Notice of Construction (NOC) Worksheet

PUGET SOUND
Clean Air Agency

Source: General Metals of Tacoma, Inc	**NOC Number:** 11986
Installation Address: 1902 Marine View Dr | Tacoma, WA 98422	**Registration Number:** 21432
Contact Name: Scott Sloan	**Contact Email: ssloan@schn.com**
Applied Date: 05/01/2020	**Contact Phone:** (253) 279-44752
Engineer: Carl Slimp	**Inspector:** Rick Woodfork

A. DESCRIPTION

For the Order of Approval:
The installation of a Shredder Emission Control System (ECS) that consists of an enclosure to route emissions to a drop out box, two wet venturi scrubbers, two regenerative thermal oxidizers (RTOs) with low NOx burners and two acid gas scrubbers designed to handle 3,000 tons per day of material fed to the shredder, with an annual limit of 730,000 tons of material fed through the shredder.

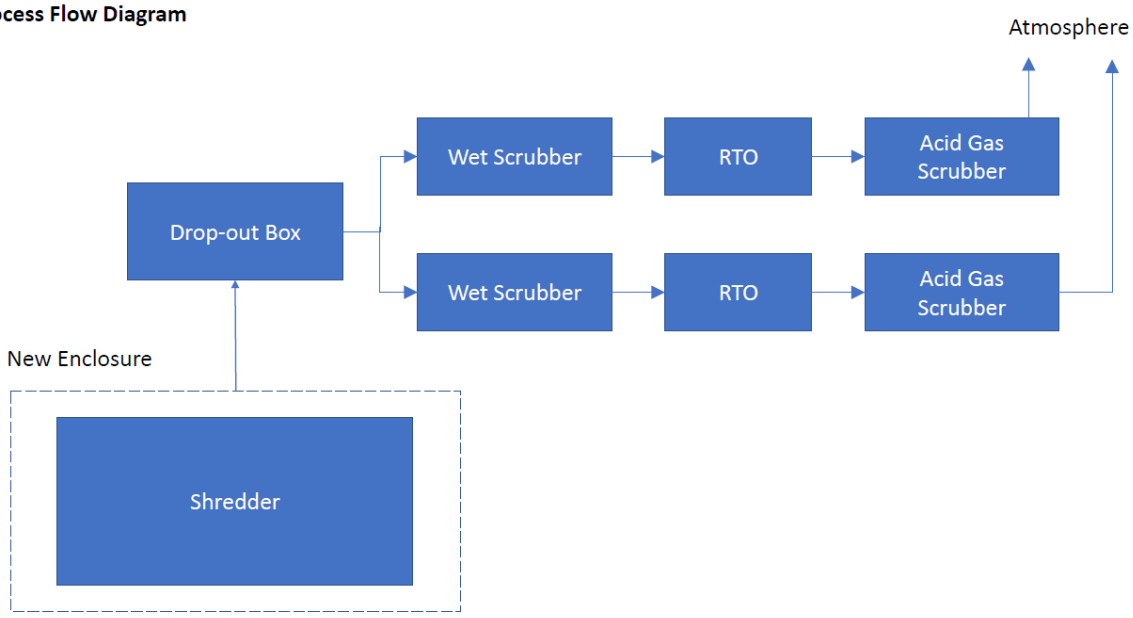
Facility-wide synthetic minor emission limit of VOC emissions.

Facility

General Metals of Tacoma (GMT) owns and operates a metal recycling facility in Tacoma, Washington (the Tacoma facility), under the jurisdiction of the Puget Sound Clean Air Agency (PSCAA). The Tacoma facility operates a metal shredder and hammermill, (referred to in this application as "the shredder"), originally permitted in 1998 under Order of Approval (OOA) No. 7609 (this Order has since been superseded by NOC 11539 issued in February 2019). The shredder is currently unenclosed. Emissions from an existing Z-Box and cyclone used downstream of the shredder to aid in separation of metal from non-metallic byproducts are controlled by a baghouse.

Bulk recyclable material, comprised of heavy iron, auto bodies, appliances, and other light iron, is delivered to the Tacoma facility by barge, rail, and truck. Incoming material is inspected and sorted based on the type of material. Shredder feedstock including auto bodies, appliances, and light iron, are stockpiled near the shredder and placed by grapple onto an infeed conveyor that carries the material into the shredder. The shredder is currently unenclosed. As noted in the Executive Summary, GMT is concurrently submitting a NOC application for the construction of a new enclosure and emission control system on the shredder. Magnetized drums, located downstream from the shredder, attract ferrous materials and separate them from the non-metallic materials and non-ferrous materials (Non-Ferrous Raw or NFR). The two outputs of the shredder are the ferrous shred material and the NFR. The NFR consists of both non-ferrous metal and nonmetallic materials. The NFR is loaded into a hopper at the Joint Products plant where metal is removed for various products that are sold to customers.

GMT Metals of Tacoma
Proposed Shredder Enclosure and Emission Control System
Process Flow Diagram



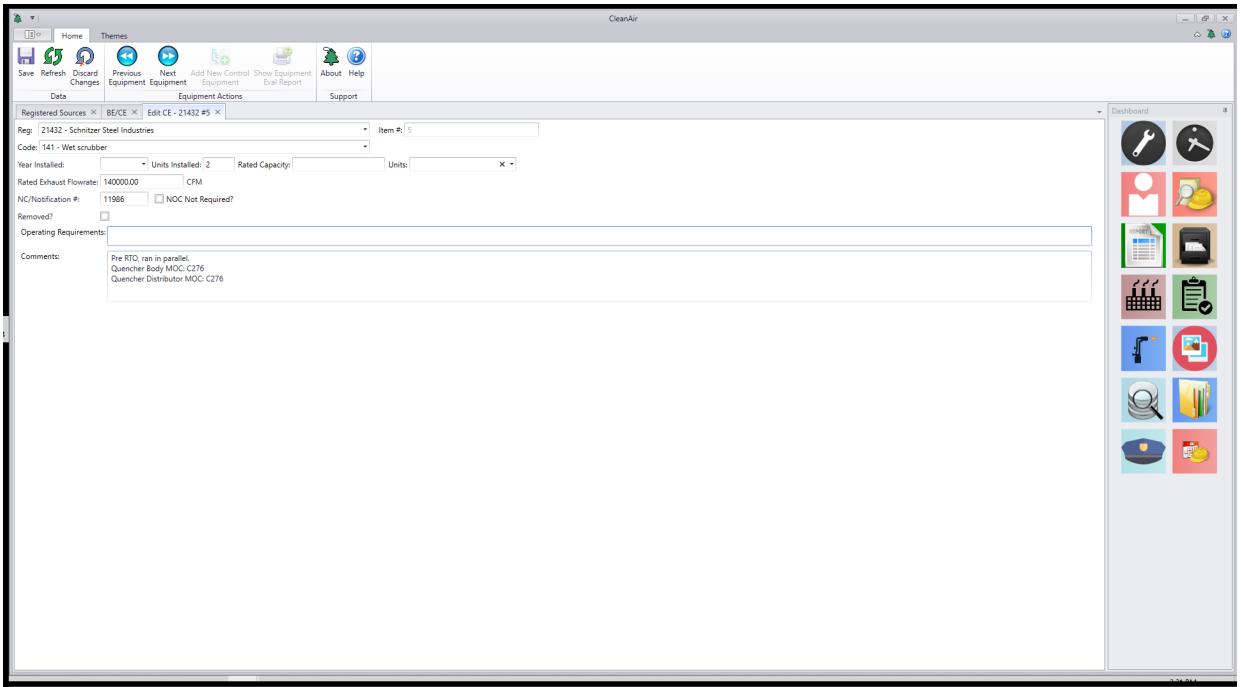
Permit History

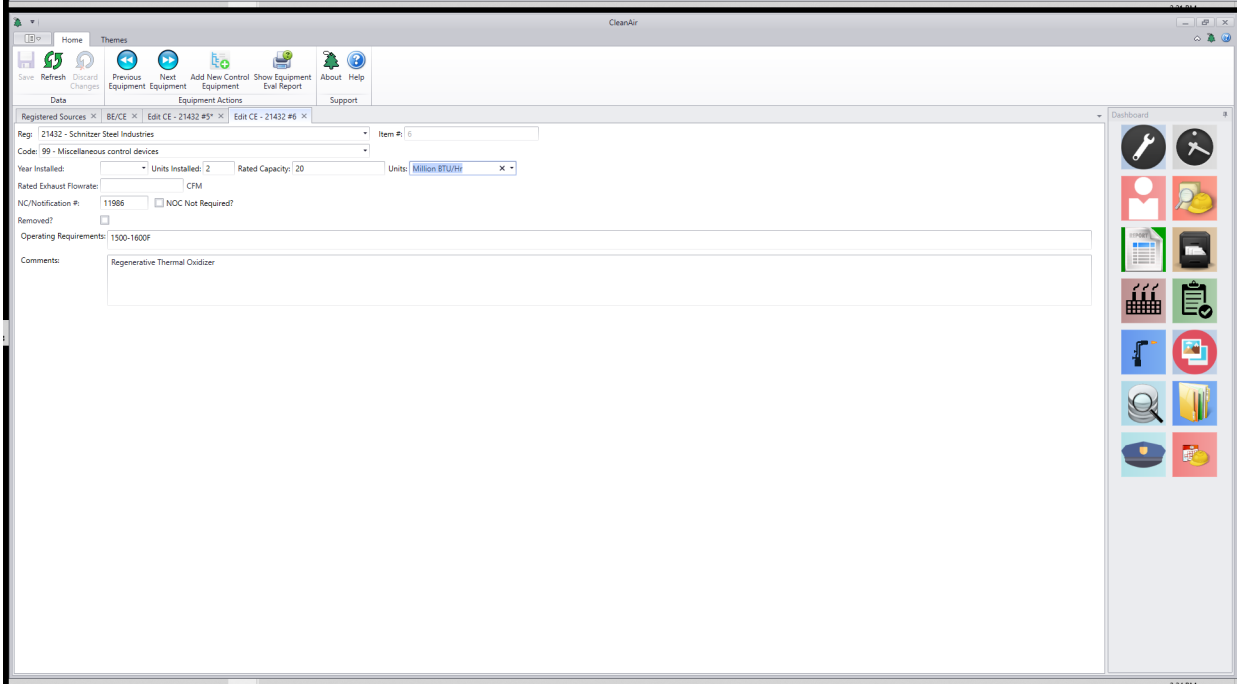
Current active permits include:

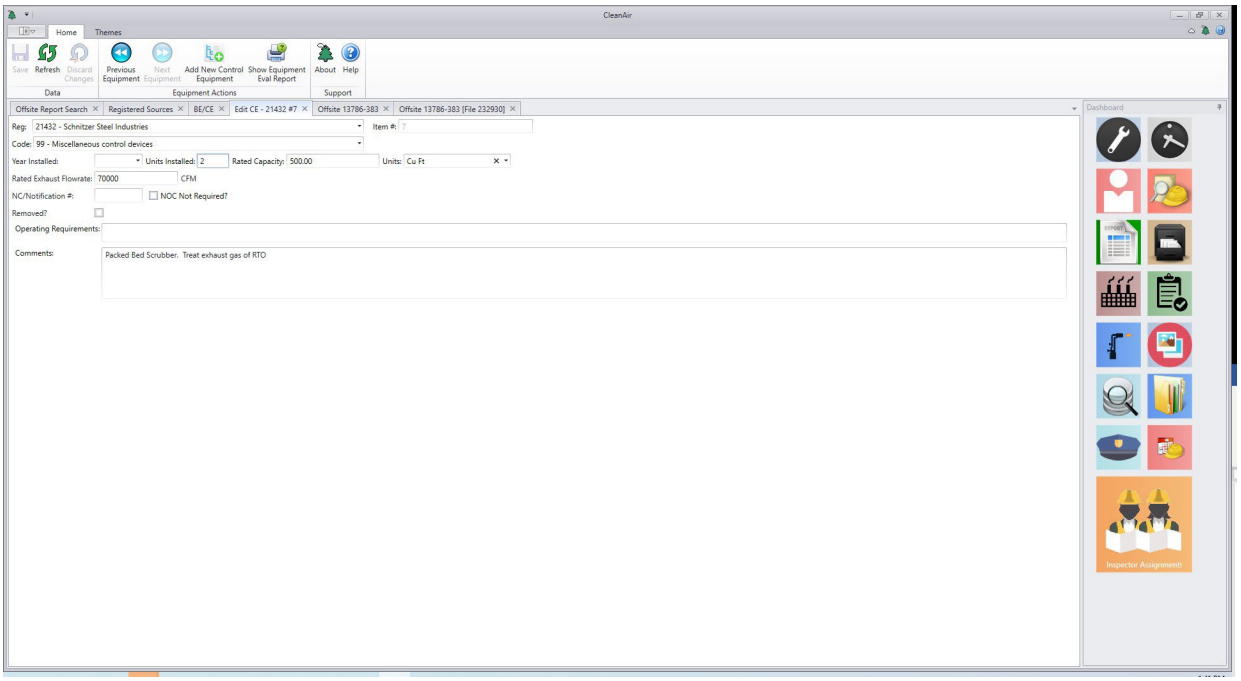
- NOC 11539 – Replacement of a Z-box separator (65,700 cfm controlled by an existing 70,000 cfm cyclone and IVEC Intellivent BF-678-68-TR baghouse rated at 4,300 cfm) which separates material from an existing 2,000 ton/day Texas Shredder and Hammermill. Replacement of two eddy current separators with two new eddy current separators (Steinert MRB 200 MT 40 BR 30, 40 TPH) which sort Auto Shredder Residue (ASR) which has been separated by the Z-box.
- NOC 11664 – For installation of a containerized material separation line for wire ("wire chopper") with a capacity of up to 2.0 metric tons/hr with particulate emissions controlled by a baghouse with a capacity of 18,000 cubic meters per hour.
- NOC 10729 – This permit is for two new air aspiration systems to be located on the end of the in-feed conveyors to the Joint Products Building and for changes to the permit conditions for the plasma cutter permitted under Order of Approval No. 10375. It will cancel and supersede Order of Approval No. 10375, which permitted numerous equipment items. The permitted equipment located within the Joint Products Building includes two parallel conveyorized sorting lines. Each line consists of a new CSL AAS-48x14 air aspiration system (ducted to the baghouse), a Steinert MRB dual magnetic separator, a Steinert 5009 eddy current separator, a pair of Wendt Finder III-2400 induction sensor sorters (the first one ducted to the baghouse); and a Wendt PolyFinder 1800 induction sensor sorter. The CSL 255TR12HEI-FS baghouse is rated at 35,000 cfm. The permitted equipment located outdoors includes a Steinert ISS-300 induction sensor sorter, Action Engineering Vibra-Snap 2080-02 single screen deck, two Steinert 6119 high-frequency eddy current separators, a Stearns 4960 magnetic drum separator, and a Hypertherm Powermax 1650 plasma cutter (in the maintenance shop).

- NOC 11193 – Replace an existing AEI Bivi-Tec double deck vibratory screening equipment with an AEI EcoStar VE6000s50 dynamic disc screener followed by a Bivi-Tec KRL/ED B vibratory screener for nonferrous metal scrap.

B. DATABASE INFORMATION







New NSPS due to this NOCOA?	**No**	**Applicable NSPS: N/A**	**Delegated? N/A**
New NESHAP due to this NOCOA?	**No**	**Applicable NESHAP: N/A**	**Delegated? N/A**
New Synthetic Minor due to this NOCOA?	**Yes**		

40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

NSPS Subpart Dc applies to facilities that operate a steam generating unit that has a maximum design heat input capacity less than 100 MMBtu/hr but greater than 10 MMBtu/hr. The Tacoma facility does not operate an enclosed heat transfer device that would meet the definition of a steam generating unit under Subpart Dc. Therefore, Subpart Dc does not apply**.**

40 CFR 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

NSPS Kb applies to storage tanks with a capacity greater than or equal to 75 cubic meters (m3) that are used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984. The Tacoma facility does not own any storage tanks of this capacity; therefore, Subpart Kb does not apply.

40 CFR 60, Subparts IIII and JJJJ - Standards of Performance for Stationary Compression Ignition

Internal Combustion Engines and Stationary Spark Ignition Internal Combustion Engines

NSPS IIII and JJJJ apply to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines and stationary spark ignition (SI) internal combustion engines, respectively. The Tacoma facility does not own or operate any CI or SI engines, so Subparts IIII and JJJJ do not apply.

40 CFR 61 Subpart M - National Emission Standard for Asbestos
NESHAP Subpart M applies to facilities that manufacture, remove, destroy, renovate or contain any equipment or operation that may contain asbestos. These standards will apply if any asbestos removal or renovation occurs at the Tacoma facility.

40 CFR 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
NESHAP ZZZZ applies to facilities that operate stationary reciprocating internal combustion engines (RICE) at a major or area source of HAP. The Tacoma facility does not own or operate any stationary RICE, so Subpart ZZZZ does not apply.

40 CFR 63 Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters at Major Sources
NESHAP DDDDD applies to sources that own or operate industrial, commercial, or institutional boilers or process heaters at major sources of HAP. The Tacoma facility does not operate any equipment that meets the definition of a boiler under Subpart DDDDD; therefore, Subpart DDDDD does not apply.

40 CFR 63 Subpart JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources
NESHAP JJJJJJ applies to sources that own or operate an industrial, commercial, or institutional boiler at an area source of HAP. The Tacoma facility does not operate any equipment that meets the definition of a boiler under Subpart JJJJJJ; therefore, Subpart JJJJJJ does not apply.

C. NOC FEES AND ANNUAL REGISTRATION FEES

NOC Fees:

Fees have been assessed in accordance with the fee schedule in Regulation I, Section 6.04. All fees must be paid prior to issuance of the final Order of Approval.

Fee Description	Cost	Amount Received (Date)
Filing Fee	$ 1,150	
Equipment (2 Regenerative Thermal Oxidizers)	$1,200	
Equipment (2 wet venturi scrubbers)	$1,200	
Equipment (2 packed bed acid gas scrubbers)	$1,200	
SEPA (DNS)	$800	
Public Notice	$700	
Agency Review of Screening Dispersion Modeling Analysis (provided by applicant)	$800	
Equipment (2 wet venturi scrubbers)	$1,200	
Public Hearing	$2,500	
Preparation of Agency Response to Comments Resulting from Public Notice and/or Public Hearing, based on level of difficulty as determined by Control Officer based upon factors including, but not limited to, substance of or numbers of comments received	$2,500	
Filing received		$ 1,150 (5/1/2020)
Additional fee received		$5,100 (2/16/23)
Equipment change		$2,000 (paid)
Public Hearing and Response to Comments		$5,000 (not yet paid)
Total	**$8,250**	

Registration Fees:
Registration fees are assessed to the facility on an annual basis. Fees are assessed in accordance with Regulation I, Section 7.07.

Upon construction of the ECS, the fees will then be assessed in accordance with Regulation I, Section 5.07, shown in the table below.

PUGET SOUND
Clean Air Agency

Puget Sound Clean Air Agency
1904 Third Avenue, Suite 105
Seattle, WA 98101-3317
Tax ID: 91-0823558
206.689.4072

Invoice for Year 2022 Operating Permit Fees

Bill To:
Schnitzer Steel Industries **1902 Marine View Dr** **Tacoma, WA 98422** **Attention: Accounts Payable**

Invoice Date:	Invoice #:
November 19, 2021	20220030
Due Date:	**Terms:**
January 03, 2022	Net 45 Days
Facility ID (Permit #):	
21432	

Site Address: ***Schnitzer Steel Industries***
1902 Marine View Dr, Tacoma, WA 98422

The annual operating permit fee is required by Washington State law and Puget Sound Clean Air Agency's Regulation I.
Your fees are based on your NAICS code and your actual emissions during 2020.

Facility Fees and Applicable Regulations			Charges
Facility Fee for Operating Permit Sources. Reg I, 7.07(b)(1)(iii)			**$ 28,600.00**
NAICS 423930 -- Recyclable Material Merchant Wholesalers			
Emission Surcharges - Reg I, 7.07(b)(2)	**Tons in 2020**	**Per Ton**	
HAP (Hazardous Air Pollutants)	38	$ 60	$ 2,280.00
PM10 (Particulate Matter < 10 microns)	29	$ 60	$ 1,740.00
VOC (Volatile Organic Compounds)	158	$ 60	$ 9,480.00
			$ 13,500.00
Fee Totals			
Operating Permit Fee (After February 17, 2022, the fee is $48,600.00).			**$ 42,100.00**
The Total Fee is due by January 03, 2022. If unpaid after February 17, 2022, an additional delinquent fee of $6,500.00 will be applied. The delinquent fee is equal to 25% of the Operating Permit Fee, not to exceed $6,500 (Reg I, 7.07(b)).			
WA State Department of Ecology surcharge, Reg I, 7.07(d)			**$ 1,039.97**
For further information regarding the WDOE surcharge, please call 1-360-407-7530.			
TOTAL FEE			**$ 43,139.97**

Pay online and confirm payment: www.pscleanair.gov/annualfee
This copy is for your records. If paying by check, please mail the yellow copy with your payment.
Your canceled check is your receipt.

11/08/2021

Applicability		
Regulation I	Description	Note
5.03(a)(5)(N)	Wet scrubber	
5.03(a)(6)(A)	Baghouse	
5.03(a)(2)	Sources with a federally enforceable emission limitation established in order to avoid operating permit program applicability under Article 7 of this regulation	
Annual Registration Fee		
Regulation I	Description	Fee
5.07(c)	Registered sources shall be assessed a fee of $1,150	$1,150
5.07(c)(2)	Sources subject to a federally enforceable emission limitation as specified in Section 5.03(a)(2)	$2,300
5.03(c)(3)	Sources subject to the emission reporting requirements under Section 5.05(b) of this regulation shall be assessed $30 for each ton of CO and $60 for each ton of NOx, PM10, SOx, HAP, and VOC, based on the emissions reported during the previous calendar year;	$30 for each ton of CO and $60 for each ton of NOx, PM10, SOx, HAP, and VOC
	Total =	$3,450 + reported emissions

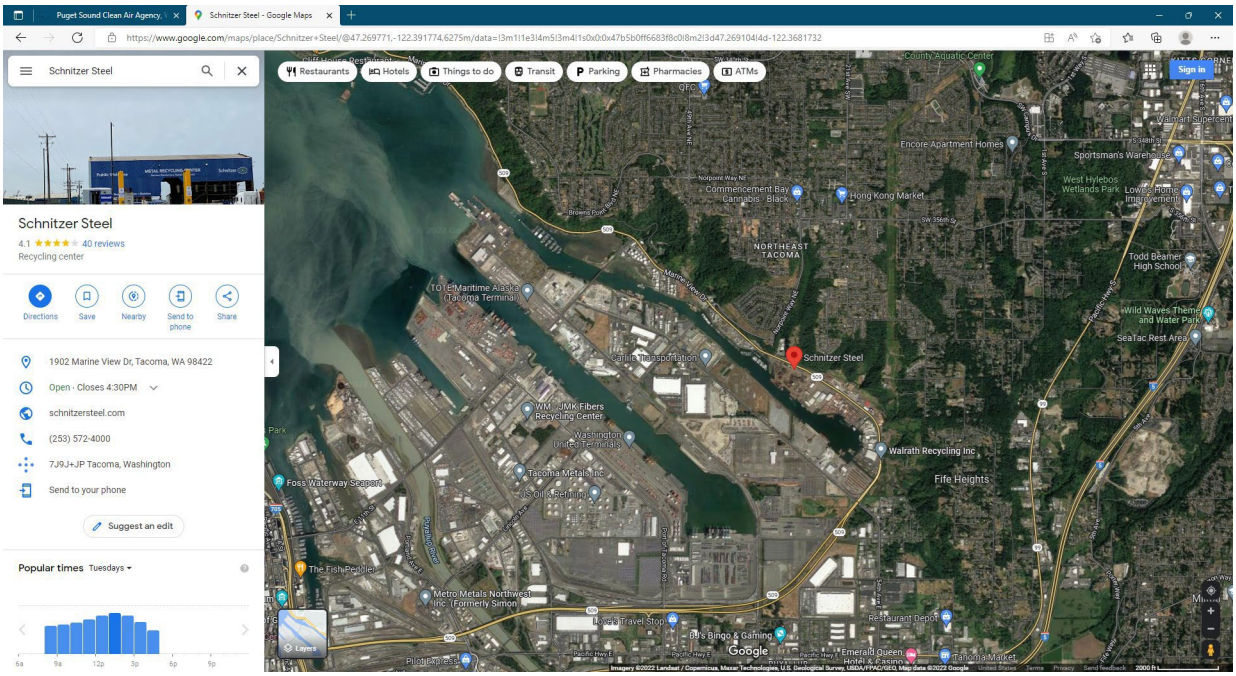
D. STATE ENVIRONMENTAL POLICY ACT (SEPA) REVIEW

State Environmental Policy Act (SEPA) review was conducted in accordance with 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.

PSCAA is the SEPA lead agency for this project. The applicant submitted a completed Environmental checklist that is included below. The shredder was covered in a past DNS, also included below. The emissions generated by the ECS require a new SEPA review.

SEPA Pages from 2020 08-11 GMT RTC

10375-dns



The City of Tacoma was consulted for comments on July 19, 2022, and again on December 17, 2022. This has been a long standing facility, with the goals of this project to lower emissions rather than to raise production. This project should be below the 12,000 sf industrial threshold that would require them to be the SEPA lead.

Based on the proposed action and the information in the checklist, the project will not: adversely affect environmentally sensitive or special areas, or endangered or threatened species; conflict with local, state, or federal laws or requirements for the protection of the environment, or establish a precedent for future actions with significant effects. This proposal is not likely to have a probable significant adverse environmental impact, and I recommend the issuance of a Determination of Non-Significance.

E. BEST AVAILABLE CONTROL TECHNOLOGY (BACT) REVIEW

Best Available Control Technology (BACT)

New stationary sources of air pollution are required to use BACT to control all pollutants not previously emitted, or those for which emissions would increase as a result of the new source or modification. BACT is defined in WAC 173-400-030 as, “an emission limitation based on the maximum degree of reduction for each air pollutant subject to regulation under Chapter 70.94 RCW emitted from or which results from any new or modified stationary source, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each pollutant.”

An emissions standard or emissions limitation means "a requirement established under the Federal Clean Air Act or Chapter 70.94 RCW which limits the quantity, rate, or concentration of emissions of air contaminants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction and any design, equipment, work practice, or operational standard adopted under the Federal Clean Air Act or Chapter 70.94 RCW."

Best Available Control Technology for Toxics (tBACT)

New or modified sources are required to use tBACT for emissions control for TAP. Best available control technology for toxics (tBACT) is defined in WAC 173-460-020 as, "the term defined in WAC 173-400-030, as applied to TAP."

Venturi scrubber

Similar Permits

Order of Approval	Emission Limits
NOC 12135 (2/15/23) – Venturi Scrubber on Sewage Sludge incinerator	• PM ≤ 0.05 gr/dscf

Analysis

Few venturi scrubbers have been installed in our area, and none for shredding operations. They are used to control PM from sewage sludge incinerators and have a 0.05 gr/dscf limit. Schnitzer has recommended a 0.0048 gr/dscf, which is similar to the Schnitzer steel plant located in Oakland, CA. Since this is more stringent than what is found locally, and possible for the industry, this should be an acceptable limit.

Recommendations

PM ≤ 0.0048 gr/dscf has been used for BACT at other locations. The application has also used 0.005 gr/dscf to determine potential emission rates, which was updated to 0.0048 in the most recent emission calculations.

RTO

Order of Approval	Emission Limits
NOC 10715 (3/28/2014) – 1.9 MMBtu/hr natural gas fired RTO to control emissions from adhesive application line	RTO shall achieve a 98.5% or higher destruction efficiency, or 10 ppmdv or less at the RTO outlet, as determined by EPA Method 25A Perform EPA Method 204 - Permanent or Temporary Total Enclosure (TTE) to evaluate if the C4 (1) production line meets the criteria of a total enclosure, or other method to determine the capture efficiency pending approval of the Agency RTO at or above the average temperature maintained during the last stack test, however shall not be lower than 1400 ºF. The average temperature during the last stack test for each RTO shall be identified at or near the temperature monitor.
12218 (2/11/2022) -- Birk TNV Model 218 low NOx natural gas fired thermal oxidizer rated at 0.5 MMBTU/hr	Combustion in natural gas fired thermal oxidizer with low NOx burners Residence time in thermal oxidizer – minimum of 1 second Minimum temperature at inlet to thermal oxidizer of 1,500 degrees F or temperature set in most recent compliance test.
11800 (9/17/2019) Anguil Model 50" 1.5 mmbtu/hr regenerative thermal oxidizer with SPT-48-96 5,500 scfm packed tower aqueous wet scrubber for groundwater remediation.	The control efficiency of the air stripper and regenerative thermal oxidizer shall meet the following requirements, as applicable: • ≥97% if inlet VOC ≥200 ppmv, measured as hexane or its equivalent; or • ≥90% if inlet VOC <200 ppmv, measured as hexane or its equivalent; or • ≤10 ppmv at the outlet of the control device, measured as hexane or its equivalent. The scrubber stack shall not emit hydrogen chloride gas at concentrations above 9.3 ppm corrected to 7% O2, 1 hour average (EPA Method 26A) The scrubber stack NOx emissions shall not exceed 0.098 lb/mmbtu, 1 hour average (EPA Method 7E) The scrubber stack CO emissions shall not to exceed 0.0824 lb/mmbtu, 1 hour average (EPA Method 10)

Acid Gas Scrubbers: No acid gas scrubbers have been permitted by the PSCAA recently

Order of Approval	Emission Limits
NOC 8423 (2/21/2002) – four Air Chem Horizontal Packed Bed Acid Gas Scrubbers rated at 50,000 scfm each	• The acid gas scrubbers shall not emit more than 0.67 HF, 0.53 HCl, 2.0 lb/hr NH3, or 0.22 lb/hr phosphoric acid (H3O4P). Microchip shall use CARB Method 421 to measure HF, HCl, and H3O4P, and EPA Method 4 modified for ammonia as described by Bay Area AQMD Source Test Procedure ST-1B for ammonia • install and maintain gauges to measure the pH, pressure differential across the packed beds, and liquid flow meters

Other Regulatory Agencies BACT

Schnitzer Steel has permitted this same modification to their operations in Massachusetts, and are currently permitting similar control equipment in California and Oregon, although do not have final permits at the time of this analysis. In the process of writing this permit, the Massachusetts plant is now also going through new permitting as reconstruction is required. I have talked to Edward Braczyk with MassDEP and Carol Allen with BAAQMD, and have received documents outlining their approach.

Prolerized nmCPA
NE-15-014(X267680)

The Massachusetts plant has a design capacity of 300 tons per hour with an actual average of 265 tph. This is about the same compared to Tacoma WA plant. MassDEP is requiring a starting minimum temperature of 1600 degrees Fahrenheit for the RTO, with the possibility of lowering the operational temperature with testing to show 98% removal of VOCs. The bed will also have gas flow direction changes approximately every 4-5 minutes by automatic poppet valves to maintain proper temperature in the ceramic beds. This should be case specific and described in the RTO manual purchased for the Tacoma plant.

The Massachusetts permit also lists out emission limits, summarized in the table below:

Table 2

EU	Operational / Production Limit	Air Contaminant	Emission Limit
1	**Interim Operational Limits (prior to installation of PCDs):** Infeed shredder rate shall be: < 990,000 tons per rolling	PM[1]	≤ 0.40 lb/hr ≤ 0.14 TPM ≤ 1.7 TPY
		VOC[1]	≤ 0.6 lb/hr ≤ 0.22 TPM ≤ 2.6 TPY <25 ppm as methane

Table 2			
EU	**Operational / Production Limit**	**Air Contaminant**	**Emission Limit**
	twelve month period and < 223,200 tons per month. **Final Operational Limits (with PCDs):** Infeed shredder rate shall be: < 2,628,000 tons per rolling twelve month period and < 223,200 tons per month. **Minimum operating temperature** of Regenerative Thermal Oxidizers (RTOs) ≥ 1600 °F [2] **Packed bed scrubbing solution** pH ≥ 7 and ≤ 10	HAPS[1]	< 5 TPY for a single HAP < 10 TPY for total HAPS
		Acid Gases[1]	< 2ppm total HCl and HF
		Opacity	≤5%
Facility-Wide	N/A	Opacity	≤ 5%
		Smoke	< No. 1 of Chart[3]

Also, to ensure 95% capture from the total enclosure, the following condition is used in the permit:

The Permittee shall demonstrate that the pollutant capture system (PCS) has been constructed to minimize the enclosure's draft openings, and the extraction vent system operates at a sufficient flow rate to promote air flow into the enclosure to sufficiently capture pollutants emanating from the shredder, consistent with USEPA Method 204 Permanent Total Enclosure Criteria (as set forth at 40 CFR Part 51, Appendix M, Test Method 204). The Permittee shall also monitor to verify that the PCS is continuously maintained under negative pressure. The Permittee shall measure the total system air flow rate, or equivalent, to aid in the establishment of a parametric monitoring program COP for the PCS.

The Agency will require that a negative pressure is attained and monitored. The Agency will also require that the owner or operator conduct capture efficiency evaluation on the enclosure during source testing, with the parametrics of the fans documented and noted.

On 11/18/2022, I discussed with Carol Allen from BAAQMD about that ongoing permit. Because it is still being written, there were not yet conditions to reference. She did confirm that the process will look the same, as in emissions will be controlled by a filter, RTO and acid gas scrubber. They also sent the redacted source test reports performed at the Oakland Plant. They had no comment on the permanent enclosure requirements.

Summary tBACT determination

Pollutant	Available Method That Meets BACT	Implementation of Method
Acid Gases	▪ Acid Gas Scrubber	▪ Control and monitor PH ▪ <2ppm total HCl and HF
Metals	▪ Venturi Scrubber	▪ 0.0048 gr/dscf limit

Summary BACT determination

Pollutant	Available Method That Meets BACT
NO_x	Low NOx burners on RTO
SO_2	Low SO2 fuel used
Total VOCs	RTO controlling VOC from process
PM	Wet venturi scrubbers

F. EMISSION ESTIMATES

Proposed Project Emissions

Actual Emissions

Trinity has prepared the following table, which shows expected the change of each criteria pollutant. These emissions estimates were updated April 17, 2023,June 28, 2023, and July 24, 2023 . The most up to date information is below.

Table 1. Updated Shredder Potential-to-Emit (PTE) Summary [a]

Pollutant	Pre-Project Emissions (tpy)	Post-Project Emissions (tpy)	Project Emissions Increase (tpy)
PM	96.00	11.81	-84.19
PM_{10}	42.24	9.12	-33.12
$PM_{2.5}$	42.24	9.12	-33.12
SO_2	--	0.10	**0.10**
NO_X	--	12.24	**12.24**
VOC	231.87	16.94	-214.92
CO	--	14.43	**14.43**
Total HAP	20.03	2.77	-17.26
Max Individual HAP	7.42	0.57	-6.86

a. All calculations represented are the sum of controlled shredder emissions from the RTOs, fugitive shredder emissions, and emissions from natural gas combustion and additional NO_X emissions due to the RTOs. These are the only emission sources that would be affected by the proposed project. Emissions for pollutants that will increase total emission rate due to this project are presented in bold.

Potential Emissions

Actual emissions were are based on operating at 100% rated capacity and 8,760 hour per year.

Facility-wide Emissions

Actual Emissions

Trinity has prepared the following estimate for natural gas combustion emission increases from the two RTOs and NO_X emission increases due to the installation of the RTOs. Note that the table below only represents the natural gas combustion emissions from the RTOs.

Table 11. Criteria Pollutant PTE Summary for Two RTOs

Pollutant	Emission Factor[1] (lb/MMscf)	Maximum Hourly Emissions[2] (lb/hr)	Annual Emissions[3] (tpy)
SO_2	0.6	0.02	0.10
NO_X	50	1.96	8.59
VOC	5.5	0.22	0.94
CO	84	3.29	14.43

1. Minimal combustion emissions are expected for most pollutants from the flameless RTOs; however, emissions are conservatively estimated based on AP-42 in place of manufacturer specifications. Emission factors obtained from AP-42 Section 1.4 Natural Gas Combustion, Tables 1.4-1 and Table 1.4-2. PM_{10} and $PM_{2.5}$ emissions are conservatively assumed to be equivalent to PM emissions.

2. Maximum Hourly Emissions (lb/hr) = Emission Factor (lb/MMscf) * Maximum Gas Firing Rate (MMscf/hr) * 2 RTOs.

3. Annual Emissions (tpy) = Emission Factor (lb/MMscf) / 2000 (lb/ton) * [Gas Firing Rate at Operating Capacity (MMscf/hr) * Annual Hours of Operation at Operating Capacity (hr/yr)] * 2 RTOs.

Reporting Source? No

Without the ECS, this is a reporting source. The ECS should reduce emissions to below reporting. Emissions will still need to be tracked and calculated to ensure compliance with the synthetic minor.

Potential Emissions

The Shredder is the prime emission unit for this source. The emission change from this project is shown in the table provided by Trinity above.

G. OPERATING PERMIT OR PSD

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 of this following order. The source is considered a "**synthetic minor**".

H. AMBIENT TOXICS IMPACT ANALYSIS

The estimated potential toxic air pollutant (TAP) emissions at operating at 100% rated capacity and 8760 hour per year for each new or modified emission unit (*or based on limit in permit*). The table below includes estimated potential emissions of all TAP and compares those to the Small Quantity Emission Rates (SQER) in WAC 173-460-150.

Trinity has compiled the following tables with expected HAPS/TAPS. Table 2 below shows the increase expected from this project, while tables 2, 5 6, 8 and 11 show the individual units.

Table 2. Updated TAP Emission Increases

TAP	Project Emission Increase	SQER	Averaging period	Below SQER?
	lb/averaging period			
Acetaldehyde	1.48	6.0E+01	Annual	Yes
Acrolein	1.27E-06	2.6E-02	24-hr	Yes
Copper Compounds	3.33E-05	1.9E-01	1-hr	Yes
Formaldehyde	25.76	2.7E+01	Annual	Yes
Hydrogen Chloride	4.68	6.7E-01	24-hr	No
Hydrogen Fluoride	4.01	1.0E+00	24-hr	No
Naphthalene	0.10	4.8E+00	Annual	Yes
CO	3.29	4.3E+01	1-hr	Yes
NO_X	4.96	8.7E-01	1-hr	No
Sodium Hydroxide [a]	0.011	1.5E-02	1-hr	Yes

a. Basis for determining the sodium hydroxide emissions is provided in the November 11, 2020 submittal to respond the agency's request for NOC 11986.

This table was also updated on 6/28/2023. The analytes changed with the change in technology. CO, NOx and Sodium Hydroxide were also analyzed. NOx exceeds the SQER, but the air modeling with Aerscreen shows that it is below ASIL. An AERSCREEN model, performed by Trinity on April 17, 2023, showed that a rate of 5.48 lb/hr would have an ambient impact of 168 ug/m^3 of NOx, below the ASIL of 470 µg/m3. This was updated again to show the current expected rates of 4.96 lb/hr of NOx, as well as applied to HCl and HF. The Air modelling input and output files are below. Table 3 below shows the pollutants that were above SQER compared to the ASIL limits. A new table was updated on July 24, 2023, when the HCl and HF were discovered to be reversed. This table is shown below.

Table 1. Updated TAP Emission Increases

TAP	Project Emission Increase	SQER	Averaging period	Below SQER?
	lb/averaging period			
Acetaldehyde	1.48	6.0E+01	Annual	Yes
Acrolein	1.27E-06	2.6E-02	24-hr	Yes
Copper Compounds	3.33E-05	1.9E-01	1-hr	Yes
Formaldehyde	25.76	2.7E+01	Annual	Yes
Hydrogen Chloride	4.01	6.7E-01	24-hr	No
Hydrogen Fluoride	4.68	1.0E+00	24-hr	No
Naphthalene	0.10	4.8E+00	Annual	Yes
CO	3.29	4.3E+01	1-hr	Yes
NO_X	4.96	8.7E-01	1-hr	No
Sodium Hydroxide [a]	0.011	1.5E-02	1-hr	Yes

a. Basis for determining the sodium hydroxide emissions is provided in the November 11, 2020 submittal to respond the agency's request for NOC 11986.

Air modeling results.pdf

Table 3. Updated TAP Modeling Results

Toxic Air Pollutant	Averaging Period	Hourly Emission Increase [b] (lb/hr)	Modeled Concentration (µg/m^3)	ASIL (µg/m^3)	Above ASIL?	% of ASIL
NO_2 [a]	1-hr	4.96	151.70	470	No	32%
HCl	24-hr	0.20	3.58	9	No	40%
HF	24-hr	0.17	3.06	14	No	22%

a. It is conservatively assumed all NO_X emissions are emitted in the form of NO_2.
b. Hourly emission increases represent the emissions corresponding to the averaging period (e.g., HCl lb/hr emissions = HCl lb/day emissions ÷ 24 hr/day).

HCl and HF were also looked at the potential to emit at the hourly rate possible for 24 hours. Those emissions were still below ASIL and are shown below.

Toxic Air Pollutant	Averaging Period	Hourly Emission Increase (lb/hr)	Modeled Concentration ($\mu g/m^3$)	ASIL ($\mu g/m^3$)	% of ASIL
HCl	24-hr	0.40	7.35	9	82%
HF	24-hr	0.47	8.59	14	61%

Below is the emission summaries created by Trinity for the equipment, which include an analysis of how criteria pollutants and taps will be affected by this project.

Table 2. Shredder Toxic Air Pollutant (TAP) and Hazardous Air Pollutant (HAP) Emission Summary[1, 7]

Pollutant	Hazardous Air Pollutant (HAP)?[2] (Yes/No)	Pre-Project Hourly Emissions (lb/hr)	Pre-Project Daily Emissions (lb/day)	Pre-Project Annual Emissions (tpy)	Post-Project Hourly Emissions (lb/hr)	Post-Project Daily Emissions (lb/day)	Post-Project Annual Emissions (tpy)
1,3-Butadiene	Yes	0.02	0.22	0.03	1.50E-03	0.02	1.83E-03
Acetaldehyde	Yes	-	-	-	1.69E-04	2.02E-06	7.39E-04
Acrolein	Yes	-	-	-	1.06E-04	1.27E-06	4.64E-04
Benzene	Yes	0.52	5.17	0.63	0.04	0.36	0.04
Cadmium Compounds	Yes	3.42E-04	3.42E-03	4.16E-04	4.08E-05	4.08E-04	4.97E-05
Chlorodifluoromethane	No	1.97	19.67	2.39	0.14	1.36	0.17
Chromium (non-VI) Compounds	No	1.05E-05	1.05E-04	1.28E-05	1.25E-06	1.25E-05	1.52E-06
Chromium (VI) Compounds	No	4.65E-06	4.65E-05	5.66E-06	5.55E-07	5.55E-06	6.75E-07
Chromium Compounds (total)	Yes	1.52E-05	1.52E-04	1.84E-05	1.81E-06	1.81E-05	2.20E-06
Copper Compounds	Yes	-	-	-	3.33E-05	4.00E-07	1.46E-04
Cumene	Yes	0.06	0.60	0.07	4.15E-03	0.04	5.05E-03
Ethylbenzene	Yes	1.19	11.88	1.45	0.08	0.82	0.10
Formaldehyde	Yes	-	-	-	2.94E-03	3.53E-05	1.29E-02
Hexane (n-Hexane)	Yes	1.93	19.34	2.35	0.20	1.34	0.47
Hydrogen Chloride	Yes	-	-	-	0.40	4.01	0.49
Hydrogen Fluoride	Yes	-	-	-	0.47	4.68	0.57
Lead Compounds	Yes	2.42E-03	0.02	2.94E-03	2.88E-04	2.88E-03	3.51E-04
Methanol	Yes	0.66	6.57	0.80	0.05	0.45	0.06
Methyl Chloroform (1,1,1-Trichloroethane)	Yes	0.29	2.86	0.35	0.02	0.20	0.02
Methyl Isobutyl Ketone (MIBK)	Yes	0.07	0.65	0.08	4.51E-03	0.05	5.49E-03
Methylene Chloride	Yes	0.18	1.85	0.22	1.27E-02	0.13	0.02
Naphthalene	Yes	-	-	-	1.18E-05	1.41E-07	5.15E-05
Tetrachloroethylene (PCE)	Yes	0.31	3.12	0.38	0.02	0.22	0.03
Polychlorinated Biphenyls (PCBs)[4]	Yes	0.02	0.17	0.02	1.14E-03	1.14E-02	1.39E-03
Propylene	No	0.61	6.08	0.74	0.07	0.42	0.18
Styrene	Yes	0.29	2.91	0.35	0.02	0.20	0.02
Toluene	Yes	4.82	48.23	5.87	0.33	3.33	0.41
Xylenes (m-, o-, and p-)[5]	Yes	6.10	61.03	7.42	0.42	4.21	0.51
Highest Individual HAP[6]:	--	--	--	7.42	--	--	0.57
Total HAPs[6] (tpy)	--	--	--	20.03	--	--	2.77

1. All calculations represented are the sum of controlled shredder emissions from the RTOs, fugitive shredder emissions, and emissions from natural gas combustion at the RTOs. These are the only emission sources that would be affected by the proposed project. Total emissions for pollutants that will have an increase in emissions are presented in bold text.
2. The summary table for all pollutants emitted from the shredder and RTOs includes several non-HAP. These pollutants are either halogenated compounds that can form acid gases in the RTOs or toxic air pollutants (TAP) emitted from natural gas combustion in the RTOs.

3. Chromium compounds are the HAP category. The report from Foulweather Consulting lists emission factors for "all chromium compounds" and chromium VI separately. In this table, emissions for "all chromium compounds" are conservatively compared to the most stringent TAP thresholds for chromium III. Emissions of chromium VI are compared to the TAP thresholds for chromium VI.
4. PCBs as a generic category are the emission factor listed in the report from Foulweather Consulting. This pollutant is a HAP and many specific PCBs are Washington TAP; emissions of this pollutant are compared the TAP category of "PCBs, NOS (not otherwise specified)"
5. Specific emission factors for isotopes of xylene are listed in the Foulweather report. All xylene emissions are conservatively grouped under the HAP of "mixed xylenes" for comparison to SQER levels in WAC 173-460-150. All xylene isotopes and mixed xylenes have the same SQER in the rule.
6. Total HAP and highest individual HAP calculations exclude any Washington TAP that is not also a HAP.
7. From Foulweather Consulting's "Recommended Test Methods and Emission Factors for Metal Shredding Operations Conducted at Schnitzer Steel Industries' Facilities" (October 2019), 1,1-difluroethane, acetaldehyde, hexachloroethane (PCA), and norflurane (HFC134a) were indicated as Tentatively Identified Compounds (TICs) and should not be included in the HAP/TAP analysis of shredder emissions.

Table 6. Shredder Stack TAP and HAP Emission Summary

Pollutant	HAP[1] (Yes/No)	TAP (Yes/No)	Uncontrolled Emission Factor[2] (lb/ton) Auto Bodies	Light Iron	Tacoma-Specific	Hourly Emissions[3,6] (lb/hr)	Daily Emissions[4,6] (lb/day)	Annual Emissions[5,6] (tpy)
1,3-Butadiene	Yes	Yes	6.20E-05	7.84E-05	7.27E-05	4.14E-04	4.14E-03	5.04E-04
Benzene	Yes	Yes	4.38E-03	2.95E-04	1.72E-03	9.83E-03	9.83E-02	1.20E-02
Cadmium Compounds	Yes	Yes	--	--	1.14E-06	2.37E-05	2.37E-04	2.89E-05
Chlorodifluoromethane	No	Yes	1.62E-04	1.00E-02	6.56E-03	3.74E-02	3.74E-01	4.55E-02
Chromium (non-VI) Compounds	No	Yes	--	--	3.50E-08	7.28E-07	7.28E-06	8.86E-07
Chromium (VI) Compounds	No	Yes	--	--	1.55E-08	3.22E-07	3.22E-06	3.92E-07
Chromium Compounds (total)	Yes	No	--	--	5.05E-08	1.05E-06	1.05E-05	1.28E-06
Cumene	Yes	Yes	2.14E-04	1.93E-04	2.00E-04	1.14E-03	1.14E-02	1.39E-03
Ethylbenzene	Yes	Yes	9.03E-03	1.23E-03	3.96E-03	2.26E-02	2.26E-01	2.75E-02
Hexane (n-Hexane)	Yes	Yes	1.35E-02	2.65E-03	6.45E-03	3.68E-02	3.68E-01	4.47E-02
Lead Compounds	Yes	Yes	--	--	8.05E-06	1.67E-04	1.67E-03	2.04E-04
Methanol	Yes	Yes	1.34E-03	2.65E-03	2.19E-03	1.25E-02	1.25E-01	1.52E-02
Methyl Chloroform (1,1,1-Trichloroethane)	Yes	Yes	1.22E-04	1.40E-03	9.53E-04	5.43E-03	5.43E-02	6.61E-03
Methyl Isobutyl Ketone (MIBK)	Yes	Yes	9.13E-05	2.86E-04	2.18E-04	1.24E-03	1.24E-02	1.51E-03
Methylene Chloride	Yes	No	1.55E-04	8.64E-04	6.16E-04	3.51E-03	3.51E-02	4.27E-03
Tetrachloroethylene (PCE)	Yes	Yes	1.51E-04	1.52E-03	1.04E-03	5.93E-03	5.93E-02	7.22E-03
Polychlorinated Biphenyls (PCBs)	Yes	Yes	2.69E-06	8.35E-05	5.52E-05	3.15E-04	3.15E-03	3.83E-04
Propylene	No	Yes	3.71E-04	2.92E-03	2.03E-03	1.16E-02	1.16E-01	1.41E-02
Styrene	Yes	Yes	1.67E-04	1.40E-03	9.68E-04	5.52E-03	5.52E-02	6.72E-03
Toluene	Yes	Yes	3.57E-02	5.51E-03	1.61E-02	9.16E-02	9.16E-01	1.11E-01
Xylenes (m-, o-, and p-)	Yes	Yes	4.59E-02	6.58E-03	2.03E-02	1.16E-01	1.16E+00	1.41E-01

1. A Hazardous Air Pollutant (HAP) is any pollutant listed pursuant to Section 112(b) of the Clean Air Act.

2. Emission factors are taken from Appendix B of a report from Foulweather Consulting; this report evaluated the results of a stack test performed on Schnitzer's facility in Oakland. Emission factors were provided for shredder feed of 100% auto bodies and 100% light iron; the emission factor used for emissions at Schnitzer Tacoma is based on the infeed mix of these two categories. The emission factors provided are in Appendix B of the Foulweather Consulting report are provided specifically for the Puget Sound Clean Air Agency (PSCAA). Tentatively Identified Compounds (TICs), including 1,1-difluroethane, acetaldehyde, hexachloroethane (PCA), and norflurane (HFC134a), are not included in estimating TAP/HAP emissions from the shredder.

The incoming feedstock to the shredder is split between the primary categories of light iron and auto bodies. The percentage of each feed is based on operating data from Schnitzer.

Auto Bodies	35%
Light Iron	65%

3. Hourly Emissions (lb/hr) = Emission Factor (lb/ton) * Maximum Hourly Throughput (tons/hr) * 95% Enclosure Capture * (1 - Control Device Efficiency (%)).

4. Daily Emissions (lb/day) = Emission Factor (lb/ton) * Maximum Daily Throughput (tons/day) * 95% Enclosure Capture * (1 - Control Device Efficiency (%)).

5. Annual Emissions (tpy) = Emission Factor (lb/ton) * Maximum Annual Throughput (ton/yr) / 2000 (lb/ton) * 95% Enclosure Capture * (1 - Control Device Efficiency (%)).

6. The 98% control efficiency from the RTOs is not applied to the particulate HAP/TAP pollutants (cadmium, chromium or lead compounds). Instead, the calculations apply a control efficiency for the venturi scrubbers based on the controlled and uncontrolled PM emissions for the process.

Table 7. Acid Gas Emission Summary

Pollutant[1]	Emission Factor[2] (lb/ton)	Hourly Emissions[3] (lb/hr)	Daily Emissions[4] (lb/day)	Annual Emissions[5] (tpy)
Hydrogen Fluoride	1.56E-03	0.47	4.68	0.57
Hydrogen Chloride	1.34E-03	0.40	4.01	0.49

1. HCl and HF emissions occur when the chlorine-containing and fluorine-containing compounds are going through combustion at the RTOs.

2. Emission factors for HF and HCl are based on Oakland, CA's most recent source test results, averaging the lb/ton values observed from the two stacks and applying a conservative safety factor.

3. Hourly Emissions (lb/hr) = Emission Factor (lb/ton) * Maximum Hourly Throughput (tons/hr)

4. Daily Emissions (lb/day) = Emission Factor (lb/ton) * Maximum Daily Throughput (tons/day)

5. Annual Emissions (tpy) = Emission Factor (lb/ton) * Maximum Annual Throughput (ton/yr) / 2000 (lb/ton)

Table 8. Shredder Fugitive Criteria Pollutant PTE Summary

Pollutant	Fugitive Emission Factor[1] (lb/ton)	Hourly Emissions[2] (lb/hr)	Annual Emissions[3] (tpy)
PM[4]	1.32E-02	3.95	4.80
PM_{10}[4]	5.79E-03	1.74	2.11
$PM_{2.5}$[4]	5.79E-03	1.74	2.11
VOC[5]	3.18E-02	9.53	11.59

1. Fugitive Emission Factor (lb/ton) = Uncontrolled Emission Rate (lb/hr) / Maximum Hourly Throughput (ton/hr) * (1 - enclosure efficiency)

2. Hourly Emissions (lb/hr) = Emission Factor (lb/ton) * Maximum Hourly Throughput (tons/hr).

3. Annual Emissions (tpy) = Emission Factor (lb/ton) * Maximum Annual Throughput (ton/yr) / 2000 (lb/ton).

4. Particulate emissions account for both filterable and condensable emissions

5. VOC emissions are provided on an as-methane basis

Table 9. Shredder Fugitive TAP and HAP Emission Summary

Pollutant	HAP[1] (Yes/No)	TAP (Yes/No)	Tacoma-specific Fugitive Emission Factor[2] (lb/ton)	Hourly Emissions[3] (lb/hr)	Daily Emissions[4] (lb/day)	Annual Emissions[5] (tpy)
1,3-Butadiene	Yes	Yes	3.63E-06	1.09E-03	1.09E-02	1.33E-03
Benzene	Yes	Yes	8.62E-05	2.59E-02	2.59E-01	3.15E-02
Cadmium Compounds	Yes	Yes	5.70E-08	1.71E-05	1.71E-04	2.08E-05
Chlorodifluoromethane	Yes	Yes	3.28E-04	9.84E-02	9.84E-01	1.20E-01
Chromium (non-VI) Compounds	No	Yes	1.75E-09	5.25E-07	5.25E-06	6.39E-07
Chromium (VI) Compounds	No	Yes	7.75E-10	2.33E-07	2.33E-06	2.83E-07
Chromium Compounds (total)	Yes	No	2.53E-09	7.58E-07	7.58E-06	9.22E-07
Cumene	Yes	Yes	1.00E-05	3.01E-03	3.01E-02	3.66E-03
Ethylbenzene	Yes	Yes	1.98E-04	5.94E-02	5.94E-01	7.23E-02
Hexane (n-Hexane)	Yes	Yes	3.22E-04	9.67E-02	9.67E-01	1.18E-01
Lead Compounds	Yes	Yes	4.03E-07	1.21E-04	1.21E-03	1.47E-04
Methanol	Yes	Yes	1.10E-04	3.29E-02	3.29E-01	4.00E-02
Methyl Chloroform (1,1,1-Trichloroethane)	Yes	Yes	4.76E-05	1.43E-02	1.43E-01	1.74E-02
Methyl Isobutyl Ketone (MIBK)	Yes	Yes	1.09E-05	3.27E-03	3.27E-02	3.98E-03
Methylene Chloride	Yes	No	3.08E-05	9.24E-03	9.24E-02	1.12E-02
Tetrachloroethylene (PCE)	Yes	Yes	5.20E-05	1.56E-02	1.56E-01	1.90E-02
Polychlorinated Biphenyls (PCBs)	Yes	Yes	2.76E-06	8.28E-04	8.28E-03	1.01E-03
Propylene	No	Yes	1.01E-04	3.04E-02	3.04E-01	3.70E-02
Styrene	Yes	Yes	4.84E-05	1.45E-02	1.45E-01	1.77E-02
Toluene	Yes	No	8.04E-04	2.41E-01	2.41E+00	2.93E-01
Xylenes (m-, o-, and p-)	Yes	Yes	1.02E-03	3.05E-01	3.05E+00	3.71E-01

1. A Hazardous Air Pollutant (HAP) is any pollutant listed pursuant to Section 112(b) of the Clean Air Act.

2. Fluorinated and chlorinated acid gasses emitted from the shredder stack are not included in the list of fugitive shredder emissions since those compounds are formed only when passing through the RTOs.
Fugitive Emission Factor (lb/ton) = [Uncontrolled Emission Factor (lb/ton) * (1 - Shredder Enclosure Capture Efficiency (%)].
3. Hourly Emissions (lb/hr) = Fugitive Emission Factor (lb/ton) * Maximum Hourly Throughput (tons/hr).
4. Daily Emissions (lb/day) = Fugitive Emission Factor (lb/ton) * Maximum Daily Throughput (tons/day).
5. Annual Emissions (tpy) = Fugitive Emission Factor (lb/ton) * Maximum Annual Throughput (ton/yr) / 2000 (lb/ton).

Table 10. RTO Natural Gas Consumption Parameters

Parameter	Value	Units
Maximum Daily Hours of Operation (Operating Capacity)[1]	24	hr/day
Daily Hours of Operation (Standby Capacity)[1]	0	hr/day
Maximum Annual Hours of Operation (Operating Capacity)[2]	8760	hr/yr
Single RTO Burner Maximum Heat Rating (Startup Capacity)[3]	20	MMBtu/hr
Natural Gas HHV[4]	1.02E-03	MMBtu/scf
Single RTO Gas Firing Rate (Operating Capacity)[5]	1.96E-02	MMscf/hr

1. The daily maximum hours of operation for the RTO is assumed to be 24 hours. Actual hours of operation are expected to be much less than this, and the RTOs will spend a significant amount of time in a standby mode.
2. Annual Hours of Operation of the RTO conservatively assumes the daily maximum hours of operation for 365 days.
3. Estimated heat rating for RTO operation at operating capacity based on a
4. Natural Gas HHV obtained from AP-42 Section 1.4 on Natural Gas Combustion
5. Gas Firing Rate (MMscf/hr) = Heat Rating (MMBTU/hr) / Natural Gas HHV (MMBtu/scf) / (10^6 scf/MMscf).

Table 11. Criteria Pollutant PTE Summary for Two RTOs

Pollutant	Emission Factor[1] (lb/MMscf)	Maximum Hourly Emissions[2] (lb/hr)	Annual Emissions[3] (tpy)
SO_2	0.6	0.02	0.10
NO_x	50	1.96	8.59
VOC	5.5	0.22	0.94
CO	84	3.29	14.43

1. Minimal combustion emissions are expected for most pollutants from the flameless RTOs; however, emissions are conservatively estimated based on AP-42 in place of manufacturer specifications. Emission factors obtained from AP-42 Section 1.4 Natural Gas Combustion, Tables 1.4-1 and Table 1.4-2. PM_{10} and $PM_{2.5}$ emissions are conservatively assumed to be equivalent to PM emissions.

2. Maximum Hourly Emissions (lb/hr) = Emission Factor (lb/MMscf) * Maximum Gas Firing Rate (MMscf/hr) * 2 RTOs.

3. Annual Emissions (tpy) = Emission Factor (lb/MMscf) / 2000 (lb/ton) * [Gas Firing Rate at Operating Capacity (MMscf/hr) * Annual Hours of Operation at Operating Capacity (hr/yr)] * 2 RTOs.

Table 12. TAP PTE Summary for Two RTOs

TAP	CAS	Emission Factor (lb/MMscf)	Maximum Hourly Emissions[1] (lb/hr)	Daily Emissions[2] (lb/day)	Annual Emissions[3] (tpy)	Emission Factor Source[4]
Acetaldehyde	75-07-0	4.30E-03	1.69E-04	2.02E-06	7.39E-04	1
Acrolein	107-02-8	2.70E-03	1.06E-04	1.27E-06	4.64E-04	1
Benzene	71-43-2	2.10E-03	8.24E-05	9.88E-07	3.61E-04	2
Copper Compounds	7440-50-8	8.50E-04	3.33E-05	4.00E-07	1.46E-04	2
Ethylbenzene	100-41-4	9.50E-03	3.73E-04	4.47E-06	1.63E-03	1
Formaldehyde	50-00-0	7.50E-02	2.94E-03	3.53E-05	1.29E-02	2
Hexane (n-Hexane)	110-54-3	1.80E+00	7.06E-02	8.47E-04	3.09E-01	2
Naphthalene	91-20-3	3.00E-04	1.18E-05	1.41E-07	5.15E-05	1
Propylene	115-07-1	7.31E-01	2.87E-02	3.44E-04	1.26E-01	1
Toluene	108-88-3	3.66E-02	1.44E-03	1.72E-05	6.29E-03	1

1. Maximum Hourly Emissions (lb/hr) = Emission Factor (lb/MMscf) * Maximum Gas Firing Rate (MMscf/hr) * 2 RTO units operating in parallel.

2. Maximum Daily Emissions (lb/day) = Annual Emissions (tpy) / (365 days/yr) * 2000 (lb/ton).

3. Annual Emissions (tpy) = Emission Factor (lb/MMscf) / 2000 (lb/ton) * [Gas Firing Rate at Operating Capacity (MMscf/hr) * Annual Hours of Operation at Operating Capacity (hr/yr) + Gas Firing Rate at Standby Capacity (MMscf/hr) * Annual Hours of Operation at Standby Capacity (hr/yr)] * 2 RTOs.

4. PSCAA has provided an informal list of TAP they will be reviewing for sources that use natural gas combustion. The emission factors for each TAP listed are taken from either (1) Ventura County Air Pollution Control District AB 2588 Combustion Emission Factors, Natural Gas Fired Combustion Equipment or (2) AP-42 Section 1.4 Natural Gas Combustion, Tables 1.4-3 and 1.4-4

There is a Consent Decree, Case 1:22-cv-10604 United States of America v. Schnitzer Steel Industries, Inc. states how Schnitzer Steel shall handle regulated scrap and in particular, recovering refrigerant. This is important to note, but should also limit TAPs that are not from the combustion of the RTO.

I. APPLICABLE RULES & REGULATIONS

Puget Sound Clean Air Agency Regulations

SECTION 5.05 (c): The owner or operator of a registered source shall develop and implement an operation and maintenance plan to ensure continuous compliance with Regulations I, II, and III. A copy of the plan shall be filed with the Control Officer upon request. The plan shall reflect good industrial practice and shall include, but not be limited to, the following:

(1) Periodic inspection of all equipment and control equipment;

(2) Monitoring and recording of equipment and control equipment performance;

(3) Prompt repair of any defective equipment or control equipment;

(4) Procedures for startup, shut down, and normal operation;

(5) The control measures to be employed to ensure compliance with Section 9.15 of this regulation; and

(6) A record of all actions required by the plan.
The plan shall be reviewed by the source owner or operator at least annually and updated to reflect any changes in good industrial practice.

SECTION 6.09: Within 30 days of completion of the installation or modification of a stationary source subject to the provisions of Article 6 of this regulation, the owner or operator or applicant shall file a Notice of Completion with the Agency. Each Notice of Completion shall be submitted on a form provided by the Agency, and shall specify the date upon which operation of the stationary source has commenced or will commence.

SECTION 9.03: (a) It shall be unlawful for any person to cause or allow the emission of any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour, which is:
(1) Darker in shade than that designated as No. 1 (20% density) on the Ringelmann Chart, as published by the United States Bureau of Mines; or
(2) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in Section 9.03(a)(1).
(b) The density or opacity of an air contaminant shall be measured at the point of its emission, except when the point of emission cannot be readily observed, it may be measured at an observable point of the plume nearest the point of emission.
(c) This section shall not apply when the presence of uncombined water is the only reason for the failure of the emission to meet the requirements of this section.

SECTION 9.09: General Particulate Matter (PM) Standard. It shall be unlawful for any person to cause or allow the emission of particulate matter in excess of the following concentrations:
Equipment Used in a Manufacturing Process: 0.05 gr/dscf

SECTION 9.11: It shall be unlawful for any person to cause or allow the emission of any air contaminant in sufficient quantities and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property.

SECTION 9.13: It shall be unlawful for any person to cause or allow the installation or use of any device or use of any means designed to mask the emission of an air contaminant which causes detriment to health, safety or welfare of any person.

SECTION 9.15: It shall be unlawful for any person to cause or allow visible emissions of fugitive dust unless reasonable precautions are employed to minimize the emissions. Reasonable precautions include, but are not limited to, the following:
(1) The use of control equipment, enclosures, and wet (or chemical) suppression techniques, as practical, and curtailment during high winds;
(2) Surfacing roadways and parking areas with asphalt, concrete, or gravel;
(3) Treating temporary, low-traffic areas (e.g., construction sites) with water or chemical stabilizers, reducing vehicle speeds, constructing pavement or rip rap exit aprons, and cleaning vehicle undercarriages before they exit to prevent the track-out of mud or dirt onto paved public roadways; or

(4) Covering or wetting truck loads or allowing adequate freeboard to prevent the escape of dust-bearing materials.

REGULATION I, SECTION 9.20(a): It shall be unlawful for any person to cause or allow the operation of any features, machines or devices constituting parts of or called for by plans, specifications, or other information submitted pursuant to Article 6 of Regulation I unless such features, machines or devices are maintained in good working order.

Washington State Administrative Code

WAC 173-400-040(3): Fallout. No person shall cause or allow the emission of particulate matter from any source to be deposited beyond the property under direct control of the owner or operator of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited.

WAC 173-400-040(4): Fugitive emissions. The owner or operator of any emissions unit engaging in materials handling, construction, demolition or other operation which is a source of fugitive emission:

(a) If located in an attainment area and not impacting any nonattainment area, shall take reasonable precautions to prevent the release of air contaminants from the operation.

WAC173-400-111(7): Construction limitations.

(a) Approval to construct or modify a stationary source becomes invalid if construction is not commenced within eighteen months after receipt of the approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. The permitting authority may extend the eighteen-month period upon a satisfactory showing by the permittee that an extension is justified.

Federal

N/A

J. PUBLIC NOTICE

This project does meets the criteria for mandatory public notice under WAC 173-400-171(3) because it includes a WAC 173-400-091 synthetic minor limit. A notice of application was posted on the Agency's website for 15 days. No requests or responses were received. A copy of the website posting is below:

New Construction Projects

Company	Address	Project Description	Date Posted	Contact Engineer
Schnitzer Steel Industries	1902 Marine View Dr, Tacoma, WA 98422	Enclosure of an existing metal shredder and install two Regenerative Thermal Oxidizers (RTOs) to control VOC emissions. The RTOs will be preceded by a high efficiency filtration sytem for particulate control, and followed by a packed bed acid gas scrubber.	8/31/20	Brian Renninger

The comment period was from August 10, 2023, to October 17, 2023. A public hearing was requested on September 6, 2023. A public hearing was held via Zoom on October 16, 2023 from 4:00 to 6:00 pm Pacific Time. All written and oral comments received are recorded and discussed in section M.

K. RECOMMENDED APPROVAL CONDITIONS

Standard Conditions:

1. Approval is hereby granted as provided in Article 6 of Regulation I of the Puget Sound Clean Air Agency to the applicant to install or establish the equipment, device or process described hereon at the installation address in accordance with the plans and specifications on file in the Engineering Division of the Puget Sound Clean Air Agency.

2. This approval does not relieve the applicant or owner of any requirement of any other governmental agency.

Facility-wide Conditions:

3. The owner or operator shall limit facility-wide emissions of volatile organic compounds (VOCs) to no more than 90 tons during any 12 consecutive rolling months. These limits will take effect after the completion of commissioning of the equipment authorized by of this Order of Approval.

Specific Conditions:

4. The shredder shall not process scrap metal without the exhaust going through the emission control system (ECS), consisting of two wet venturi scrubbers, two regenerative thermal oxidizers (RTOs), and two acid gas scrubbers.

5. The shredder may process no more than 3,000 tons per calendar day and no more than 730,000 tons in any 12-consecutive-month period. The owner or operator shall maintain throughput records, with the previous 12-month throughput calculated within 30 days of the end of each month. If processing in any 12-consecutive-month period exceeds 730,000 tons, the owner or operator shall notify the Agency within 30 days after the calculation is done.

Shredder Enclosure

6. The Permittee shall demonstrate that the pollutant capture system (PCS) has been constructed to minimize the enclosure's draft openings, and the extraction vent system operates at a sufficient flow rate to promote air flow into the enclosure to sufficiently capture pollutants emanating from the shredder and ensure a minimum of 95% capture efficiency using principles of method 204.

Compliance with EPA Method 204, Section 5.1 must be demonstrated by documenting that 1) the shredder is at least 1.5 equivalent opening diameters from any Natural Draft Opening (NDO); and 2) there are auxiliary hoods located adjacent to the shredder infeed conveyor NDO and discharge conveyor NDO discharge conveyor NDO and above the shredder; and 3) Owner or operator is maintaining a pressure inside the Enclosure of at least 0.007 inches of water less than the outside of the Enclosure, *as demonstrated by a face velocity of at least 200 feet per minute over all NDOs,* following completion of the EPA Method 204 testing, will be demonstrated using parametric monitoring of fan amperage. Compliance with EPA Method 204, Section 5.4 must be demonstrated using the procedures in EPA Method 204, Section 8.3. The parametric monitoring program shall be established in the facility's Operation and Maintenance Plan. The owner or operator shall notify the Agency any substantive changes of the Operation and Maintenance Plan.

Wet Venturi Scrubbers

7. The owner or operator shall install and maintain monitoring to measure the pressure drop across the wet venturi scrubbers and the recirculated water flow rates used at each wet venturi scrubber. The acceptable range for the gauge determined by the manufacturer shall be clearly marked on or nearby the gauge. A log shall be kept of when these parameters fall out of range and any corrective action needed. Operation should cease if this cannot be corrected *in a timely fashion.*

8. The exhaust gas shall not exceed a total particulate matter hourly average of 0.0048 gr/dscf per U.S. EPA Method 5 as modified by Puget Sound Clean Air Agency Board Resolution 540 dated August 11, 1983.

RTOs

9. The RTOs shall be operated at all times when the shredder is operating.

10. Each RTO shall achieve an hourly average of either a 98.0% or higher destruction efficiency, or 20 ppmdv VOC as methane or less at the RTO outlet, as determined by EPA Method 25A.

11. Two RTOs combined shall not emit more 4.96 lbs of NO_x as NO_2 per hour as measured by U.S. EPA Methods 1-4 and 7E.

12. The RTO shall operate at a combustion zone temperature of no less than 1,600 degrees F on an hourly average until completion of the performance test required in Condition 16. After completion of the performance test, the Owner and/or Operator shall maintain the RTO combustion zone temperature at no less than the "baseline" temperature, taken on an hourly average. The "baseline" temperature shall by the average operating temperature that was observed in the most recent VOC performance test meeting the emission limits under Condition 10. The baseline temperature for each RTO shall be defined separately. The baseline temperature shall be clearly marked on or near the RTO temperature display.

13. The owner or operator shall install, operate, calibrate and maintain a monitoring device to monitor and record operations of each RTO to ensure that the minimum required combustion chamber temperature defined by condition 12 is achieved prior to feeding material into the shredder and ensure this minimum temperature is maintained at all times while material is being fed into and processed by the shredder. Both audible and visual alarms shall be used to indicate the need to initiate corrective actions and/or discontinue operation of the shredder infeed conveyor. A log of

alarm incidents and corrective actions shall be kept onsite.

ACID GAS SCRUBBERS

14. The Permittee shall install, operate, calibrate and maintain a monitoring device to continuously monitor pH, and to ensure that each acid gas scrubber solution is recirculating at all times the unit(s) is/are in operation. The scrubbing solution flow monitors shall be connected to a visible and audible alarm to alert operator if scrubber solution flow is out of range.

15. Emissions from the acid gas scrubbers may exceed neither an hourly average of 0.40 lb/hr of HCl nor 0.47 lb/hr of HF as measured by EPA method 26, EPA Method 26A, EPA method 321 or other agency approved method.

16. **Performance Testing:**
    a. The Owner and/or Operator shall conduct performance tests on the following equipment within 60 days after completion of commissioning of the applicable equipment. The testing deadline may be extended for good cause if preapproval is obtained in writing by the Agency, but in no case shall the testing deadline extend beyond 180 days after completion of commissioning of the new applicable equipment.
        i. Permanent enclosure
        ii. Wet Venturi Scrubbers
        iii. RTOs
        iv. Acid Gas Scrubbers
    b. The Owner and/or Operator shall conduct a performance test of the equipment listed above while operating the shredder and ECS as close to normal operation as possible.
    c. Emission Control System:
        i. The Owner and/or Operator shall measure the concentrations of PM, VOC, NOX and HCl and HF in the exhaust stream.
        ii. If showing destruction efficiency, the inlet to the RTO shall be measured for VOC, and determined on a lb/hr basis.
        iii. A capture efficiency evaluation shall be performed on the enclosure.
    d. Test Frequency: Following the initial performance test for this permit, The Owner and/or Operator shall conduct a performance test every year (within 15 months) from the last respective test. Testing shall measure the concentrations of PM, NOx, VOC, HCl, and HF in the exhaust stream.
    e. Testing Criteria: Testing of sources for compliance with emission standards shall be performed in accordance with Regulation 1, Article 3, Section 3.07. The Owner and/or Operator shall notify the Agency in writing at least 21 days in advance of the actual date and time of each performance test as required by Regulation 1, Section 3.07(b). The Owner and/or Operator shall complete and submit a separate test report for each performance test to the Department within 60 days after the completion of testing in accordance with the requirements specified in Regulation 1, Section 3.07(c).
    f. Test Methods: Sampling sites and velocity traverse points shall be selected in accordance with EPA Test Method 1 or 1A. Adequate and safe access to the test ports must be provided. The gas volumetric flow rate shall be measured in accordance with EPA Test Method 2. The dry molecular weight shall be determined in accordance with EPA Test Method 3 or 3A. The stack gas moisture shall be determined in accordance with EPA Test

Method 4. These methods must be performed, as applicable, during each test run.

i. PM testing shall be conducted in accordance with PSCAA Method 5.

ii. VOC testing shall be conducted in accordance with US EPA Test Method 25A. Testing to quantify exempt compounds, such as methane, shall be conducted in accordance with US EPA Test Method 18.

iii. NOX testing shall be conducted in accordance with US EPA Test Method 7E.

iv. HCl and HF shall be measured using US EPA Method 26, 26A or 321.

v. Test methods listed above may be modified if approved by the Agency ahead of performance testing.

g. The Owner and/or Operator shall submit a separate test protocol for each performance test to the Department for Review at least 21 days prior to each performance test.

h. Minimum Testing Requirements: Each performance test shall consist of three separate test runs with each test run being at least one hour in duration unless otherwise specified in the applicable standard or test method. The same test methods shall be conducted for both the inlet and outlet measurements, if applicable and technically feasible, which must be conducted simultaneously. Emissions rates, concentrations, grain loadings, and/or efficiencies shall be determined as the arithmetic average of the values determined for each individual test run. Performance tests may only be stopped for good cause, which includes forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Owner and/or Operator's control. Termination of a performance test without good cause after the first test run has commenced shall constitute a failure of the performance test.

i. The total enclosure efficiency shall meet the requirements of EPA Method 204, Section 5.4 must be demonstrated using the procedures in EPA Method 204, Section 8.3. and validated once per year.

j. During the compliance testing, the following shall be measured and recorded:
   a. Production rate through the shredder
   b. Fan speed and amperage of the exhaust fans.
   c. The operational temperature of the RTO
   d. pH of the acid gas scrubber liquid.
   e. Pressure difference across the wet venturi scrubbers
   f. recirculated water flow rate of the wet venturi scrubbers.

General Reporting and Recordkeeping

17. Records to be maintained by this Order of Approval shall be kept onsite for at least two years from the date of generation and made available to Puget Sound Clean Air Agency personnel upon request.

18. Within 90 days after commissioning of the emission control system, the owner and/or Operator shall send a Maintenance and Operation plan to the agency for the Permanent Total Enclosure, RTO's, Venturi Scrubber and Acid Gas Scrubber.

19. Within 30 days of the end of each month after completion of commissioning of the emission control system, the owner or operator shall calculate the facility-wide VOC emissions for the previous 12

months using the emission factor in pounds per ton shredder feed derived from the last source test.

20. Within 30 days of the end of each month after completion of commissioning of the emission control system, the owner or operator shall calculate the facility-wide emissions of HCl, HF, and organic HAPs for the previous 12 months. Total VOCs may be used as a surrogate for organic HAPs. This shall be done using emission factor in pounds per ton shredder feed derived from the most recent source tests for HCl, HF, and VOC, and appropriate emissions factors for emissions, including fugitives, based on appropriate emissions factors of these pollutants.

21. The Owner and/or Operator shall notify the Agency, in writing, within 30 days after the end of any 12-month period in which combined emissions of HCl, HF, and organic HAPs exceeded 24 tons, or emissions of VOCs exceeded 90 tons. Total VOCs may be used as a surrogate for organic HAPs. The report shall include emissions data for the time period for which these thresholds were exceeded. If combined emissions of HCl, HF, and organic HAPs exceed 24 tons, the Agency may require additional testing for emissions of organic HAP to determine whether emissions of any individual HAP or combined HAPs exceeded the major source threshold.

22. The Owner and/or Operator shall calculate the emissions of PM, NOx, and CO from the shredder using the arithmetic average of emission factors from the three most recent stack tests or using emission factors from AP-42 or other references if stack test information is not available.

23. The owner and/or operator shall notify the Agency, in writing, within 30 days of discovering an exceedance of any limitations identified in Conditions #6, #8, #10, and #11.

CORRESPONDENCE AND SUPPORTING DOCUMENTS

Method 25A RF correction for NSPS

m-25A FID-Response-Facto

L. REVIEWS

Reviews	Name	Date
Engineer:	Carl Slimp	12/28/22, 5/3/2023, 7/19/2023, 2/26/2024
Inspector:	Rick Woodfork	12/28/22
Second Review:	John Dawson	1/3/2023 5/1/2023, 2/24/2024
Applicant Name:	Scott Sloan	7/25/2023

M. COMMENTS

All Comments received can be found in the Appendix at the end of the document.

U.S. EPA

The first comment received was from U.S. EPA, received September 6, 2023, which divided into 21 sections. These are shown in the appendix at the end of this document, and will be addressed item by item.

1. Public notification of the proposed permitting action:
   The original public notice did not explicitly state whether written comments needed to be received or post-marked by the end of the comment period closing date, although the Agency did make this adjustment when extending the comment period to include a public hearing. The EPA comment asked about the possibility of commenters submitting confidential business information during the comment period, though the Agency is unaware of any attempts to do so. This concern has been noted.

2. Facility-wide emission limit:
   EPA raised a concern about when the emission limits for synthetic minor would become effective and enforceable, and there was confusion about when these limits would start. Also, based on these concerns, as well as testing and reporting concerns, the agency has reevaluated if the synthetic minor limit for HAPs was really adding anything to enforcement or would be needed. After installation, this facility should not be able to be reached with the enclosure and control equipment. With these in place, GMT should not be able to exceed any HAP above 10 tons/year, or 25 tons/year in total.

   Page 20 shows the expected total of HAPs based on 730,000 tpy, or an average of 2,000 tons per day for 365 days. This limit has been added, as it is tighter than the 3,000 tons per day. Based on this production limit, the total HAPs is expected to be less than 2.77 tpy. Of these, HCl is the highest individual HAP at an expect 0.57 tpy. HF is expected at 0.49 tpy. Both of these will be tested for using EPA method 26, 26A or 321. Other significant HAP emissions should be able to be accounted for by measuring total VOC's with method 25a, and it should not be feasible to come close to a 10 tpy rate of any of these pollutants. Again, this is based on the annual limit and control technology installed doing the actual limiting of pollutants.

   This has been clarified that both these limits will begin when the capture and control systems are built and commissioned. Compliance will be verified by reporting described in the general reporting and recordkeeping section.

3. Averaging periods for emission limits:
   It is pointed out that the averaging periods in conditions 8, 10, 11 and 15 were not stated explicitly. While this could possibly inferred by the testing methods, the conditions have been clarified to be a 1 hour average, as to be consistent and enforceable with the methods available.

4. Operation and maintenance plan:
   EPA raised concerns about how to show continuous compliance with the Permanent enclosure, which is why it was called out in condition 7. Edits to condition 7 have been made, and will be addressed in different comments. EPA called out Condition 8, however, condition

6 is the one that calls out monitoring plan. The requirements of Condition 6 are standard practice to show continuous compliance. A timeline for setting these parameters has been added as well as an approval requirement. For general maintenance and operation, PSCAA Regulation I, Section 9.20 is relied upon: shown below.

SECTION 9.20 MAINTENANCE OF EQUIPMENT Adopted 12/09/82 (531) Revised 06/09/88 (621)

(a) It shall be unlawful for any person to cause or allow the operation of any features, machines or devices constituting parts of or called for by plans, specifications, or other information submitted pursuant to Article 6 of Regulation I unless such features, machines or devices are maintained in good working order.

(b) It shall be unlawful for any person to cause or allow the operation of any equipment as defined in Section 1.07 or control equipment not subject to Section 9.20(a) unless the equipment or control equipment is maintained in good working order

5. Enclosure demonstration and
6. Enclosure monitoring
   Comments 6 and 7 both involve monitoring and demonstrating compliance with the Total Enclosure. The suggestions of using EPA Method 204 and to require submittal of a monitoring plan is noted and has been added to the permit.
7. Venturi Scrubber Labeling. The EPA expressed concerns that the 90 day limit on setting the range of the wet venturi scrubber pressure drop could be inadequate. This is a common limit for requiring the labeling of ranges on smaller sources. However, this should be known by the manufacturer, and should be able to be labeled and set prior to start up. The 90 day limit has been removed.
8. Venturi Scrubber Monitoring. A requirement for a monitoring system has been added. The acceptable range should be defined by the manufacturer. Sources need to maintain an operation and maintenance plan for review by PSCAA, which will be able to be verified.
9. Venturi scrubber emission limit. The limit is defined to Particulate Matter for the requested clarity. The applicant also requested the limit be changed to 0.0048 gr/dscf.
10. Determination of VOC. Per the comment, an "as propane" has been added to the condition for clarity.
11. NOx emissions from RTO: The draft Order of Approval posted publicly was an older draft that was not clear. The worksheet that was also posted during the comment period had changed the NOx limit to "Two RTOs combined shall not emit more 4.96 lbs of NOx as NO2 per hour as measured by EPA method 7E." This language is a tighter limit, and should make clear the questions the EPA has raised.
12. Operating temperature of the RTO: This is requesting clarity that the base line temperature of the RTO's needs to be specified to also meet the destruction efficiency requirements. Language was added to make this clear.
13. RTO Temperature alarm. This comment is suggesting that records of corrective action and when production was discontinued should be kept for the RTO when the alarm sounds for low temperatures. This language has been changed to reflect this concern.
14. Acid gas scrubber monitoring: This comment suggests the addition of monitoring the pH of the scrubbing solution and the pressure drop across the scrubber. It also suggests requiring discontinuation of operation when any of these factors are out of range and a log to track when this happens and corrective actions. The ranges should be determined by the manufacturer, and confirmed by a source test. Language has been added to reflect these concerns.

15. Performance testing
    a. The EPA has suggested "normal operation" could be biased low, and we should allow for higher rates during the test. Due to testing being recurrent, the tests would be best tracked to "normal operation." RTO's tend to have a better destruction efficiency when inlet loading is high, and this phrasing will give the most representative results in the longevity of the test.
    b. The EPA states the permit must require a test such as method 18 to identify organic HAPs to develop representative, site specific emission factors.
    With the removal of the HAP synthetic minor limit, discussed in the second comment, measuring individual organic HAPs should be unnecessary. It will be impossible for any individual HAP to exceed 2 tons per year based on the RTO efficiency, enclosure capture efficiency and production limit. Total VOC's should be below 9 tons per year, showing that no individual HAP should be able to exceed 10 tons per year. Please reference the tables in sections F and H.
    These estimates are based off of emissions based on tests performed at another car shredder, one of the reasons the source test was included.
    c. This comment seeks clarification in condition 16 paragraph (c)(ii) of how to do the testing. This clarification is in paragraph f.
    d. Clarification is requested on what equipment needs to be tested for fugitive emissions. This was meant to be a ensure compliance of the total enclosure. However, EPA method 204 is replacing this test. EPA method 22 has been removed, and Method 204 has been added with this clarification.
    e. A request for flow rate and pressure drop of the acid gas scrubber liquid of the venturi scrubbers during the source test has been made. These have been added.
    f. A comment on how site-specific emission factors based on source testing are required but needing a source test is not required in the permit. However, a source test is required in the condition 16. This source test should cover everything required to be reported.

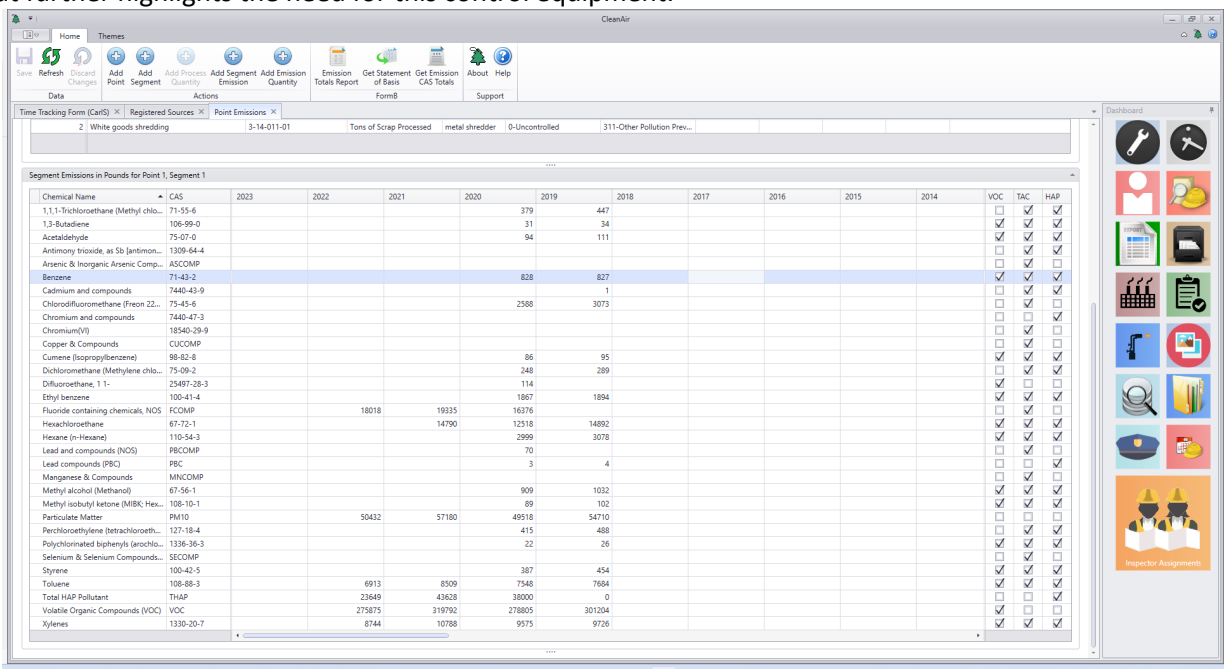
16. Maintenance of records: Condition 17 requires that records be maintained onsite for two years. There is a question if the documents can be destroyed or if they must be maintained somewhere else. There is no requirement to maintain the records beyond two years.
17. Annual VOC emissions calculations: It is pointed out that this condition does not prescribe a definitive method of calculating the emission factors. However, this does say that the most recent source test should be used. If other source tests are used, they must be provided to the agency. The Foulweather consulting source test was also put on the website for 30 days prior to the public hearing. This was meant to help prior to the first source test, but it appears to add confusion, and can be removed.
    The comment about not requiring to establish VOC emission factors based on source data seems to be a point of misinterpretation. Condition 18 requires GMT to calculate emission via an emission factor derived from source tests. This would then conclude they need to calculate emission factors.
    Instances where offsite source tests would be more valuable would be with new pollutants of question, or substances not tested regularly on this site.
18. Annual HAP and VOC emissions reporting: The EPA commented that no specific HAPs emission testing or inventory is required to enforce the synthetic minor HAP limit. With the removal of the synthetic minor HAP limit, the testing of individual HAPs should not be needed. Annual VOC's will be tested and captured with EPA method 25A. HCl and HF are two of larger

pollutants expected from this project, and they will be measured with EPA 26A.

19. Emissions calculations

    It is noted that time frames are missing from condition 22. A time frame has been added.

20. Potential HAP emissions: This notes that the pre-project potential HAP emissions was 20.03 tpy, but the 2022 operating permit fee invoice was for 38 tpy, and exceeds the title V threshold for HAPs. The application was written in 2019. Schnitzer Steel has submitted an application for a title V permit and is registered as such. A screen shot below shows the emissions reported. This application predates when emissions were reported to the agency, but further highlights the need for this control equipment.



Chemical Name	CAS	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	VOC	TAC	HAP
1,1,1-Trichloroethane (Methyl chlo...	71-55-6				379	447						☐	☑	☑
1,3-Butadiene	106-99-0				31	34						☑	☑	☑
Acetaldehyde	75-07-0				94	111						☑	☑	☑
Antimony trioxide, as Sb (antimon...	1309-64-4											☐	☑	☑
Arsenic & Inorganic Arsenic Comp...	ASCOMP											☐	☑	☐
Benzene	71-43-2				828	827						☑	☑	☑
Cadmium and compounds	7440-43-9					1						☐	☑	☑
Chlorodifluoromethane (Freon 22...	75-45-6				2588	3073						☐	☑	☐
Chromium and compounds	7440-47-3											☐	☐	☑
Chromium(VI)	18540-29-9											☐	☑	☐
Copper & Compounds	CUCOMP											☐	☑	☐
Cumene (Isopropylbenzene)	98-82-8				86	95						☑	☑	☑
Dichloromethane (Methylene chlo...	75-09-2				248	289						☐	☑	☑
Difluoroethane, 1 1-	25497-28-3				114							☑	☐	☐
Ethyl benzene	100-41-4				1867	1894						☑	☑	☑
Fluoride containing chemicals, NOS	FCOMP		18018	19335	16376							☐	☑	☐
Hexachloroethane	67-72-1			14790	12518	14892						☑	☑	☑
Hexane (n-Hexane)	110-54-3				2999	3078						☑	☑	☑
Lead and compounds (NOS)	PBCOMP				70							☐	☑	☐
Lead compounds (PBC)	PBC				3	4						☐	☐	☑
Manganese & Compounds	MNCOMP											☐	☑	☐
Methyl alcohol (Methanol)	67-56-1				909	1032						☑	☑	☑
Methyl isobutyl ketone (MIBK; Hex...	108-10-1				89	102						☑	☑	☑
Particulate Matter	PM10		50432	57180	49518	54710						☐	☐	☐
Perchloroethylene (tetrachloroeth...	127-18-4				415	488						☐	☑	☑
Polychlorinated biphenyls (arochlo...	1336-36-3				22	26						☑	☑	☑
Selenium & Selenium Compounds...	SECOMP											☐	☑	☐
Styrene	100-42-5				387	454						☑	☑	☑
Toluene	108-88-3		6913	8509	7548	7684						☑	☑	☑
Total HAP Pollutant	THAP		23649	43628	38000	0						☐	☐	☑
Volatile Organic Compounds (VOC)	VOC		275875	319792	278805	301204						☑	☐	☐
Xylenes	1330-20-7		8744	10788	9575	9726						☑	☑	☑

21. Potential VOC emissions: The EPA states how there is no pre-project enforcement to keep VOC emissions below the major source threshold. The reason for this discrepancy is that this source is currently in our major source program and condition 3 would become enforceable only after the commissioning of the equipment.

Radius Recycling

On 9/29/2023, Scott Sloan with Radius Recycling, it was noted that the approval order did not match the worksheet when the process was updated from 2,000 tons per day up to 3,000 tons per day. This has been updated for the approval order. The worksheet was already updated to 3,000 tons per day, as well as all the emission estimates.

11986-Draft Order of Approval - Annot

RE_ Draft Order of Approval.msg

On 10/17/2023, Scott Sloan requested the name of the name of the facility for this permit be changed to General Metals of Tacoma, Inc (GMT). GMT is the proper owner and operator of the Tacoma Facility.

Tacoma-Pierce County Chamber

On 10/4/2023, Andrea Reay with the Tacoma-Pierce County Chamber sent in the following email and comments. They are noted, and not further action is needed.

Youth Marine Foundation
On 10/6/2023, Tom Rogers with the Youth Marine Foundation sent in the following email supporting the project. No further action needed.

Claudia Riedener
On 10/16/2023, Claudia Riedener sent in the following email, with various concerns.

1. The first concern is that the PSCAA board member contacts were not found in time to be included in this comment.
   The Agency's Board of Directors can be found here: Board of Directors | Puget Sound Clean Air Agency, WA (pscleanair.gov). The following FAQ is also provided on how to speak to the board: FAQs • Puget Sound Clean Air Agency, WA • CivicEngage (pscleanair.gov). Additionally, the Agency's Board has no role in individual permitting decisions.
2. This commenter mentioned only learning of the public comment period near the end of the comment period, and not through PSCAA.
   The Agency's regulations were followed for posting the public comment period. Notice was posted to the Agency website and the State of Washington Permit Register, and the public notice was published in the *Tacoma News Tribune* and the *Daily Journal of Commerce*. Notice was also emailed to the Agency's "Permit Actions" email list, which has approximately 1500 subscribers. Members of the public can sign up for this list via the Agency website: https://pscleanair.gov/258/Connect-With-Us
3. The next comment was also a question, *"Schnitzer is a MAJOR air polluter here in Tacoma. Yet PSCAA is not evaluating any actual local data, instead they use Oakland date - with redactions?!"*
   The goal of this project would reduce GMT's emissions to not be a major polluter, and removing over 100 tons of VOC's per year from the emissions inventory. The Oakland data sited is one of the few available source tests for this kind of process. This source test is not based on local air data, but rather on the equipment being installed, which provides very useful data on the project here. The Tacoma site is required to do a similar test once the project is built to ensure compliance and proper operation.

Claudia Riedener sent in the written comments below on 10/17/2023. Each question is addressed individually.

1. *First, I'd like to acknowledge that all agency permitted pollution to air, land and water is happening not only on the Ancestral Land of the Puyallup Tribe, but indeed on their very Reservation, a small bit of land set aside for the Tribe after everything else was - and still is - stolen.*
   It is Constitutionally enshrined that government and government agencies like yours must follow Treaty obligations to get consent from the Puyallup Tribe. Was this consent given before the agency pre-approved this permit?

   In regards to obligations to the tribes, while this facility is within the historical boundaries of the Puyallup Reservations, it is not on tribal trust land. According to US EPA (88 FR 39210), "Under the Puyallup Tribe of Indians Settlement Act of 1989, 25 U.S.C. 1773,

Congress explicitly provided state and local agencies in Washington authority over activities on non-trust lands within the 1873 Survey Area." If the facility were on tribal trust land, the tribe or US EPA would be responsible for permitting. Below is also the parcel information for 1902 Marine View Dr showing that GMT pays property taxes assessed by Pierce County. Additionally, this project did not fall into any of the categories described in the PSCAA interim Tribal policy. This policy can be found in resolution 1410, located here: https://pscleanair.gov/DocumentCenter/View/4045/Resolution-1410---Interim-Tribal-Consultation-Policy
Because production is not being increased by this permit, and it is an existing source, it does not fall into any of the categories of II.A of resolution 1410.

2. *How come the public was not notified?*
   Notice was posted to the Agency website and the State of Washington Permit Register, and the public notice was published in the *Tacoma News Tribune* and the *Daily Journal of Commerce*. Notice was also emailed to the Agency's "Permit Actions" email list, which has approximately 1500 subscribers. Members of the public can sign up for this list via the Agency website: https://pscleanair.gov/258/Connect-With-Us

3. *Why was the public hearing held at a Monday at 4 when regular people cannot attend?*
   We chose this time to bridge a day shift and evening shift, from 4 PM to 6PM, online. The comment period was open the entire duration specifically to give the most people the opportunity to attend.

4. *Why no meeting, no q&a and no emails?*
   Please see section J, above. The procedures established in the applicable regulations of Washington State and the Puget Sound Clean Air Agency were followed through the issuance of the draft order of approval and the acceptance of public comment. The request for such materials has been noted.

5. *What exactly are PSCAA's responsibilities to inform the general public, neighbors and interested parties as well as the Tribe?*
   The Agency's Interim Tribal Consultation Policy was noted above.
   The Agency posts a notice on its website for 15 days upon receipt of a Notice of Construction application. Under some circumstances, the Agency holds a 30-day public comment period on the draft Order of Approval. The Agency would hold a comment period if one is requested, if the Agency determines there is substantial public interest, if the Order of Approval would establish emission limits that would keep an emission source out of the Operating Permit program, or for several other reasons given in WAC 173-400, 173-401, and 173-460. Additionally, the Agency holds a hearing on the draft Order of Approval if one is requested before the end of the comment period. Comment periods last for at least 30 days, and notice of at least 30 days is given before a public hearing.
   The regulations describing PSCAA's responsibilities can be found here: PSCAA Regulations | Puget Sound Clean Air Agency, WA (pscleanair.gov)

6. *Why is it routine that the agency pre-approves permits before public input? When the public is presented with such fait accompli, is it not a result that we all feel participation is 100% useless and can not impact anything? PSCAA calls the project a proposed order of approval, yet it's already pre-approved. Clarity of language is important.*

It is inaccurate to say that this permit is pre-approved, although the Agency will not issue a draft Order of Approval for comment, unless Agency staff make a preliminary determination that the proposed project satisfies the applicable regulations. The public comment period is an opportunity for substantive comments, which do have the ability to change the permit. The agency has been assigned the responsibility to review permits, and to try and assure that all applicable laws are considered and that the Best Available Control Technology is being implemented. The criteria by which the Agency determines whether a project is approvable are given in regulation (primarily Agency Regulation I, and WAC 173-400). If the proposed project meets all applicable requirements, the Agency is obligated to issue the final Order of Approval. Comments that focus on whether or not the proposed project and draft Order of Approval meet the applicable requirements can and do result in actual changes to permit conditions. (See, for example, the comments from US EPA and the Agency's responses, above.)

7. *The documentation supporting PSCAA's approval of this is using data from Oakland, CA. The data used is not made available to the public as much of it has been redacted.*
   This was a source test used as a preliminary estimate. This source test will be performed when the equipment is built here, per section K of this worksheet. The results of that source test were used to build an estimated emission inventory, which is shown in sections F and H of this worksheet.

8. *How is the public to make informed comment on the permit application when the public agency hides basic facts from the public?*
   Please see sections F and H of this worksheet, which was posted during the public comment period, which contain the necessary emissions information.

9. *How is it possible for a local air agency to shop around the county for data that fits predetermination, data that supports approval?*
   This is an inaccurate version of how and why this data was obtained. A similar system was built as required by the Bay Area Air Quality Management District. A third party did the measurements. This is the best available data to predict what actual emissions will be.

10. *Schnitzer has been polluting Tacoma air for over 50 years. Surely PSCAA must have detailed information on all that pollution? Some 215 tons of VOCs have been emitted into our air and lungs every year!*
    The emissions from auto shredding was not understood fully until fairly recently. The Agency was not aware that this was a reporting source prior. Once it was made aware, annual emissions have been reported starting in 2019. As was noted above, auto shredding was not discovered to be a substantial source of VOC emissions until rather recently. Until there are applicable VOC emissions limits that apply to the facility, the Agency cannot require VOC source testing. Issuance of this final Order of Approval will put into place applicable VOC limits and testing requirements.

11. *Will the clean air agency ever do a real and honest and local health impact assessment on what it approves? Cumulative??*
    The agency monitors ambient pollution and reports the findings. More information on this can be found at the following links:

Air Quality | Puget Sound Clean Air Agency, WA (pscleanair.gov)
Air Toxics | Puget Sound Clean Air Agency, WA (pscleanair.gov)
Strategic Plan | Puget Sound Clean Air Agency, WA (pscleanair.gov)
The Agency's recently released Seattle and Tacoma Air Toxics Trends Technical Report is available at
https://www.pscleanair.gov/DocumentCenter/View/5369/2023TacomaSeattleAirToxicsReport?bidId=

12. *With state, city and port climate polices in place, how can PSCAA approve new fracked gas infrastructure? Was this work done with the Climate Emergency Declaration by city and the Puyallup Tribe in mind? Why is clean hydro power from TPU not the mandate?*

    While there is a small amount of information about electric thermal oxidizers, Regenerative Thermal Oxidizers (RTO's) are an industry standard and common practice. Industries that use RTO's in our area include Coffee Roasters, Aerospace manufacturing and various surface coating operations. Schnitzer Steel suggested the use of RTO's voluntarily, and there is not enough evidence or supporting information to suggest that a different technology would be more appropriate for this project.
    Part of this project is also to reduce PM and acid gas emissions that would come from the RTO's and Shredding. The wet venturi scrubbers after the RTO are to control particulate matter, and acid gas scrubbers will remove HCl emissions that are generated from the RTO process. Low NOx burners are also being implemented, which is best practice for any type of natural gas combustion to lower nitrogen oxide emissions.

13. *The permitting of new polluting fossil fuel infrastructure in the middle of the second largest city on the Sound is akin to a suicide mission, especially in 2023, a year that has seen immense temperature spikes, many people dying from heat effects as well and untold economic damages from climate relates catastrophes. If PSCAA is not taking policies, laws and declarations into account, what is guiding these permitting decisions?*

    The Agency's regulations are published on the Agency website: PSCAA Regulations | Puget Sound Clean Air Agency, WA (pscleanair.gov)

14. *How can PSCCA have a board make-up that is majority politically funded by polluting interests with business/permits in front of the agency? Without a clean board how can the agency do proper business for the public?*

    PSCAA was first chartered in 1967 by state law. Details regarding the composition of the Board can be found here: Chapter 70A.15 RCW: WASHINGTON CLEAN AIR ACT.
    Additionally, the Agency's Board has no role in individual permitting decisions.

15. *Lacking from the documents are noise and smell issues, as well as frequent routine fires that heavily impact neighbors and port workers.*

    There are existing laws on noise pollution set by Tacoma, found here: Noise Ordinance - City of Tacoma. Odor complaints can be reported to PSCAA here: Odor Complaint (pscleanair.org). This project is expected to reduce both, but does not address the entirety of the existing source. The Agency does not permit accidental fires and expects

proper maintenance of all equipment and processes.

16. *The people of Tacoma demand and deserve a complete health assessment and cumulative air analysis in regards to all these polluting permits approved by the clean air agency. (These permits are always approved, we have yet to see one not rubber-stamped by PSCAA). We have been begging the agency for this for a very long time. Benzene, a very toxic air pollutant for example, is only being measured in Beacon Hill. The agency simply says they are "averaging Tacoma numbers from there, trust us". In this new permit approval, PSCCA shops for data in California and I guess also "averages from there"?*
    These points are addressed in responses numbers 6, 9, and 11, above.

17. *It's exceedingly hard to believe that Tacoma is anything but a pre-designated sacrifice zone, where anything and everything will get permitted.*
    In particularity the Puyallup Reservation is home of many Superfund Sites, polluted sites, smoke stacks and flares, and a bay so toxic that food from it is harmful to the human body, and of course all the critters as well. The Port Subarea Rezone has been languishing for many years. In the meantime, just about all polluters have increased their emissions and throughput, and massive new polluters have come online.
    Tacoma also has 1,500 or so human beings (often also Indigenous) locked up inside this toxic kitchen, breathing toxic fumes and idling diesel exhaust 24/7. Nobody seems to care. During abnormally toxic air/smoke events there are no masks, no info, no protections, no help. Not even the Tacoma fire department is willing to do sany outreach - we have begged them. Calling the air pollution hotline at PSCAA only means an inspector might show up and few days or weeks later....
    This is PSCAA's motto: "Puget Sound Clean Air Agency jurisdiction covers King, Kitsap, Pierce, and Snohomish counties. These four counties are home to more than 4.1 million people, over half the state's population. Every day we work to protect public health, improve neighborhood air quality, and reduce our region's contribution to climate change."
    How do you all believe PSCAA measures up to protecting people in sacrifice zones?

    This comment does not appear to be applicable to this particular permitting action for the installation of an emissions control system at GMT.

Yvonne McCarty
On 10/16/2023, Yvonne McCarty emailed the following comments, which were also expressed verbally at the public hearing. The questions are reproduced and answered bellow.

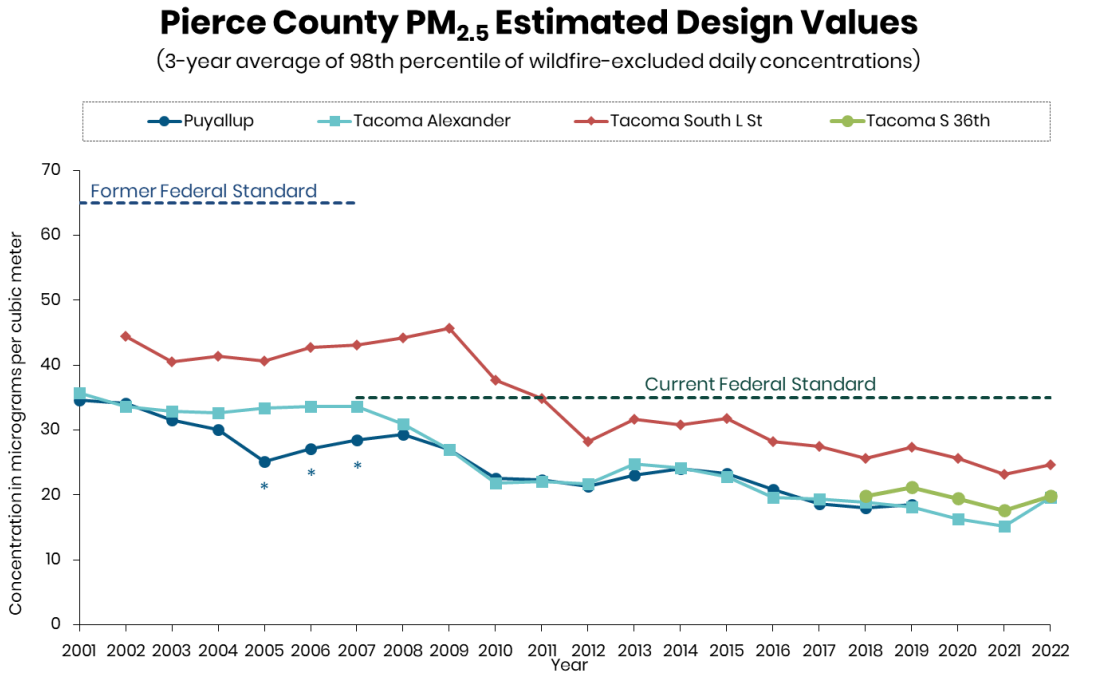
1. *Why is Schnitzer doing this? What is in it for them? What is their business case?*
    The Agency is not tasked with evaluating the motivations of permit applicants. The Agency is tasked with assuring that the proposed project meets the requirements of the laws and regulations the Agency enforces.

2. *It appears that the emissions data in the materials on your website is from their Oakland facility. What are the actual levels of air pollutants at the Tacoma site? Do we have a record of these emissions over time? Are these levels self-reported, or does PSCAA do independent and unscheduled monitoring when the grinder is in operational mode?*
    The Oakland emissions referred to was a source test evaluating the efficiency of the

equipment which is needed to make an estimate of future emissions here. Until there are applicable conditions or emissions limits that apply to the facility, the Agency cannot require source testing. Upon completion of the project, a new source test will be done at the Tacoma facility to ensure compliance and to track local emissions here. These source tests are usually done by a third party paid for by the source.

Tracking emissions over time was not in the scope of this project, nor required by regulation for this permit. However, the Agency does measure local air quality, and relevant data related to concentrations of particulate matter and air toxics are summarized in the figures below:

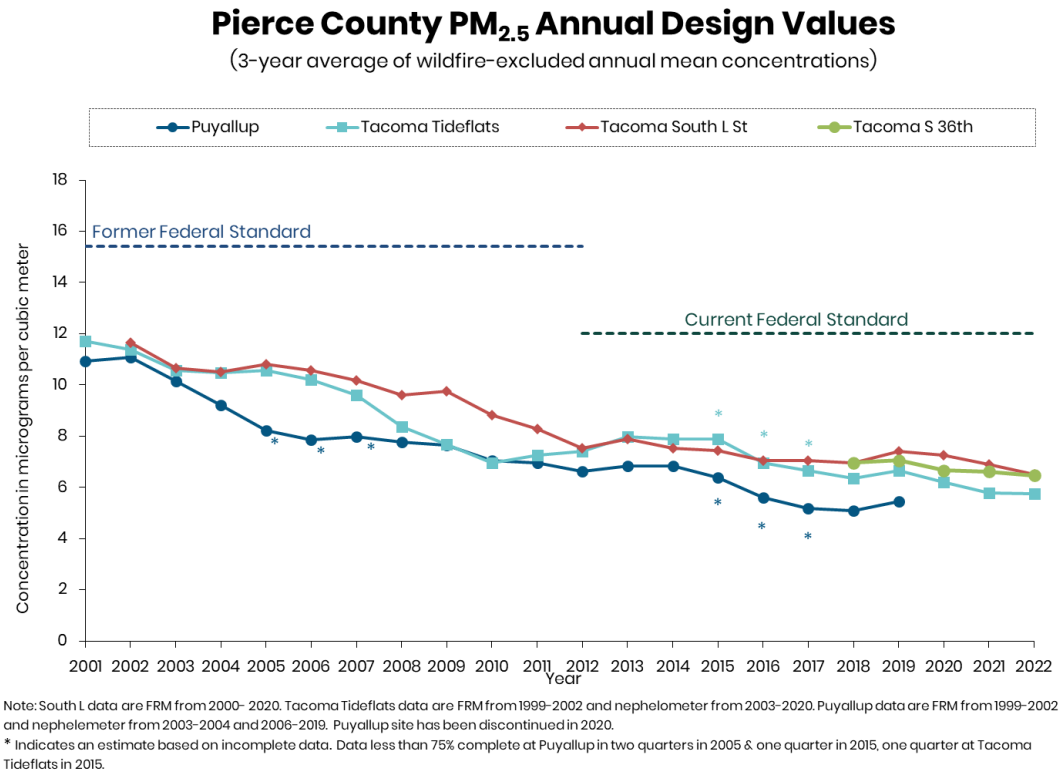
Daily Design Values for Pierce County (wildfire smoke days removed):



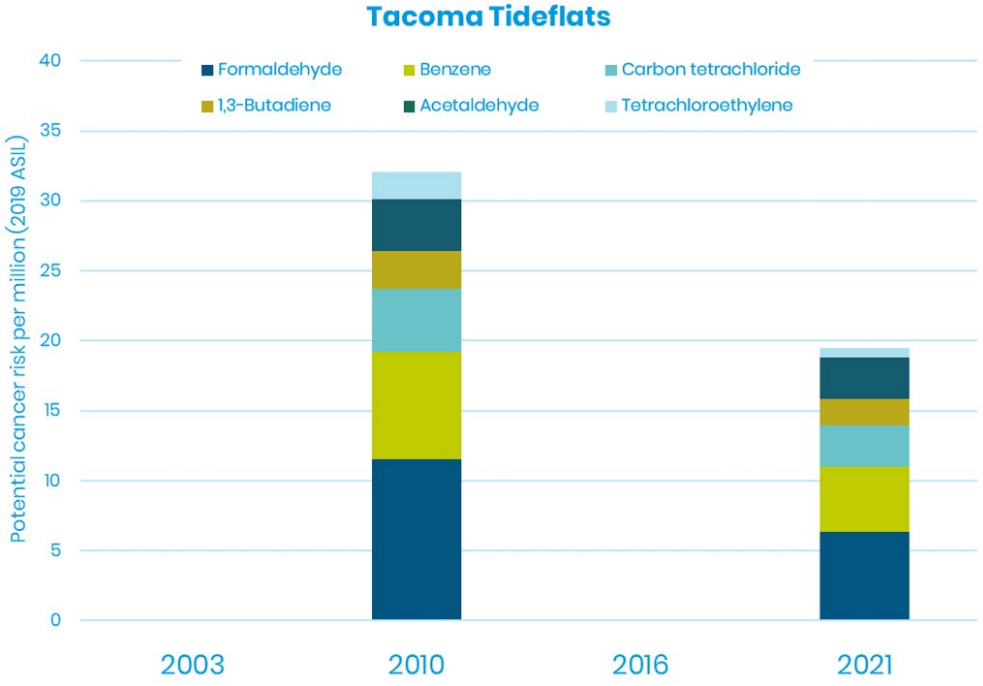
Note: South L data are FRM from 2000- 2020. Alexander Avenue data are FRM from 1999-2002 and nephelometer from 2003-2020. Puyallup data are FRM from 1999-2002 and nephelemeter from 2003-2004 and 2006-2019. Puyallup site has been discontinued in 2020.
* Indicates an estimate based on incomplete data. Data less than 75% in two quarters at Puyallup in 2005.

Annual Design Values for Pierce County (wildfire smoke days removed):

PUGET SOUND
Clean Air Agency



Preliminary results showing potential cancer risk for volatile organic compounds—comparing two air toxics studies that included the Tacoma Tideflats:



3. *Who can tell me the short- and long-term health impacts to workers and nearby communities of being exposed to the levels of VOCs, HAPs, TAPs etc. that we have been*

exposed to since shredding operations started years ago? What symptoms and health concerns should we be looking out for at the levels of exposure we have been subjected to?
The EPA, CDC and local heath department have several resources on the health impacts of these pollutants. In this instance, VOC's are the major pollutant of concern. VOC's mix with ambient nitrogen oxides to produce ambient ozone. The EPA provides information on both pollutants below:
https://www.epa.gov/indoor-air-quality-iaq/volatile-organic-compounds-impact-indoor-air-quality
https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution

Past emissions are beyond the scope of the Agency's review of this project. A tier 1 new source review looks at new emissions that are created from a project. In this case, this is the new emissions from the RTO's. All pollutants evaluated were under the rates or impacts determined to be acceptable by WAC 173-460-150, found here: https://app.leg.wa.gov/WAC/default.aspx?cite=173-460-150

4. *The documentation says that the post project capture efficiency will be 95% and the destruction efficiency will be 98%. Did the Schnitzer look at designs that improved the percentages to 100%? Was total enclosure of their operation considered as an option (not just the shredder)?*
This was considered. To make the building large enough to meet conditions for 100% would require additional sets of fans and control equipment, ballooning the cost of the project. 95% capture efficiency was deemed appropriate, especially on a project that is being done voluntarily.

5. *Can the RTOs be powered by something other than natural gas (for example, electricity)? If not, is there a way to capture the brand newly introduced pollutants and particulate matter from the RTOs? We don't want a new source of pollution introduced… but if it ultimately is not able to be captured, then who is looking at the cumulative impact of adding new sources to an already very polluted air above the Tideflats – especially the air that gets trap against the NE Tacoma hillside?*
While there is a small amount of information about electric thermal oxidizers, Regenerative Thermal Oxidizers (RTO's) are an industry standard and common practice. Industries that use RTO's in our area include Coffee Roasters, Aerospace manufacturing and various surface coating operations. Schnitzer Steel suggested the use of RTO's voluntarily, and there is not enough evidence or supporting information to suggest that a different technology would be more appropriate for this project.
Part of this project is also to reduce PM and acid gas emissions that would come from the RTO's and Shredding. The wet venturi scrubbers after the RTO are to control particulate matter, and acid gas scrubbers will remove HCl emissions that are generated from the RTO process. Low NOx burners are also being implemented, which is best practice for any type of natural gas combustion to lower nitrogen oxide emissions.

6. *In the SEPA Checklist, Section 7, Item A, it mentions "Toxic Air Pollutants have been identified to be present in the process. These pollutants will be uncontrolled from the RTOs and emission levels are at acceptable ambient impact levels" – what is considered acceptable ambient impact levels… are you included a cumulative look at these TAPs in the Tideflats?*

A Tier 1 New Source Review considers the impacts of the new project, and compares them to the impact levels defined by Washington State. This list can be found in WAC 173-460-150. The Agency's review of TAPs was in accordance with the applicable TAP regulation in WAC 173-460. The agency does measure ambient toxics, and recently released the Seattle and Tacoma Air Toxics Trends Technical Report, available at https://www.pscleanair.gov/DocumentCenter/View/5369/2023TacomaSeattleAirToxicsReport?bidId=. However, that is not part of the scope of this project.

7. *Who will be responsible for measuring the actual capture and destruction efficiency rate, as well as the levels of new pollutants and PM after the new system goes live? How often will it be measured? Where will it be reported?*
   Please see condition 16 of section K. It will be reported to PSCAA within 60 days of each test.

8. *In the SEPA Checklist, Section 7, Item B, Number 1, that "this noise will not affect the project due to the fact that the facility is heavily industrialized and experiences a high level of ambient noise" That is not true at night and on the weekends; any noise in the Tideflats carries directly up the hill to the nearby communities.*
   I'll believe that there is no noise impact of these RTOs running when I get to hear it myself - I'd like to hear a recording of this equipment running at night with limited/no ambient sound levels, and then with it off. Can this be done?
   Noise from this facility – especially at night has been a huge problem, so we are extremely sensitive to the introduction of new noise sources.

   Enclosing the shredder should help with noise pollution. The control equipment outside of the enclosure should also have minimal moving parts. There is also a noise ordinance in Tacoma that is potentially applicable to GMT. This code can be found here: Tacoma Municipal Code (cityoftacoma.org)

Communities for a Healthy Bay
Logan Danzek, representing Communities for a Healthy Bay, (CHB), submitted the following comments below.

1. *Can you provide information on a possible timeline, from design to operation?* This permit was first entered 5/4/2020. The Agency does not have a clear timeline on how long the enclosure will take to build. This facility will remain in our title V program until its completion and certification. The authorization for the project expires if construction has not commenced within 18 months of issuance of the Order of Approval.

2. *When did PSCAA become aware that shredder emissions can be captured?*
   Based on a search of Agency emails, the EPA scheduled a meeting on May 9th, 2018, to discuss with PSCAA about possibility of VOC emissions.

3. *Is there accessible emissions data for industry throughout the Tacoma tide flats (particularly those without a Title V permit)?*
   Reporting requirements for sources is described in PSCAA Reg I, Section 5.05(b), shown below. This is available through an information collection request to the agency, and is also shared with the EPA. Our data does not include mobile sources, such as ships, diesel

trucks and other nonstationary sources.

(b) *The owner or operator of a source requiring registration under Section 5.03 of this regulation shall submit a report by June 30th of each year, listing the emissions of those air contaminants emitted during the previous calendar year that equaled or exceeded: (1) 2.50 tons of any single hazardous air pollutant (HAP); (2) 6.25 tons of total hazardous air pollutants (HAP); (3) 25.0 tons of carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM2.5 or PM10), sulfur oxides (SOx), or volatile organic compounds (VOC); or (4) 0.5 tons of lead.*

4. *Why doesn't the public comment period require a community information session for engineering proposals? Can materials be produced to better educate the public in more accessible ways?*
   The procedures established in state and Agency regulations were followed through the issuance of the draft order of approval and the acceptance of public comment. The request for such materials has been noted.

5. *Is there proper consideration of this project's impact on cumulative emissions vs its isolated emissions reduction potential?*
   The Agency analyzed the project in accordance with the applicable state and Agency regulations. The criteria by which projects are reviewed are included in WAC 173-400, WAC 173-401, WAC 173-460, WAC 197-11, and Agency Regulations I and III. A more in-depth review of these impacts would be required if this facility reached the level requiring the Prevention of Significant Deterioration, or a PSD, permit. More information about this can be found here: Prevention of Significant Deterioration Basic Information | US EPA.

Tacoma-Pierce County Health Department
On 10/17/2023, Erin Dilworth representing Tacoma-Pierce County Health Department submitted the following comments. To summarize the comments below, the questions are if the RTO could be run on something other than natural gas. This was addressed above. The second question is if the natural gas would be stored on site or piped in. The facility will rely on the existing natural gas distribution network, without onsite gas storage. Lastly, it was asked how 95% capture efficiency will be determined. This was also addressed in the comments from the EPA. EPA method 204 will be implemented.

Comments from Public Hearing
The complete transcript is in the appendix. Transcripts were generated using Microsoft voice recognition software, so there may be some small, inconsequential inaccuracies. Each comment has been condensed below with an agency response.

"Thank you. My name is Robin Evans Agnew. I live in North Tacoma. I'm a public health nurse, and I'm here to comment on the proposal. Just to begin to try and get some plain language understanding over the changes that are happening to this important pollute. On the on the tide flats. Given the fact that Schnitzer has been a resident on the type flats and active since the 1960s, that's over 60 years of cumulative effects on local, local communities from. The VOC's that now Schnitzer is considering capping and cleaning the air. I salute that. However, there is no accounting for the cumulative effects in the population for the last 60 years of emissions from this plant. I'm concerned that a health impact assessment has not been made both on the future risks with the continued use of continued emissions of

nitrous oxides from the plant and I'd like better information on what those cumulative effects would be from the exposure than nitrous oxides. The 17 tons or so that are going out. And really the last point is that the materials presented by Puget Sound Clean Air Agency, well detailed are quite difficult and unfathomable for environmental justice communities to be able to make their way through and understand the particular impacts of this decision. I am grateful the of this opportunity for the hearing. But I do believe that Peter Sound Clean Air Agency could do a better job in getting the information out in plain language term summaries for people to understand and be able to engage with. Thank you very much."

The emissions from auto shredding was not understood fully until fairly recently. The Agency was not aware that this was a reporting source prior. Once it was made aware, annual emissions have been reported starting in 2019. As was noted above, auto shredding was not discovered to be a substantial source of VOC emissions until rather recently. Until there are applicable VOC emissions limits that apply to the facility, the Agency cannot require VOC source testing. Issuance of this final Order of Approval will put into place applicable VOC limits and testing requirements. Past emissions are beyond the scope of this project.
Pollutants emitted from this project were compared to WAC 173-460-150. All toxics, including nitrogen oxides from this project are projected to be either below the Small Quantity Emission Rate, (SQER) or the Acceptable Source Impact Level (ASIL). These are our guidelines for a tier 1 review for any new project.
Information on a current ambient toxic study was linked, but can be found here: https://www.pscleanair.gov/DocumentCenter/View/5369/2023TacomaSeattleAirToxicsReport?bidId=.
Concerns about clarity of the materials has been noted.

"Hi, yes, I'm Michelle mood. I have my retirement home in South Tacoma and I was curious. I would, I mean, I would like to echo what the first speaker said about the environmental justice. That's a huge concern of mine and I believe that the area that this industry is in. Is creating similar problems that we have in South Tacoma. I look at the residents, they're not really that far away and I would be concerned about. How to think? In a more creative green way about this, I read the SEPA checklist and it said natural gas. I couldn't tell if that's going to be LNG or natural gas and that really makes a difference in terms of the total carbon. Emissions and Tacomas 1 Tacoma Comprehensive Plan has a goal to be carbon neutral. So natural gas, as I'm sure you know, is 84 times more potent than carbon dioxide. But LNG, because it has to be cooled, creates double the greenhouse gas as normal ordinary natural gas. And that was what they said would be used for the combustion was natural gas. I don't know what kind. And of course, it's 15 times more Carbon than solar 50 times more than wind and I just was I my in laws are all in King and Pierce County, but I am new you know, the last three years I am still pretty shocked by Puget Sound cleaning our agency making some of these determinations that don't seem to look more broadly, at the bigger issues, thinking more creatively and that's.
I know that you guys are are working hard in many ways, but it's really hard to shift gears. I'm a political scientist by training and I know that institutions are hard to change, but I would just urge you to, you know, work more diligently at looking at creative ways to preserve a more green and sustainable future. Thank you."

Your concerns have been noted. The facility will be using natural gas from the local natural gas distribution network. It was stated in the application that natural gas would be used. Note that natural gas utilities are subject to state regulations, such as the Cap-and-Invest program, related to the carbon intensity of the fuel they provide.

"Hi there. My name is Yvonne McCarty and I'm the chair of the Northeast Tacoma Neighborhood Council. Good afternoon. Thank you for hosting this public hearing. The first comment that I want to start with is that I haven't found anywhere in the documents posted on your website about why Schnitzer is requesting permit. What is the business case? I see what it will do, which is to reduce air pollution and I don't see anything that says that they're required to spend millions of dollars to install and operate this equipment. It's expensive for them. I know that I and others have been asking to have the shredder enclosed for at least five to six years. It always fell on deaf ears, so I was very

surprised to see this application and determination of non significance show up in my inbox. Recently I am also surprised to hear that they are doing this at the other facilities with shredders across. The country In fact, I believe the state of California is required. To them to do this. Maybe it's because they know that they've been exposing their workers in the surrounding community of cancer, causing volatile organic compounds for decades. Vocs don't just cause cancer, they're also not known to cause eye, nose and throat irritation, headaches, loss of coordination, nausea, nausea, damage to liver, kidney and central nervous system. So my first question is, since you're doing this to reduce air pollution because they want to do the right thing because they know their practices can lead to short and long term health impacts, that's definitely no price as a would be a priceless outcome. Second set of questions, it appears that the emissions data and the materials on your website is from their Oakland facility. What are the actual levels of air pollutants at the Tacoma site? Do we have a record of these emissions over time? Are these levels self reported or does PSC a do independent and unscheduled monitoring when the grinder is in operational mode? Third set of questions who can tell me the short and long term health impacts to workers and nearby communities of being exposed to levels of VOC's, HPT, AP's, et cetera that we have been specifically exposed exposed to since shredding operations started years ago. What should we be looking out for at the levels of exposure we have been subjected to? As you can tell, I'm hoarse. I've been battling chronic lung issues, my for a set of questions, the documents documentation says that the post project capture efficiency will be 95% and the destruction efficiency will be 98%. Did the applicant look at designs that improve the percentages to 100%? Was the total enclosure of their operation considered as an option, not just the shredder?"

Written comments by Yvonne McCarty were submitted the day after for clarity. Please see the written comments for responses to these questions.

"This set of questions can the RTO's be powered by something other than natural gas? For example electricity, something cleaner? If not, is there a way to capture the brand new brand, newly introduced pollutants and particulate matter from the RTO's? We don't want a new source of pollution introduce. But if it ultimately is, then who is looking at the cumulative impact of adding new sources to an already very polluted air above the tide slots, especially the air? Excuse me.

That gets trapped against the northeast Tacoma hillside.
Specifically, in Section 7 item A, it mentions toxic air pollutants have been identified to be present in the process. These pollutants will be uncontrolled from the RTO's and emission levels are acceptable ambient impact levels. What's
Are you? Have you included a cumulative look at these TA's and the tide flats?
Six set of questions who will be responsible for measuring the actual capture and destruction efficiency rate, as well as the levels of new pollutants and PM after the new system go up goes.
Live. How often will it be measured? Where will it be reported?
Seven set of questions. Noise impacts it states in Section 7, item B. Number one that this noise will not affect the project due to the fact that the facility is heavily industrial.
Wise and experience is a high level of ambient noise. Number one that is not true at night and on the weekends. Any noise carries directly up the hill to the nearby communities who are sleeping #2. I believe that there is no impact when I get to hear it my or I will believe that there is no impact when I get to hear it myself.
I'd like to to hear a recording of this equipment running at night with limited no ambient sound levels and then with it off noise from this facility, especially at night, has been a huge problem for our community so we're extremely sensitive to the introduction of new noise sources.

Lastly, I'd like to comment on this process. There is a flaw in this process. The agency posted 8 documents on their website and sent out one e-mail notifying some people of a proposed project. Then expects the public to find it.
Find it and understand what they're reading when most of it is an engineering lingo and you and you expect the public to be able to make substantive comments on what they're reading. It's just not going to happen. That is just doing lip

service to the process. Then I requested an information session with Q&A and a public hearing. I appreciate you holding a public hearing, but without the information session I'm not able to convince any of my community members to to participate in the public hearing. The general the general public is not going to go out to a website and plot through 8 technical documents that they don't understand and show up to give a one way public testimony, especially at 4:00 PM during the work. Additionally, the reason I was given by your staff that your agency couldn't hold an information session was the public comment process was already opened up. And it would be unfair to those who had already looked at the documents and provided their comments. That's not a rational explanation. There would be nothing holding back someone that already commented from attending the info session and providing additional comments afterwards. Again, your process is flawed. Please fix it to serve the Public. Thank you.

I'm sorry I didn't. I just wanted to add 1 item to my list of comments in reading the the view in determining impacts to non human species in the environment. The plan did not check the box that that that Beaver live in the area. There are existing Beaver sign in the area around the Schnitzer Mill, and that's not mentioned in the report, so I'd like you to correct that. Please. Thank you.

"There the the last thing is really in terms of how this works with the overall sub area planning process that is going on with the City of Tacoma and there's not really a clear line of understanding in terms of how this is In Sync with what the city has been doing in terms of thinking about rezoning and working in the area. Thank you."

Thank you for the comment. As this is an existing site, there should be no change or impact to the water or outside of the property boundaries.

The city of Tacoma was contacted by PSCAA to inform them of that project and to give an opportunity to inform us of any concerns. That process is described in section D.

Appendix: Comments

The EPA, Region 10 is submitting the attached comments on the draft order of approval for Schnitzer Steel Industries in Tacoma. In general, we are in favor of installing equipment to capture and control emissions from metal shredding operations. However, the permit requires better integration of the emission limits with the testing, monitoring, recordkeeping, and reporting requirements to be enforceable as a practical matter.

Please contact me if you have any questions or would like to discuss any of these comments. Region 10 is committed to working with the Puget Sound Clean Air Agency to develop the best possible Schnitzer Tacoma permit.

Geoffrey Glass | Air Toxics Coordinator | U.S. EPA Region 10
1200 Sixth Avenue, Suite 155 | Seattle, WA 98101
206.553.1847 | glass.geoffrey@epa.gov | (**he/him**)

Comments – Schnitzer Steel
From U.S. EPA to PSCAA
September 6, 2023

1. Public notification of the proposed permitting action

The draft permit, the application, and the SEPA documents are all available on PSCAA's website and at the Agency's office. The public notification document identifies an engineer who serves as the contact person and informs the public how to submit comments and request a public hearing. These are all good practices. However, the public notification states that "written comments … must be mailed … or emailed … within 30 days of the publication date of this notice." The PDF version of the public notification document states that it will "be published in the Daily Journal of Commerce and Tacoma News Tribune on August 10, 2023." The website version of the notice states that it was posted on August 9, 2023. It is unclear which of these dates constitutes the "publication date" for purposes of the public comment period. It would be clearer to specify the date and time when comments are due (e.g., comments must be received by Monday, September 11, 2023, at 5:00 PM PDT). Because comments may be submitted by mail, we recommend clarifying whether written comments must be received by the end of the comment period or if you consider mailed comments postmarked by the by the end of the comment period to be timely. We note that if the comment period begins on Thursday, August 10, 2023, the end of the 30-day comment period would fall on Saturday, September 9, 2023. Ordinarily, when the last day of a comment period falls on a Saturday, Sunday, or holiday, comments are due on the next business day. Your public notification document correctly states that "all comments received during the comment period will become part of the public record." Also, do you have a policy for handling comments that may contain confidential business information?

2. Facility-wide emission limit

Condition 3 of the permit establishes facility-wide limits on HAP emissions (9 tpy of any individual HAP and 24 tpy of total HAP) and VOC (90 tpy of total VOC). Although the Order of Approval authorizes the construction and operation of emissions capture and control systems, this emission limit appears to apply immediately. It is not clear whether the permittee can comply with the limit before the capture and control systems are operating or how the permittee would verify compliance with the limits.

3. Averaging periods for emission limits

Although, the averaging periods for emission limits may be inferred from test methods, including averaging periods with emission limits is a good permitting practice.

4. Operation and maintenance plan

Permit conditions 5 and 7 rely on an operation and maintenance plan to establish parametric monitoring for the enclosure system and corrective actions to be taken when the venturi scrubber is out of range. It is not clear from the permit when the plan must be completed. In addition, the permit does not require the permittee to submit the plan to PSCAA for review or approval. It is not clear why operation and maintenance plans are not required for all control devices and monitoring equipment. It is also not clear why the devices used to monitor RTO operations and acid gas scrubber recirculation are the only ones that need to be calibrated.

5. Enclosure demonstration

Permit condition 5 requires the permittee to "demonstrate that the pollutant capture system (PCS) has been constructed to minimize the enclosure's draft openings, and the extraction vent system operates at a sufficient flow rate to promote air flow into the enclosure to sufficiently capture pollutants emanating from the shredder and ensure a minimum of 95% capture efficiency." However, the permit does not specify a method (e.g., EPA Method 204) to verify the enclosure.

6. Enclosure monitoring

Permit condition 5 requires the permittee to "monitor to verify that the permanent enclosure is continuously maintained under negative pressure during normal operations." Neither a monitoring frequency nor a monitoring method is specified. If it is not possible to specify the monitoring method and frequency prior to the initial demonstration of the enclosure, we recommend requiring the permittee to submit a plan to the agency for approval by a certain time. (See comment 4.)

7. Venturi scrubber labeling

Permit condition 6 requires the permittee to monitor pressure drop across the wet venturi scrubber and to mark the acceptable range on or nearby the gauge within 90 days after beginning operation. It is unclear why a time period of 90 days is specified. An acceptable range based on the initial performance test required by permit condition 17 will most likely not have been determined within 90 days of beginning operations. If the acceptable range is provided by the manufacturer or consulting engineer, it should be known prior to installation.

8. Venturi scrubber monitoring

Permit condition 7 requires the permittee to determine and record once per day if the pressure drop across the wet venturi scrubber is in the acceptable range. (Actually, the condition erroneously refers to a baghouse.) The permit should require the permittee to monitor and record pressure drop continuously and record the measured pressure drop instead of recording whether the pressure drop is in the acceptable range. Also, the permit does not define the acceptable range or how it will be determined.

9. Venturi scrubber emission limit

Permit condition 8 states that "exhaust gas shall not exceed 0.005 gr/dscf per U.S. EPA Method 5 as modified by Puget Sound Clean Air Agency Board Resolution 540 dated August 11, 1983." Although it can often be inferred from the test method, identifying the pollutant along with the emission limit (e.g., PM or PM_{10}) is a good permitting practice.

10. Determination of VOC

Permit condition 11 requires each regenerative thermal oxidizer (RTO) to achieve a control efficiency of 98.0 percent or, alternatively, an outlet concentration of 20 ppmdv or less, as determined by U.S. EPA Method 25A. Although not explicitly stated, presumably these limits apply to VOC. Method 25A determines concentrations of VOC measured as propane (or other appropriate calibration gas) or as carbon. The permit does not specify the appropriate calibration gas or why it was chosen. Note that measuring VOC "as carbon" does not account for the full mass of VOC and is therefore not acceptable for limiting emissions below major source thresholds.

11. NOx emissions from RTO

Permit condition 12 states that the "two RTOs combined shall not emit more [than] 5.48 lbs of NOx as NO_2 per hour as measured by EPA method 7E. The total emissions should be determined based on 50 lb per million standard feet natural gas consumed and 0.016 lbs per ton feed at the shredder." It is not clear from this language how concentrations of NOx measured by Method 7E will be converted to pounds per hour of NOx emissions. It is not clear what is represented by the "50 pounds" per million standard feet natural gas consumed or why the amount of material fed to the shredder is needed to convert a measured concentration to an hourly emission rate. Is the purpose of this condition to use test data to establish a NOx emission factor? If so, it is not clear how the permittee should do this.

12. Operating temperature of the RTO

Permit condition 13 sets a minimum combustion zone temperature in the RTO of 1600 °F. After conducting a source test, the permittee "shall maintain the RTO combustion zone temperature at no less than the 'baseline' temperature, taken on an hourly average. The 'baseline' temperature shall be defined as the lower of 1600 degrees F, or the average operating temperature that was observed in the most recent VOC performance test." It is unclear whether baseline temperatures will be established separately for each RTO. Permit condition 13 does not specify whether it is necessary that the RTO achieve the emission limits in permit conditions 11 and 12 before redefining the baseline using data from a performance test. In addition, the permit does not address the possibility that an RTO is unable to comply with the emission limits in permit conditions 11 and 12 when operated at a temperature of 1600 °F, nor does the permit address the possibility that a higher RTO temperature may be required to control organic HAP than is required to control VOC.

13. RTO temperature alarm

Permit condition 14 requires that "audible and visual alarms shall be used to indicate the need to initiate corrective actions and/or discontinue operation of the shredder infeed conveyor." The condition would be clearer if it specified that the alarms will indicate a combustion temperature below the "baseline" temperature specified in Condition 13, which would trigger corrective action and/or the need to discontinue operations. If it is necessary to initiate corrective actions and/or discontinue operation, the permit should require the permittee to keep records of each such occurrence including what corrective actions were taken and how conditions were improved so that operation could resume.

14. Acid gas scrubber monitoring

Permit condition 15 requires the permittee to "install, operate, calibrate and maintain a monitoring device to continuously monitor to ensure that each acid gas scrubber solution is recirculating at all times the unit(s) is/are in operation. The scrubbing solution flow monitors shall be connected to a visible and audible alarm to alert operator if scrubber solution flow is out of range." The permit does not specify an acceptable solution flow range or specify how such a range will be determined and approved for the acid gas scrubber. In addition, the permit does not require the permittee to monitor and record the pH of the scrubbing solution, which will impact the control efficiency of acid gases, or pressure drop across the scrubber, which can indicate impeded flow or channeling through packing material. Condition 15 should also require the permittee to initiate corrective action and/or discontinue operations when the alarm is triggered, similar to the language in condition 14. Finally, if such an alarm is triggered, the permit should require records of the occurrence, corrective actions, and how conditions were improved.

15. Performance testing

Permit condition 17 establishes performance testing requirements for the shredder system.

- Paragraph (b) requires the permittee to conduct testing while operating the system as close as possible to normal operations. The permitting authority must allow itself the flexibility to require testing under other possible operating conditions that may result in higher emissions (e.g., much higher or much lower throughput rates than "normal operations"). Furthermore, because shredder VOC emissions are dependent on the material shredded, performance testing must be conducted when shredding different materials as needed to assure compliance with emission limits under the most challenging circumstances and to develop representative, site-specific emission factors.
- In addition to testing PM, VOC, NOx, HCl, and HF, the permit must require a test (such as Method 18) to identify the organic HAP emitted at the highest rates and develop representative, site-specific emission factors.
- Paragraph (c)(ii) does not state explicitly how to measure inlet and outlet VOC concentrations to assure compliance with the VOC destruction efficiency limit in permit condition 11.
- Paragraph (f)(v) requires a method 22 visible emissions test. However, it is not clear what equipment is subject to a fugitive visible emissions limit.
- Paragraph (i) requires the permittee to monitor the pH of the acid gas scrubber liquid, but not the flow rate or the pressure drop, which are also important in evaluating function of the acid gas scrubber.
- Representative, site-specific emission factors based on source testing are required to demonstrate compliance with the facility-wide emission limits and requirements to calculate emissions, but the permit does not require the permittee to develop emission factors based on source testing.

16. Maintenance of records

Permit condition 18 requires records to be maintained onsite for two years. Is the permittee required to maintain records in some other location after two years or can they be destroyed?

17. Annual VOC emissions calculations

Permit condition 19 requires the permittee to calculate rolling 12-month facility wide VOC emissions totals. The condition does not specify any particular method for calculating VOC emissions except that the permittee shall use the emission factor from the last source test or results from the source tests performed at the Schnitzer facility in Oakland, California as documented in Foulweather Consulting's October 2019 memorandum of recommended emission factors. This is problematic as:

- Nowhere in this permit is the permittee required to establish VOC emission factors based on source test data;
- It is unclear under what circumstances test data from a different source would be preferable to test data from the same source; and
- The memo from Foulweather Consulting was not included as part of the public record.

18. Annual HAP and VOC emissions reporting

Permit condition 20 requires the permittee to notify PSCAA, "in writing, within 30 days after the end of each 12-month period if, during that period, emissions of any single HAP exceeded 9 tons, emissions of all HAPs combined exceeded 24 tons, or emissions of VOCs exceeded 90 tons." It is unclear how the permittee would discover that the single or combined HAP limit had been exceeded as the permit does not require the permittee to develop HAP emission factors or calculate HAP emissions.

19. Emissions calculation

Permit condition 21 requires the permittee to "calculate the emissions of PM, NOx, CO and VOC from the shredder using the arithmetic average of emission factors from the three most recent stack tests or using emission factors from AP-42 or other references if stack test information is not available." There is no time period associated with this calculation (e.g., rolling 12-month), nor are any calculation methodologies specified.

20. Potential HAP emissions

Page 18 of the NOC worksheet identifies the facility's pre-project potential HAP emissions as 20.03 tpy. Page 7 of the NOC worksheet includes a copy of the facility's 2022 operating permit fee invoice that identifies total HAP emissions as 38 tpy.

21. Potential VOC emissions

Table 1 to Appendix A of Trinity Consulting's June 28, 2023, letter "Supplemental Information for NOC 11986 - General Metals of Tacoma (GMT)" states that the pre-project VOC potential emissions are 190.58 lbs/hr and 231.87 tpy. An hourly emission rate of 190.58 lbs/hr multiplied by 8760 hours per year and divided by 2000 lbs/ton results in an annual PTE of 834.7 tpy. According to WAC 173-400-0030(76), adopted by reference into PSCAA Article 6, Section 6.01:

> *"Potential to emit" means the maximum capacity of a source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is enforceable. Secondary emissions do not count in determining the potential to emit of a source.*

There is no explanation in the application, NOC worksheet or permit explaining how any enforceable physical or operational limitation prevents the pre-project system from emitting above the major source threshold.

Note that if there is no such enforceable limitation and if the hourly emission rates for HAP in Table 2 to Appendix A of the letter are correct, the pre-project PTE for the HAP xylene is 26.7 tpy, more than 2.5 times the major source threshold for a single HAP. This exceeds both the 10 tpy major source threshold for a single HAP and the 25 tpy threshold for combined HAP.

Dear Carl Simp,

I am writing to provide public comment on Proposed Order of Approval No. 11986 for Schnitzer Steel Industries. I represent Tacoma City Council District 2, which includes the Port of Tacoma and NE Tacoma. I am formally requesting the Puget Sound Clean Air Agency hold a public hearing on this permit since there is significant public interest in the outcome of the permit. I have heard from numerous constituents who have requested the opportunity for a public hearing to learn more about this project, ask questions, and share their feedback on the permit request. It would be in the public's best interest for you to offer this additional public outreach opportunity for this permit.

Councilmember Sarah Rumbaugh

City of Tacoma | District 2
747 Market Street, Room 1020
Tacoma, WA 98402 | Ofc 253.591.5106 | Fax 253.591.5123
srumbaugh@cityoftacoma.org | www.cityoftacoma.org
(she/her/hers)
Subscribe to my Newsletter here!!

Carl,

I hope you're doing well. During preparations for the upcoming public hearing Hui Cheng noticed that the first paragraph of the draft permit still refers to a "…2,000 tons per day of material fed to the shredder." We had requested that this be increased to 3,000 tons per day, consistent with the worksheet and all the emissions calculations. Can you please make a note to make this correction in the final permit?

I also want you to know that I won't be able to attend the virtual public hearing on October 16th. I'll be on a long flight at the time. Randy Spencer of my team will be attending the hearing on behalf of Schnitzer.

Please let me know if you have any questions or would like to discuss.

Thank you,

Scott B. Sloan, R.G., L.Hg.
Vice President – Corporate Environmental
Schnitzer Steel Industries, Inc. – dba Radius Recycling
Mobile: (253) 279-4752

radius recycling

Hello Mr. Slimp,

Attached please find our written comments in reference to Radius Recycling's proposed order and determination of nonsignificance.

Please feel free to contact me should I be able to provide any further information or support on behalf of our organization.

Best,
Andrea

Andrea H. Reay
President & CEO, Tacoma-Pierce County Chamber
Mobile: (206) 683-4585
Making the South Sound the Most Equitable, Inclusive, and Thriving Place to do Business in Washington State
www.tacomachamber.org

PUGET SOUND
Clean Air Agency

TACOMA-PIERCE COUNTY CHAMBER

Carl Slimp (CarlS@pscleanair.gov)
Engineer
Puget Sound Clean Air Agency
1904 Third Ave
Suite 105
Seattle, WA 98101

Re: Comment on Proposed Order for Radius Recycling

Dear Mr. Slimp:

The Chamber is a non-profit service organization dedicated to equitable economic development for the South Sound. Supporting investments by our members to create more environmentally sustainable business practices is a keystone to our collective work to make the South Sound the most equitable, inclusive and thriving place to do business in Washington State and why it is my great pleasure to write in support of the proposed Order and Determination of Non-significance for General Metals of Tacoma's forthcoming shredder emission control system installation.

As a long-established operation in the Port of Tacoma, General Metals is home to over 130 jobs, of which 94 are represented by a union. The facility contributes over $1 million to the local government each year via property, sales and use, and business and occupation taxes. General Metals' parent company, Schnitzer Steel Industries, Inc, recently rebranded as Radius Recycling, is a world leader in sustainable and environmentally responsible recycling. The Company was listed as one of TIME's 100 Most Influential Companies of 2023, recognized as the Most Sustainable Company in the World by Corporate Knights in 2023, and has been honored by Ethisphere as one of the World's Most Ethical Companies® for nine consecutive years.

The proposed Order would enable General Metals to construct the most advanced metal shredder emission control system seen anywhere in the country. The project involves enclosing the shredder and routing all emissions through advanced technologies that virtually eliminate air emissions. The enclosure will also serve to reduce sound from shredder operations, demonstrating General Metals' interest in being a good neighbor. This significant commitment to the betterment of the Tacoma airshed is precisely the sort of investment that we need to encourage and facilitate.

At a time that major employers are shuttering their operations in Tacoma, it is heartening to see that General Metals is making a significant investment in its operations and in the community. We encourage the Puget Sound Clean Air Agency to issue this Order and Determination of Non-significance with all due haste so that we can realize the benefits of the proposed project as soon as possible.

Please do not hesitate to call me if you have any questions about these comments or I can clarify or provide greater context.

Sincerely,

Andrea H. Reay
Pres/CEO
Tacoma-Pierce County Chamber
AndreaR@TacomaChamber.org

Mr. Slimp, we believe this is a very important improvement to our environment, economy and recycling of waste materials. Please support this proposal as a positive contribution to our communities.

Hello,
I would have liked to cc some more of the PSCAA board members, but PSCAA is not making any contacts available.
We only *just now* learned about a public hearing at PSCCA tonight. I learned about it from a community member, not from the 'clean air' agency or any other government entity.
https://www.pscleanair.gov/civicalerts.aspx?aid=142

Schnitzer is a MAJOR air polluter here in Tacoma. Yet PSCAA is not evaluating any actual local data, instead they use Oakland date - with redactions?!
The agency already pre-approved NEW GAS emissions and is holding at *4 PM meeting on a Monday without informing the public*.
There is no question that local folks in Tacoma don't count, working people don't matter and that any public input means jack as it is already pre-approved. There is no info session, no q&a and the comment deadline is tomorrow.
Instead of supporting and encouraging public engagement, these political agencies have swifly learned how to operate with more secrecy, less transparency as as little input as possible from those affected most.
New leadership has changed nothing, if not for the worse.
Hundreds of tons of toxic Schnitzer VOCs have rained over our community over the years. They are a very large polluter and operate very closely to residents, schools, day-cares and tribal areas - and of course what they emit also pollutes the bay, the fish and the orca.
Yet PSCCA is doing nothing to protect, evaluate actual harm nor inform community, not even those who wish to be engaged.
Instead, PSCAA will swiftly remove Schnitzer from the major source air operating permit program.
I guess we all just give up, let the gas industry and other polluters roll over public agencies and forget about climate and enviro harm.

PUGET SOUND
Clean Air Agency

Claudia Riedener
253-274-0655

PUGET SOUND
Clean Air Agency

TACOMA YOUTH MARINE CENTER
A Place for Youth to Touch the Sound

October 16, 2023

BY EMAIL

Carl Slimp (CarlS@pscleanair.gov)
Engineer
Puget Sound Clean Air Agency
1904 Third Ave
Suite 105
Seattle, WA 98101

Re: Comment on Proposed Order for Radius Recycling

Dear Mr. Slimp:

It is my great pleasure to write in support of the proposed Order and Determination of Non-significance for General Metals of Tacoma's forthcoming shredder emission control system installation.

As a long-established operation in the Port of Tacoma, General Metals is home to over 130 jobs, of which 94 are represented by a union. The facility contributes over $1 million to the local government each year via property, sales and use, and business and occupation taxes. General Metals' parent company, Schnitzer Steel Industries, Inc, recently rebranded as Radius Recycling, is a world leader in sustainable and environmentally responsible recycling. The Company was listed as one of TIME's 100 Most Influential Companies of 2023, recognized as the Most Sustainable Company in the World by Corporate Knights in 2023, and has been honored by Ethisphere as one of the World's Most Ethical Companies® for nine consecutive years.

The proposed Order would enable General Metals to construct the most advanced metal shredder emission control system seen anywhere in the country. The project involves enclosing the shredder and routing all emissions through advanced technologies that virtually eliminate air emissions. The enclosure will also serve to reduce sound from shredder operations, demonstrating General Metals' interest in being a good neighbor. This significant commitment to the betterment of the Tacoma airshed is precisely the sort of investment that we need to encourage and facilitate.

At a time that major employers are shuttering their operations in Tacoma, it is heartening to see that General Metals is making a significant investment in its operations and in the community. We encourage the Puget Sound Clean Air Agency to issue this Order and Determination of Non-significance with all due haste so that we can realize the benefits of the proposed project as soon as possible.

Please do not hesitate to call me if you have any questions about these comments.

Sincerely

Tom Rogers
President

Our mission is to provide hands-on training to introduce and prepare young people for careers in the maritime industry.

P (253) 572-2666
F (253) 597-7353
820 East D Street, Tacoma WA 98421
youthmarinefoundation.org

Hello

Carl,

Please see my comments and questions in writing attached.

Thanks,
Yvonne McCarty
Chair, NE Tacoma Neighborhood Council

October 16, 2023

Carl Slimp
Puget Sound Clean Air Agency
1904 Third Avenue, Suite 105
Seattle, Washington 98101

Re: Comments for NOC 11986

Dear Mr. Slimp,

I haven't found anywhere in the documents posted on your website to state why Schnitzer is requesting this permit – simply put, what is the business case? I see what it will do, which is to reduce air pollution. I don't see what the expected benefits are, assuming that there will be environmental and health benefits, but what are they? I don't see anything that says that they are required to spend millions of dollars to install and operate this equipment, so what is in this for them? Is it to avoid potential litigation?

I know that I and others have been asking Schnitzer to enclose their shredder for at least 5 or 6 years. It always fell on deaf ears when we pleaded with the Puget Sound Clean Air Agency or City of Tacoma to help us persuade them. So, I was very surprised to see this application and determination of non-significance show up in my inbox recently. I also am surprised to hear that they are doing this at other facilities with shredders across the country. In fact, I believe the State of California required them to do this. Maybe it's because they know that they've been exposing their workers and the surrounding community to cancer causing Volitale Organic Compounds for decades. VOCs don't just cause cancer, they are also known to cause eye, nose, and throat irritation; headaches, loss of coordination and nausea; damage to liver, kidney, and central nervous system.

Please consider the following questions:

- Why is Schnitzer doing this? What is in it for them? What is their business case?
- It appears that the emissions data in the materials on your website is from their Oakland facility. What are the actual levels of air pollutants at the Tacoma site? Do we have a record of these emissions over time? Are these levels self-reported, or does PSCAA do independent and unscheduled monitoring when the grinder is in operational mode?
- Who can tell me the short- and long-term health impacts to workers and nearby communities of being exposed to the levels of VOCs, HAPs, TAPs etc. that we have been exposed to since shredding operations started years ago? What symptoms and health concerns should we be looking out for at the levels of exposure we have been subjected to?
- The documentation says that the post project capture efficiency will be 95% and the destruction efficiency will be 98%. Did the Schnitzer look at designs that improved the percentages to 100%? Was total enclosure of their operation considered as an option (not just the shredder)?
- Can the RTOs be powered by something other than natural gas (for example, electricity)? If not, is there a way to capture the brand newly introduced pollutants and particulate matter from the RTOs? We don't want a new source of pollution introduced… but if it ultimately is not able to be captured, then who is looking at the cumulative impact of adding new sources to an already very polluted air above the Tideflats – especially the air that gets trap against the NE Tacoma hillside?

- In the SEPA Checklist, Section 7, Item A, it mentions "Toxic Air Pollutants have been identified to be present in the process. These pollutants will be uncontrolled from the RTOs and emission levels are at acceptable ambient impact levels" – what is considered acceptable ambient impact levels… are you included a cumulative look at these TAPs in the Tideflats?
- Who will be responsible for measuring the actual capture and destruction efficiency rate, as well as the levels of new pollutants and PM after the new system goes live? How often will it be measured? Where will it be reported?
- In the SEPA Checklist, Section 7, Item B, Number 1, that "this noise will not affect the project due to the fact that the facility is heavily industrialized and experiences a high level of ambient noise"
    - That is not true at night and on the weekends; any noise in the Tideflats carries directly up the hill to the nearby communities.
    - I'll believe that there is no noise impact of these RTOs running when I get to hear it myself - I'd like to hear a recording of this equipment running at night with limited/no ambient sound levels, and then with it off. Can this be done?
    - Noise from this facility – especially at night has been a huge problem, so we are extremely sensitive to the introduction of new noise sources.

Lastly – I'd like to comment on the Puget Sound Clean Air Agency public process:

- This process is very flawed. Your agency posts 8 documents on your website and sends out one email notifying some people of a proposed project. Then you expect the public to open 8 documents (some very technical) and be able to understand what they are reading, and then expect the public to be able to make quality comments on what they are reading. That simply isn't going to happen. It is simply just doing lip service to the process.
- When I requested an information session with Q&A and a public hearing, I appreciated you holding a public hearing, but without the information session, I was not able to convince any of my community members to participate in the public hearing. Again, the public is not going to go out to a website and plow through 8 documents that they don't understand and show up to give one-way public testimony. Especially at 4pm on a workday.
- Additionally, the reason I was given by someone on your staff that your agency couldn't hold an information session was that the public comment process had already opened, and it would be unfair to those who had already looked at the documents and provided their comments. That is not a rational explanation. There would be nothing holding back someone that already commented from attending the info session and providing additional comments.
- Your process is flawed. Please fix it to serve the public.

Sincerely,

Yvonne McCarty

Chair, NE Tacoma Neighborhood Council

Dear Carl Slimp,

Thank you and the Puget Sound Clean Air Agency (PSCAA) for the opportunity to comment on the Proposed Order of Approval No. 11986 concerning the installation of emission control technology at the Radius Recycling facility on Marine View Dr, Tacoma WA.

My name is Logan Danzek, and I am the Policy Manager with Communities for a Healthy Bay (CHB). I have attached CHB's comment letter on the proposed project.

Please contact us if you have any questions regarding our comments.

All the best,
Logan Danzek | Policy Manager
Communities for a Healthy Bay | Tacoma, WA
253-383-2429 x3
he/him

Connect with us: Facebook | Twitter | Instagram
LinkedIn | Subscribe to our enews

PUGET SOUND
Clean Air Agency

Communities for a Healthy Bay

17 October, 2023

535 Dock Street
Suite 213
Tacoma, WA 98402
Phone (253) 383-2429
chb@healthybay.org
www.healthybay.org

A tax-exempt
501(c)(3) Washington
nonprofit corporation

Carl Slimp, Engineer
Puget Sound Clean Air Agency (PSCAA)
1904 Third Avenue, Suite 105, Seattle, WA 98101
Via Email: CarlS@pscleanair.gov

Re: Radius Recycling Shredder Emission Control System

Dear Carl Slimp,

Thank you for the opportunity to comment on the Proposed Order of Approval No. 11986 (hereafter referred to as the "Permit") concerning the installation of emission control technology at the Radius Recycling facility on Marine View Dr, Tacoma WA.

For over 30 years, Communities for a Healthy Bay (CHB) has been working to engage people in the cleanup, restoration, and protection of Commencement Bay and its surrounding natural habitat. We are a 501(c)3 nonprofit working with residents, businesses, and government to offer practical, solutions-based environmental leadership in the Puget Sound area. Our mission is to mobilize popular support for policies that make our communities healthier and more vibrant.

First, we want to emphasize our support for this project. We are happy to see Radius enclosing their shredder and installing control technologies that, based on the technical documents provided, can cut their emission of volatile organic compounds (VOCs) by over 90% while improving air and water quality around the site. With the construction of a new building to enclose and manage shredding emissions, **CHB does request that Radius utilize sustainable materials and building practices that are responsive to the environmental needs of its location on the Hylebos Waterway**.

Additionally, this proposal has left us with serious concerns about PSCAA's regulatory oversight and procedures regarding emissive industries in Tacoma's tide flats. **We seek clarification on PSCAA's permitting, monitoring, and regulatory processes for addressing pollution**.

We ask the following questions:

1. Can you provide information on a possible timeline, from design to operation?
2. When did PSCAA become aware that shredder emissions can be captured?
3. Is there accessible emissions data for industry throughout the Tacoma tide flats (particularly those without a Title V permit)?
4. Why doesn't the public comment period require a community information session for engineering proposals? Can materials be produced to better educate the public in more accessible ways?
5. Is there proper consideration of this project's impact on cumulative emissions vs its isolated emissions reduction potential?

While we believe that Radius pursuing this project will be a net benefit to the environment, we are concerned about how companies ultimately interact with the air permitting process. As we understand it, PSCAA relies on individual companies or landowners to pursue Title V permits based on their own self-reported emissions data. Therefore, if an entity lacks the proper resources to measure their emissions accurately or simply isn't aware that they should seek a Title V permit, it seems that the status quo approach is insufficient for ensuring that all polluters are properly regulated.

According to the updated emissions estimates for this project, Radius' pre-project VOC emissions total 231.87 tpy.[1] This emissions profile is more than twice the major source VOC emissions threshold for Title V permits established by the EPA (100 tpy).[2] We also understand that Radius is pursuing this project voluntarily and will not be required to obtain a Title V permit if their monitoring data demonstrates the proposed emissions reductions. Apart from permitting fees and violation fines, it doesn't appear that PSCAA requires the installation of emission control technology based on facility type and instead operates on a case-by-case basis. If the best available technology demonstrates a significant emissions reduction effect, **CHB urges that PSCAA require the installation of such technologies at relevant facilities**.

For clarity, we are not concerned with Radius' actions during this process, as they seem to be following PSCAA's established policies and procedures. Our primary concern is that this project illustrates worrying gaps or loopholes within PSCAA's regulatory framework. This facility is not the sole polluter operating in the tide flats, rather there are likely over one hundred minor source emitters affecting Tacoma's air quality.

An emissions reporting honor system is insufficient in a location with a serious concentration of heavy industry, where hundreds if not thousands of people live 24 hours a day in the Northwest Detention Center (NWDC) or unhoused encampments, surrounded by neighborhoods with the worst health disparities in the state, and no off-site monitoring of VOC, NOx, or SOx concentration.

At what point will PSCAA decide that an honor system is an ineffective approach to regulating air emissions? A regulatory framework that fails to properly weigh the cumulative impact of industry in the tide flats, one of the defining burdens on Tacoma's health landscape, does not appropriately protect human health or the environment. **We ask that PSCAA seriously reconsider their approach to air quality permitting, including their public engagement strategy that leaves residents without robust engineering knowledge unable to meaningfully contribute to these conversations.**

CHB is glad to see a company like Radius step up to address their own environmental impact. However, we remain concerned that other businesses, particularly smaller non-major source polluters, lack the resources or incentives to engage with emissions regulations appropriately. We will follow up on any responses we receive to these comments. Please contact us if you have any questions regarding our comments.

Sincerely,

Melissa Malott

Executive Director
mmalott@healthybay.org | 253-383-2429 x6

Logan Danzek

Policy Manager
ldanzek@healthybay.org | 253-383-2429 x3

[1] "Notice of Construction (NOC) Worksheet." *pscleanair.gov*, Puget Sound Clean Air Agency, Schnitzer Steel Industries, 2023, pp. 14-15, https://pscleanair.gov/DocumentCenter/View/5204/11986-worksheet

[2] "Who Has to Obtain a Title V Permit?" *epa.gov*, United States Environmental Protection Agency, 2023, Table 1: Lower Major Source Thresholds for Non-attainment Areas, https://www.epa.gov/title-v-operating-permits/who-has-obtain-title-v-permit

Carl,

First of all I want to thank you for all your hard work along the way, and for the extra time spent preparing for the hearing and responding to comments. Of all the air permitting agency staff I've worked with you are among the most responsive and it's very much appreciated.

Although I was unable to attend last night's hearing due to business travel I've been advised by those that attended for us that the public expressed a few fairly standard concerns and that nothing was raised that would typically result in substantial delays issuing our permit. We're also interested in the content of any written comments you may have been received. We'd really appreciate it if you can direct us to a website where they reside or send them to us if necessary. We'd also like to know your general thoughts on when the permit might be issued in final form. We have the process of purchasing equipment and lining up our contractors' schedules ahead of us and would like to get started.

One topic of discussion between our team following the meeting was the legal entity that should be permitted. There's a lot of confusion surrounding our recent name change, and the fact is that neither Schnitzer or Radius is the right legal entity. Our Tacoma facility is owned and operated by General Metals of Tacoma, Inc. (GMT). GMT is a wholly owned subsidiary, but it stands alone as it's own business along with our feeder yard in Woodinville. In preparing the final permit we'd like to request that the permit be issued in the name of General Metals of Tacoma, Inc.

Thanks again for your help with everything. Please let me know your thoughts on the topics discussed above.

Take care,

Scott B. Sloan, R.G., L.Hg.
Vice President – Corporate Environmental
Schnitzer Steel Industries, Inc. – dba Radius Recycling
Mobile: (253) 279-4752

radius recycling

Hi Carl,

Please find attached our comments on Proposed Order of Approval No. 11986. Thank you for the opportunity to comment.

Erin

Erin Dilworth (she/her)
Healthy Community Planner
Social, Economic and Environmental Conditions for Health
Environmental Health
(253) 722-4287 c • edilworth@tpchd.org

Tacoma-Pierce County Health Department
Healthy People in Healthy Communities

Facebook | Instagram | Twitter | YouTube

PUGET SOUND
Clean Air Agency

Tacoma-Pierce County
Health Department
Healthy People in Healthy Communities

Puget Sound Clean Air Agency
Attn: Carl Slimp, Engineer
1904 Third Avenue, Suite 105
Seattle, Washington 98101
Submitted electronically to: CarlS@pscleanair.gov

RE: Proposed Order of Approval No. 11986 for Radius Recycling, previously known as Schnitzer Steel Industries

Dear Mr. Slimp,

Thank you for the opportunity to review and provide comments on the Proposed Order of Approval No. 11986 for Radius Recycling, previously known as Schnitzer Steel Industries.

The Tacoma-Pierce County Health Department's mission is to protect and improve the health of all people and places in Pierce County. Through our mission, the Health Department tackles known and emerging health risks though policy, programs, and treatment to protect public health. As part of our Healthy Community Planning Program, we work with policy makers, planners, and community members to build sustainable and healthy communities.

The Health Department advances healthy communities by:

- Encouraging land use and transportation planners to think about people, prosperity, and the planet.
- Getting affected communities to help shape the planning process.
- Addressing health inequities.
- Reducing health risks.

While some aspects of a healthy community are regulated in local, state, or national legal frameworks, many determinants of health that come from Healthy Community Planning are not. We acknowledge these limitations as we offer the comments below related to the project in review. These comments are intended to advance health equity, and should not be construed as legal requirements.

We are encouraged that PSCAA and Radius Recycling are taking significant steps to reduce the volume of VOCs, HAPs, and PM emissions through the construction of Shredder Emission Control System (reductions of 215 tpy, 12 tpy, and 86 tpy, respectively). As part of this system, the Regenerative Thermal Oxidizers run on natural gas, resulting in an additional 12 tpy of NO_x emissions and 14 tpy of CO emissions. We are curious if this project could do even more to protect and enhance the air quality of our region by running the RTOs on electricity, rather than natural gas. What is the feasibility of this operational change?

It is unclear from our review where the natural gas will be stored and how it will reach the facility. Understanding these details are important in protecting public health and safety, so we request this information be clarified in the permit conditions or in responses to our comments. Lastly, the draft permit conditions are not clear on how Radius Recycling will demonstrate and report the 95% capture efficiency that the emission control system should provide. We request that information be clarified in the permit conditions or in the response to our comments.

Thank you again for the opportunity to review and comment on Proposed Order of Approval No. 11986. Please direct any communications regarding these comments to Erin Dilworth at edilworth@tpchd.org or by phone at 253-722-4287.

Sincerely,

Erin Dilworth

Erin Dilworth
Healthy Community Planner
Environmental Health Division

Proposed Order of Approval No. 11986

To whom it may concern:

First, I'd like to acknowledge that all agency permitted pollution to air, land and water is happening not only on the Ancestral Land of the Puyallup Tribe, but indeed on their very Reservation, a small bit of land set aside for the Tribe after everything else was - and still is - stolen.
It is Constitutionally enshrined that government and government agencies like yours must follow Treaty obligations to get consent from the Puyallup Tribe. Was this consent given before the agency pre-approved this permit?

How come the public was not notified?
Why was the public hearing held at a Monday at 4 when regular people cannot attend?
Why no meeting, no q&a and no emails?
What exactly are PSCAA's responsibilities to inform the general public, neighbors and interested parties as well as the Tribe?

Why is it routine that the agency pre-approves permits before public input? When the public is presented with such fait accompli, is it not a result that we all feel participation is 100% useless and can not impact anything?
PSCAA calls the project a *proposed order of approval*, yet it's already pre-approved. Clarity of language is important.

The documentation supporting PSCAA's approval of this is using data from Oakland, CA. The data used is not made available to the public as much of it has been redacted.
How is the public to make informed comment on the permit application when the public agency hides basic facts from the public?
How is it possible for a local air agency to shop around the county for data that fits predetermination, data that supports approval?
Schnitzer has been polluting Tacoma air for over 50 years. Surely PSCAA must have detailed information on all that pollution?
Some 215 tons of VOCs have been emitted into our air and lungs *every year*!

Will the clean air agency ever do a real and honest and local health impact assessment on what it approves? Cumulative??
With state, city and port climate polices in place, how can PSCAA approve new fracked gas infrastructure?
Was this work done with the ***Climate Emergency Declaration*** by city and the Puyallup Tribe in mind?
Why is clean hydro power from TPU not the mandate?

The permitting of new polluting fossil fuel infrastructure in the middle of the second largest city on the Sound is akin to a suicide mission, especially in 2023, a year that has seen immense temperature spikes, many people dying from heat effects as well and untold economic damages from climate relates catastrophes.
If PSCAA is not taking policies, laws and declarations into account, what is guiding these permitting decisions?

How can PSCCA have a board make-up that is majority politically funded by polluting interests with business/permits in front of the agency?
Without a clean board how can the agency do proper business for the public?

Lacking from the documents are noise and smell issues, as well as frequent routine fires that heavily impact neighbors ands port workers.

The people of Tacoma demand and deserve a *complete health assessment* and *cumulative air analysis* in regards to all these polluting permits approved by the clean air agency. (These permits are always approved, we have yet to see one not rubber-stamped by PSCAA).
We have been begging the agency for this for a very long time.
Benzene, a very toxic air pollutant for example, is only being measured in Beacon Hill. The agency simply says they are "averaging Tacoma numbers from there, trust us".
In this new permit approval, PSCCA shops for data in California and I guess also "averages from there"?

It's exceedingly hard to believe that Tacoma is anything but a pre-designated sacrifice zone, where anything and everything will get permitted.
In particularity the Puyallup Reservation is home of many Superfund Sites, polluted sites, smoke stacks and flares, and a bay so toxic that food from it is harmful to the human body, and of course all the critters as well. The Port Subarea Rezone has been languishing for many years. In the meantime, just about all polluters have increased their emissions and throughput, and massive new polluters have come online.

Tacoma also has 1,500 or so human beings (often also Indigenous) locked up inside this toxic kitchen, breathing toxic fumes and idling diesel exhaust 24/7. Nobody seems to care. During abnormally toxic air/smoke events there are no masks, no info, no protections, no help. Not even the Tacoma fire department is willing to do sany outreach - we have begged them. Calling the air pollution hotline at PSCAA only means an inspector might show up and few days or weeks later....

This is PSCAA's motto: "Puget Sound Clean Air Agency jurisdiction covers King, Kitsap, Pierce, and Snohomish counties. These four counties are home to more than 4.1 million people, over half the

state's population. Every day we work to protect public health, improve neighborhood air quality, and reduce our region's contribution to climate change. "
How do you all believe PSCAA measures up to protecting people in sacrifice zones?

Regards
Claudia Riedener, Tacoma

To whom it may concern:

First, I'd like to acknowledge that all agency permitted pollution to air, land and water is happening not only on the Ancestral Land of the Puyallup Tribe, but indeed on their very Reservation, a small bit of land set aside for the Tribe after everything else was - and still is - stolen.
It is Constitutionally enshrined that government and government agencies like yours must follow Treaty obligations to get consent from the Puyallup Tribe. Was this consent given before the agency pre-approved this permit?

How come the public was not notified?
Why was the public hearing held at a Monday at 4 when regular people cannot attend?
Why no meeting, no q&a and no emails?
What exactly are PSCAA's responsibilities to inform the general public, neighbors and interested parties as well as the Tribe?

Why is it routine that the agency pre-approves permits before public input? When the public is presented with such fait accompli, is it not a result that we all feel participation is 100% useless and can not impact anything?
PSCAA calls the project a proposed order of approval, yet it's already pre-approved. Clarity of language is important.

The documentation supporting PSCAA's approval of this is using data from Oakland, CA. The data used is not made available to the public as much of it has been redacted.
How is the public to make informed comment on the permit application when the public agency hides basic facts from the public?
How is it possible for a local air agency to shop around the county for data that fits predetermination, data that supports approval?
Schnitzer has been polluting Tacoma air for over 50 years. Surely PSCAA must have detailed information on all that pollution?
Some 215 tons of VOCs have been emitted into our air and lungs every year!

Will the clean air agency ever do a real and honest and local health impact assessment on what it approves? Cumulative??
With state, city and port climate polices in place, how can PSCAA approve new fracked gas infrastructure?
Was this work done with the Climate Emergency Declaration by city and the Puyallup Tribe in mind?
Why is clean hydro power from TPU not the mandate?

The permitting of new polluting fossil fuel infrastructure in the middle of the second largest city on the Sound is akin to a suicide mission, especially in 2023, a year that has seen immense temperature spikes, many people dying from heat effects as well and untold economic damages from climate relates catastrophes.
If PSCAA is not taking policies, laws and declarations into account, what is guiding these permitting decisions?

How can PSCCA have a board make-up that is majority politically funded by polluting interests with business/permits in front of the agency?
Without a clean board how can the agency do proper business for the public?

Lacking from the documents are noise and smell issues, as well as frequent routine fires that heavily impact neighbors ands port workers.

The people of Tacoma demand and deserve a complete health assessment and cumulative air analysis in regards to all these polluting permits approved by the clean air agency. (These permits are always approved, we have yet to see one not rubber-stamped by PSCAA).
We have been begging the agency for this for a very long time.
Benzene, a very toxic air pollutant for example, is only being measured in Beacon Hill. The agency simply says they are "averaging Tacoma numbers from there, trust us".
In this new permit approval, PSCCA shops for data in California and I guess also "averages from there"?

It's exceedingly hard to believe that Tacoma is anything but a pre-designated sacrifice zone, where anything and everything will get permitted.
In particularity the Puyallup Reservation is home of many Superfund Sites, polluted sites, smoke stacks and flares, and a bay so toxic that food from it is harmful to the human body, and of course all the critters as well. The Port Subarea Rezone has been languishing for many years. In the meantime, just about all polluters have increased their emissions and throughput, and massive new polluters have come online.

Tacoma also has 1,500 or so human beings (often also Indigenous) locked up inside this toxic kitchen, breathing toxic fumes and idling diesel exhaust 24/7. Nobody seems to care. During abnormally toxic air/smoke events there are no masks, no info, no protections, no help. Not even the Tacoma fire department is willing to do sany outreach - we have begged them. Calling the air pollution hotline at PSCAA only means an inspector might show up and few days or weeks later....

This is PSCAA's motto: "Puget Sound Clean Air Agency jurisdiction covers King, Kitsap, Pierce, and Snohomish counties. These four counties are home to more than 4.1 million people, over half the state’s population. Every day we work to protect public health, improve neighborhood air quality, and reduce our region’s contribution to climate change. "
How do you all believe PSCAA measures up to protecting people in sacrifice zones?