issued under this section shall be less than the source's or stationary source's otherwise allowable annual emissions of a particular contaminant under all applicable requirements of the chapter **70.94** RCW and the FCAA, including any standard or other requirement provided for in the Washington state implementation plan. The term "condition" refers to limits on production or other limitations, in addition to emission limitations.

(3) Any order issued under this section shall include monitoring, recordkeeping and reporting requirements sufficient to ensure that the source or stationary source complies with any condition established under this section. Monitoring requirements shall use terms, test methods, units, averaging periods, and other statistical conventions consistent with the requirements of WAC **173-400-105**.

(4) Any order issued under this section must comply with WAC **173-400-171**.

(5) The terms and conditions of a regulatory order issued under this section are enforceable. Any proposed deviation from a condition contained in an order issued under this section shall require revision or revocation of the order.

I. PUBLIC NOTICE

This project meets the criteria for mandatory public notice under WAC 173-400-171(3)(k) for establishing a voluntary limit on emissions. A 30-day public comment period shall be held from July 25 through August 24, 2022. Notices that the draft materials were open to comment were published in the Ecology permit register, the Tacoma News Tribune and the Journal of Commerce on July 25, 2022. The Agency posted the application, potential emissions report, the draft worksheet and the draft Regulatory Order on the Agency's website during the comment period.

J. RECOMMENDED APPROVAL CONDITIONS

Standard Conditions:

1. Joint Base Lewis-McChord (JBLM) shall limit base-wide emissions of the following pollutants during any consecutive 12-month period to:

   a. 95 tons oxides of nitrogen (NOx);
   b. 95 tons carbon monoxide (CO); and
   c. 95 tons of volatile organic compounds (VOC) as defined in 40 CFR Part 51.100.

2. By June 30 of each year, JBLM shall calculate emissions of CO, NO_x, PM, SO_2, VOC and HAP from stationary sources operated by JBLM for the previous calendar year, including but not limited to external combustion units (boilers, heaters, furnaces), stationary reciprocating internal combustion engines, gasoline refueling operations using the definition of gasoline in Regulation II, Section 2.01 (12/20/12), wood working equipment, abrasive blast equipment, stationary test engine operation, landfill emissions, degreasing and general solvent use, surface coating operations and other sources required to obtain a Notice of Construction Order of Approval under Regulation I, Article 6. Fugitive emissions, emissions from mobile sources, and emissions from nonroad engines do not need to be included in this inventory. JBLM shall calculate emissions using the methods and procedures in Condition Nos. 4 and 5 of this Order.

3. Within 60 days of the end of each month, JBLM shall calculate and record emissions over the month and the previous consecutive 12-month period for CO, NO_x, and VOC. JBLM shall calculate emissions using the methods and procedures in Condition Nos. 4 and 5 of this Order.

4. JBLM shall use the following methods and approved emission factor source in Condition No. 5 to demonstrate compliance with Condition 1 of this Order:

   a. For combustion of natural gas in external combustion units (boilers, heaters, furnaces), emissions shall be calculated using usage records of natural gas and approved emission factors. Natural gas purchase records can be used in lieu of actual usage. The emission factor shall be based on the combustor type and heat input of the external combustion unit, and similar external combustion units can be grouped together if the same emission factor applies.

      For monthly records required by Condition 3 of this Order, JBLM may use an emissions estimate based on an established worst-case monthly natural gas usage and worst-case emission factors as long as records demonstrate monthly natural gas usage was below that level.

   b. For combustion of fuel oil in external combustion units, emissions shall be calculated using usage records of fuel and approved emission factors. Fuel purchase records can be used in lieu of actual usage. The emission factor shall be based on the combustor type, heat input of the boiler, and the type of fuel combusted. Similar external combustion units can be grouped together if the same emission factor applies.

For monthly records required by Condition 3 of this Order, JBLM may use an emissions estimate based on an established worst-case monthly fuel usage and worst-case emission factors as long as records demonstrate monthly fuel usage was below that level.

c. For combustion of fuel oil in emergency stationary internal combustion engines, emissions shall be calculated using fuel usage or hours of operation, load factors (if applicable) and approved emission factors. The emission factor shall be based on the fuel type used and the size of the equipment. Similar engines can be grouped together if the same emission factor applies.

   For the annual emission inventory required by Condition 2 of this Order and monthly records required by Condition 3 of this Order, emissions may be calculated for the previous calendar year and the previous consecutive 12-month period by grouping emergency generators and assuming all emergency generators operated 500 hours during the 12-month period and using worst-case emission factors for the group. If this methodology is used, emission estimates for the individual month are not required.

d. For gasoline fuel dispensing operations, emissions shall be calculated using fuel throughput and approved emission factors. The emission factor shall be based on the vapor recovery controls used at the station (uncontrolled or Phase II vapor controls) and the percent of the fleet estimated to have onboard refueling vapor recovery (ORVR) based on Washington Department of Ecology's fleet estimates.

   For monthly records required by Condition 3 of this Order, JBLM may use an emissions estimate based on an established worst-case monthly throughput for each type of gas station (uncontrolled or Phase II vapor controls), the percentage of non-ORVR and ORVR vehicles, and the approved emission factors. Records of monthly throughput would be required to demonstrate below this worst-case amount.

e. For coating, degreasing and general solvent cleaning usage, VOC emissions shall be calculated using the material balance method. Purchase records may be used as a surrogate for usage. Hand-wipe cleaning operations used for the removal of contaminants such as dirt, grease, oil, and *coatings* from an aerospace vehicle or component shall comply with the requirements of 40 CFR 63.744(b).

f. For jet engine testing operations, emissions shall be calculated based on the number of engines tested.

g. Emissions from other sources shall be based on methodologies used in the Air Emissions Guide for Air Force Stationary Sources (June 2020) unless an Order of Approval specifies methodology to be used in calculating emissions to demonstrate compliance with this Order. Alternative emissions factors or methodologies must be preapproved by the Agency in writing.

5. Approved emission factors for estimating emissions include the following:

   a. For external combustion units, source specific emission tests for individual boilers or heaters if the test is conducted using EPA Reference Test Methods and results are approved by the Agency (preferred emission factor if available);

b. For the landfill operations, emission factors in EPA's Compilation of Air Emission Factors (AP-42) Section 2.4.4.1 and LANDGEM;

c. For gasoline dispensing operations, VOC emissions factors listed in the Table below (preferred emission factors unless written concurrence by Agency to use alternative emission factors):

	Pre-EVR	**Uncontrolled**
Fueling Emission Factors	**lb/1000 gal**	**lb/1000 gal**
non-ORVR vehicles	2.4	8.4
ORVR vehicles	0.12	0.42
Spillage	0.42	0.61
pressure driven losses, with arid permeator	0.092	0.76
Phase 1 bulk transfer losses	0.42	7.7

d. Emission Factors contained in the Air Emissions Guide for Air Force Stationary Sources (June 2020) or the Air Program Information Management System (APIMS). If newer versions of the Air Emissions Guide for Air Force Stationary Sources become available, this version can be used if the Agency is notified by e-mail of any changes to emission factors with documentation on why the factor was updated. Approved exceptions are included below:

   i. For the jet engine test facility, emissions from surrogate engines reviewed under Order of Approval No. 12012 may be used.

e. Emission factors reviewed for new or modified emission sources through the Notice of Construction review process in Regulation I, Article 6, including any emission limits in the final Order of Approval;

f. EPA's AP-42: Compilation of Air Emission Pollutant Factors; or

g. Alternative emission factors can be used if the Agency has preapproved in writing.

General Recordkeeping and Reporting

6. The owner or operator shall provide a one-time notification to the Puget Sound Clean Air Agency in writing, within 60 days after the end of any 12-month period if, during that period, facility-wide emissions of NOx, CO, or VOC exceeded 90 tons. The report shall include a summary of the total 12-month emissions and the unit specific emission factors. Upon request, the owner or operator shall provide the supporting emission calculations for the reported emission totals.

7. All records maintained by this Order of Approval must be maintained for five years (in hard copy or electronic format) and must be made available to Puget Sound Clean Air Agency personnel upon request.

8. This Order shall expire upon Puget Sound Clean Air Agency's determination that JBLM has submitted a complete application for an operating permit under Article 7 of Puget Sound Clean Air Agency Regulation I.

9. Upon issuance, this Order cancels and supersedes Order of Approval No. 11247, issued November 22, 2016.

K. CORRESPONDENCE AND SUPPORTING DOCUMENTS

See electronic NOC folder and Agency e-mail management system for additional supporting information. Supplemental information includes the following e-mails from Diane Roberts:

6/7/2022	Follow-up on spray booths – autobody shop (NOC 9954)
6/6/2022	Follow-up on spray booths
6/6/2022	Response to woodworking emission factor question
6/6/2022	Response on non-NSPs engine emission factors
6/6/2022	Response on abrasive blasting and woodworking equipment and degreasers
6/1/2022	Emission inventory spreadsheet
5/9/2022 and 5/12/2022	PTE emission report (updated version sent on 5/12)
2/9/2022	Natural gas fuel usage for boilers
2/9/2022	Test data for McChord Boilers plant
2/8/2022	Emission factor set used in calculating emissions

L. REVIEWS

Reviews	Name	Date
Engineer:	Maggie Corbin	6/3/2022
Inspector:	Wellington Troncoso	6/6/2022
Second Review:	John Dawson	6/3/2022
Applicant Name:	Diane Roberts	7/17/2022