



TECHNICAL SUPPORT DOCUMENT

**Air Discharge Permit 21-3500
Air Discharge Permit Application CO-1044**

DRAFT Issued: December 20, 2021

PNW METAL RECYCLING, INC.

SWCAA ID – 2734

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ABBREVIATIONS

List of Acronyms

ADP	Air Discharge Permit	NESHAP	National Emission Standards for Hazardous Air Pollutants
AP-42	Compilation of Emission Factors, AP-42, 5th Edition, Volume 1, Stationary Point and Area Sources – published by EPA	NSPS	New Source Performance Standard
ASIL.....	Acceptable Source Impact Level	PSD	Prevention of Significant Deterioration
BACT.....	Best available control technology	RACT	Reasonably Available Control Technology
BART	Best Available Retrofit Technology	RCW	Revised Code of Washington
CAM	Compliance Assurance Monitoring	SQER	Small Quantity Emission Rate listed in WAC 173-460
CAS No.....	Chemical Abstracts Service registry number	Standard	Standard conditions at a temperature of 68°F (20°C) and a pressure of 29.92 in Hg (760 mm Hg)
CFR.....	Code of Federal Regulations	SWCAA.....	Southwest Clean Air Agency
EPA.....	U.S. Environmental Protection Agency	T-BACT	Best Available Control Technology for toxic air pollutants
EU	Emission Unit	WAC	Washington Administrative Code
LAER.....	Lowest achievable emission rate		
MACT.....	Maximum Achievable Control Technologies		

List of Units and Measures

µm.....	Micrometer (10 ⁻⁶ meter)	lb/hr.....	Pounds per hour
acfm	Actual cubic foot per minute	tpy	Tons per year

List of Chemical Symbols, Formulas, and Pollutants

CO.....	Carbon monoxide	PM ₁₀	PM with an aerodynamic diameter 10 µm or less
CO ₂	Carbon dioxide	PM _{2.5}	PM with an aerodynamic diameter 2.5 µm or less
CO _{2e}	Carbon dioxide equivalent	SO ₂	Sulfur dioxide
HAP.....	Hazardous air pollutant listed pursuant to Section 112 of the Federal Clean Air Act	SO _x	Sulfur oxides
NO _x	Nitrogen oxides	TAP.....	Toxic air pollutant pursuant to Chapter 173-460 WAC
O ₂	Oxygen	VOC.....	Volatile organic compound
PM.....	Particulate Matter with an aerodynamic diameter 100 µm or less		

Terms not otherwise defined have the meaning assigned to them in the referenced regulations or the dictionary definition, as appropriate.

1. FACILITY IDENTIFICATION

Applicant Name: PNW Metal Recycling, Inc.
Applicant Address: 10105 SE Mather Road
Clackamas, OR 97015
Facility Name: PNW Metal Recycling – Paper Way
Facility Address: 100 Paper Way
Longview, WA 98632
SWCAA Identification: 2734
Contact Person: Hank Doane – Senior Vice President
Primary Process: Metal Recycling
SIC/NAICS Code: 5093: Scrap and waste materials
423930: Recyclable materials merchant wholesalers
Facility Classification: Natural Minor

2. FACILITY DESCRIPTION

PNW Metal Recycling is a scrap metal facility that receives, prepares, and sorts recyclable material for export to off-site recycling.

3. CURRENT PERMITTING ACTION

This permitting action is in response to Air Discharge Permit (ADP) application number CO-1044 received October 26, 2021. ADP application CO-1044 requests approval to conduct metal recycling activities at a new site (100 Paper Way, Longview, WA). The proposed activities generally consist of the following:

- Torch cutting of metal materials that could not be reduced in size using hydraulic shears
- Material handling activities, including receiving, sorting, baling, and loading trucks for shipment

This is the initial permitting action for this facility. PNW Metal Recycling currently conducts these same activities at 3500 Hoehne Avenue, Longview, WA, and intends to transfer these activities to this new location.

4. PROCESS DESCRIPTION

Recyclable metal commodities will be brought to the site via truck or rail and will be handled on-site using trucks, forklifts, grapples, and/or magnetic material handlers. Material transfer activities at the site will consist of the segregation of recyclable metal commodities into piles according to metal type, level of preparation, and ultimate shipping destination. Recyclable metal commodities may be cut using an electric shear or torch cutter or simply packaged and shipped off-site without additional processing. An electric baler may be used for packaging.

Up to four torch cutting stations may be used. A water misting system will be used to reduce visible emissions when torch cutting metal products that are more likely to produce significant visible emissions.

Whole automobiles brought to the site will be drained of fluids, have batteries and mercury switches removed, and dismantled.

5. EQUIPMENT/ACTIVITY IDENTIFICATION

5.a. Torch Cutting (new). Metal pieces that need to be reduced in size but cannot be accommodated by the portable baler or electric shear will be reduced in size by hand torch. It is expected that all torches will operate on propane. The following description was provided in ADP application CO-1044:

Up to four propane torch cutting stations may be used, with the total annual cutting time for all cutting stations limited to 7,300 hours. This conservative estimate of operating hours assumes that cutting continues without stopping, changing fuel supply, staging, or removing metal pieces. A portable atomized misting system (BossTek Dust Boss, "DB-60" or equivalent) will be used to control visible emissions from metal torch cutting when visual emissions are observed within a reasonable distance of the torch cutting area, or for torch cutting of metal that is more likely to produce smoke. The DB-60 uses atomized mist in the 50- to 200-micron range to adsorb fume particles and pull them to the ground. Visual emissions from torch cutting will not exceed 20 percent opacity for more than 3 minutes in any 1-hour period. The torch cutting process will generally be as follows:

- Recyclable metal commodities identified for torch cutting will be placed near the torch table in the torch cutting area. The torch table will be composed of several thick steel plates that provide an appropriate cutting surface.
- The torch table will be in view of employees who are trained to be aware of visible emissions and to intercede if visible emissions are noticed.
- If present, materials will be cleaned of oils, greases, or coatings in the area to be cut prior to cutting.
- When materials that are more likely to produce smoke are cut, or when visible emissions are observed within a reasonable distance of the torch cutting area, the wet suppression system will be employed. Additionally, the wet suppression system will be proactively employed when cutting cable, cast iron, suspected cast-iron materials, and metal greater than 3 inches thick. The location of the wet suppression system within the torch cutting area will depend on local winds and position of the cutting and will be determined by staff on a case-by-case basis. The wet suppression system will be moved as needed during cutting to ensure visible emissions are controlled.
- Cut metal pieces will be allowed to cool and will then be placed in the appropriate staging pile for shipment off the site.
- Cutting operations will cease at least 30 minutes before the end of a shift to allow completion of fire watch, conducted for hot work safety.

Location: ~46° 6'46.51"N, 122°56'44.02"W. The perimeter of the torch cutting area will be over 100 meters from any property boundary.

Federal Regulations: None

- 5.b. Material Handling (new). Scrap metal is moved into piles and loaded into the shear baler with claw cranes and magnetic cranes. Equipment operators use best practices to avoid dust creation while handling material. Wet suppression may be used as necessary to control fugitive dust.

Location: Throughout the facility

Federal Regulations: None

- 5.c. Roads and Yard Surface (new). All road and yard surfaces where vehicles travel on site will be paved. Wet suppression and a street sweeper will be used as necessary to control fugitive dust from roadways.

Location: Throughout the facility

Federal Regulations: None

- 5.d. Equipment/Activity Summary.

ID No.	Equipment/Activity	Control Equipment/Measure
1	Propane or Acetylene Torch Cutting	Wet suppression, surface cleaning
2	Material Handling	Wet suppression
3	Roads and Yard Surface (fugitive emissions)	Sweeping, wet suppression

6. EMISSIONS DETERMINATION

Unless otherwise specified by SWCAA, actual emissions must be determined using the specified input parameter listed for each emission unit and the following hierarchy of methodologies:

- Continuous emissions monitoring system (CEMS) data;
- Source emissions test data (EPA reference method). When source emissions test data conflicts with CEMS data for the time period of a source test, source test data must be used;
- Source emissions test data (other test method); and
- Emission factors or methodology provided in this TSD.

- 6.a. Torch Cutting. Potential annual emissions from torch cutting were calculated with the assumption that up to four torch cutters could be operating at any one time, and that annual man-hours of torch cutting would not exceed 7,300 per year.

Torch Cutting of Metal					
# of Torches =			4		
Torch-hours per year =			7,300		
Percent of Cr fume emitted as Cr ⁺⁶			4%		Estimate based on PNW measurements
Pollutant		lb/hr/torch	lb/hr	tpy	Emission Factor Source
NO _x		0.030542	0.122	0.111	Note 1
PM/PM ₁₀ /PM _{2.5}		0.0503	0.201	0.183	Note 2
Toxic Compounds	% of PM	lb/hr/torch	lb/hr	tpy	Emission Factor Source
Cr (Assumed Cr ⁺³)	0.020%	1.01E-05	4.02E-05	3.67E-05	Note 2
Cr ⁺⁶	0.00080%	4.02E-07	1.61E-06	1.47E-06	Note 2
Nickel	0.05%	2.51E-05	1.01E-04	9.17E-05	Note 2
Zinc Oxide	0.36%	1.81E-04	7.24E-04	6.60E-04	Note 2
¹ "Oxides of Nitrogen in Welding, Cutting and Oxy-Acetylene Heating Processes, A Review of Emission Rates, Exposure Levels and Control Measures" Eric Hansen, Han ² "Final Report, Development of Emission Inventory for Metal Welding, Cutting and Spraying Operations" prepared by Pacific Environmental Services, Inc. May 31, 2000.					

Annual emissions must be calculated by multiplying the number of man-hours of torch cutting by the emission factors provided above unless new emission factors are developed through source emissions testing, or an alternative methodology is specified or approved by SWCAA.

6.b. Material Handling. Potential annual emissions from material handling were calculated with the assumption that material will be handled 2.4 times on average, and the maximum facility throughput was 300,000 tons per year. The average number of times material might be handled was calculated by assuming that baled material is handled four times (receipt, transfer to the baler, transfer from the baler, and shipping) and comprises 20% of the total material throughput. It was assumed that the remaining material (80%) will be handled only twice (once upon receipt and once for shipping out).

Material Handling			
Material Received =	300,000 tons per year		
Number of Transfers =	2.4 (average)		
		Emission	
		Factor	Emissions
Emission Point	% Material	lb/ton	lb/yr
Fugitive PM	100%	0.003	2,160
Fugitive PM ₁₀ /PM _{2.5}	100%	0.0011	792
Emission Factor Source: AP-42 Table 11.19.2-2 for crushed stone processing.			

Annual emissions must be calculated by multiplying the amount of material handled by the emission factors identified above and the average number of transfers unless new emission factors are developed and approved by SWCAA.

6.c. Roads and Yard Surfaces. Emissions of particulate matter from the operation of vehicles on paved roads and surfaces in the facility can be estimated using equation 2 from AP-42 Section 13.2.1 (1/11). For the purposes of these calculations, SWCAA did not subtract out the emissions from exhaust, brake wear and tire wear. These emissions are insignificant compared to the potential for re-suspended dust from roadways. The assumed vehicle miles traveled over the course of a year was 14,400 miles.

$$E = k (sL)^{0.91} \times (w)^{1.02}$$

Where: E = pounds of pollutant per vehicle mile traveled
 k = particle size multiplier (lb/vehicle mile traveled (VMT))
 sL = road surface silt loading (g/m²)
 W = average vehicle weight (tons)

k = 0.011 lb/VMT for PM
 k = 0.0022 lb/VMT for PM₁₀
 k = 0.00054 lb/VMT for PM_{2.5}

sL is assumed to be 0.6 g/m² (from Table 13.2.1-2)
 W is assumed to be 31.5 tons

The facility uses wet suppression/water truck or street sweeper as necessary to control fugitive dust, which provides an 80% control efficiency.

Vehicle Traffic on Roadways						
Note: yard will be paved						
Average Truck Weight =	31.5 tons					
silt loading =	0.6 g/m ² (AP-42 Table 13.2.1-4 (11/06))					
Distance Traveled per Truck =	3,168 feet (0.6 miles)					
Operating Time Per Year =	2,340 hours per year					
Control Efficiency =	80% Based on combination of wet suppression and street sweeping					
Truck Miles	Load Size (tons)	Annual Throughput (tons)	% by Truck	# of Trips	Vehicle Miles Traveled	Average Daily Miles
Transfer to facility	12.50	300,000	100%	24,000	14,400	66
Pollutant	Particle Size Multiplier lb/VMT	Uncont. Emissions lb/yr/VMT	Controlled Emissions lb/yr	Emissions tpy	Emission Factor	Source
PM	0.0110	0.23	672	0.34	AP-42 Sec. 13.2.1 (1/11), Eq. 2	
PM ₁₀	0.0022	0.047	134	0.067	AP-42 Sec. 13.2.1 (1/11), Eq. 2	
PM _{2.5}	0.00054	0.011	33	0.016	AP-42 Sec. 13.2.1 (1/11), Eq. 2	

Annual emissions must be calculated using the methodology identified above, unless new emission factors are developed through source emissions testing, or an alternative methodology is specified or approved by SWCAA.

6.d. Emissions Summary

Air Pollutant	Potential to Emit (tpy)	Project Impact (tpy)
NO _x	0.11	0.11
CO	0	0
VOC	0	0
SO ₂	0	0
PM	0.92	0.92
PM ₁₀	0.65	0.65
PM _{2.5}	0.60	0.60
CO ₂ /CO _{2e}	Negligible	Negligible

Toxic/Hazardous Air Pollutant	Potential to Emit (lbs)	Project Impact (lbs)
Chromium [7740-47-3] (Assumed to be Cr ⁺³ for regulatory purposes)	0.073	0.073
Hexavalent Chromium and Compounds [no CAS #]	0.0029	0.0029
Nickel [7440-02-0]	0.18	0.18
Zinc Oxide [1314-13-2]	1.32	1.32

7. REGULATIONS AND EMISSION STANDARDS

Regulations have been established for the control of emissions of air pollutants to the ambient air. Regulations applicable to the proposed facility that have been used to evaluate the acceptability of the proposed facility and establish emission limits and control requirements include, but are not limited to, the following regulations, codes, or requirements. These items establish maximum emissions limits that could be allowed and are not to be exceeded for new or existing facilities. More stringent limits are established in this ADP consistent with implementation of Best Available Control Technology (BACT):

- 7.a. Revised Code of Washington (RCW) 70A.15.2040 empowers any activated air pollution control authority to prepare and develop a comprehensive plan or plans for the prevention, abatement and control of air pollution within its jurisdiction. An air pollution control authority may issue such orders as may be necessary to effectuate the purposes of the Washington Clean Air Act (RCW 70A.15) and enforce the same by all appropriate administrative and judicial proceedings subject to the rights of appeal as provided in Chapter 62, Laws of 1970 Ex. Sess. This law applies to the facility.
- 7.b. RCW 70A.15.2210 provides for the inclusion of conditions of operation as are reasonably necessary to assure the maintenance of compliance with the applicable ordinances, resolutions, rules and regulations when issuing an ADP for installation and establishment of an air contaminant source. This law applies to the facility.
- 7.c. Washington Administrative Code (WAC) 173-460 "Controls for New Sources of Toxic Air Pollutants" (as in effect August 21, 1998) requires Best Available Control Technology (BACT) for toxic air pollutants (T-BACT), identification and quantification of emissions of toxic air pollutants and demonstration of protection of human health and safety. The facility emits Toxic Air Pollutants (TAPs); therefore, this regulation applies to the facility.
- 7.d. WAC 173-476 "Ambient Air Quality Standards" establishes ambient air quality standards for PM₁₀, PM_{2.5}, lead, SO₂, NO_x, ozone, and CO in the ambient air, which must not be exceeded. The facility emits PM₁₀, PM_{2.5}, SO_x, NO_x, and CO; therefore, certain sections of this regulation apply. The facility does not emit lead; therefore, the lead regulation section does not apply.

- 7.e. SWCAA 400-040 "General Standards for Maximum Emissions" requires all new and existing sources and emission units to meet certain performance standards with respect to Reasonably Available Control Technology (RACT), visible emissions, fallout, fugitive emissions, odors, emissions detrimental to persons or property, SO₂, concealment and masking, and fugitive dust. This regulation applies to the facility.
- 7.f. SWCAA 400-040(1) "Visible Emissions" requires that emissions of an air contaminant from any emissions unit must not exceed twenty percent opacity for more than three minutes in any one hour at the emission point, or within a reasonable distance of the emission point. This regulation applies to the facility.
- 7.g. SWCAA 400-040(2) "Fallout" requires that emissions of PM from any source must not be deposited beyond the property under direct control of the owner(s) or operator(s) of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited. This regulation applies to the facility.
- 7.h. SWCAA 400-040(3) "Fugitive Emissions" requires that reasonable precautions be taken to prevent the fugitive release of air contaminants to the atmosphere. This regulation applies to the facility.
- 7.i. SWCAA 400-040(4) "Odors" requires any source which generates odors that may unreasonably interfere with any other property owner's use and enjoyment of their property to use recognized good practice and procedures to reduce these odors to a reasonable minimum. This regulation applies to the facility.
- 7.j. SWCAA 400-109 "Air Discharge Permit Applications" requires that an ADP application be submitted for all new installations, modifications, changes, or alterations to process and emission control equipment consistent with the definition of "new source." Sources wishing to modify existing permit terms may submit an ADP application to request such changes. An ADP must be issued, or written confirmation of exempt status must be received, before beginning any actual construction, or implementing any other modification, change, or alteration of existing equipment, processes, or permits. This regulation applies to the facility.
- 7.k. SWCAA 400-110 "New Source Review" requires that SWCAA issue an ADP in response to an ADP application prior to establishment of the new source, emission unit, or modification. The new units meet the definition of a new source; therefore, this regulation applies to the facility.
- 7.l. SWCAA 400-113 "Requirements for New Sources in Attainment or Nonclassifiable Areas" requires that no approval to construct or alter an air contaminant source will be granted unless it is evidenced that:
- (1) The equipment or technology is designed and will be installed to operate without causing a violation of the applicable emission standards;
 - (2) BACT will be employed for all air contaminants to be emitted by the proposed equipment;

- (3) The proposed equipment will not cause any ambient air quality standard to be exceeded; and
- (4) If the proposed equipment or facility will emit any toxic air pollutant regulated under WAC 173-460, the proposed equipment and control measures will meet all the requirements of that Chapter.

8. RACT/BACT/BART/LAER/PSD/CAM DETERMINATIONS

The proposed equipment and control systems incorporate BACT for the types and amounts of air contaminants emitted by the processes as described below:

- 8.a. BACT Determination – Torch Cutting. The following equipment control options were considered for the control of emissions from torch cutting:

Control Option	Assumed Control	Cost Effectiveness (\$/ton PM ₁₀)	Notes
Full enclosure vented to filter	~99%	\$4,349,528	Some items would be too large to be moved into the building.
Dry fogging	~50%	\$2,564,721	Control is an engineering estimate.
Portable multi-clone / HEPA filter unit	Low	No additional cost	This equipment was permitted in ADP 18-3306 for PNW Metal Recycling's 3500 Hoehne Ave. location.
Water mist cannon	Unknown	No additional cost	This is the facility's current practice.

Notes:

Full Enclosure Vented to Filter: This option consisted of a building to enclose the activity and a baghouse or similar device to filter emissions from the building. This option would not apply to items too large to be moved into the building. This option is complicated by the need to move materials into, and out of, the building.

Dry Fogging: This technology produces very fine water droplets that can be extremely effective at controlling dust, so theoretically the small droplet size would work well for controlling fume from torch cutting. One challenge with this option is maintaining the fog in the work area during changing winds. As with any wet suppression technology, freezing temperatures would limit the practical application.

Portable Multi-Clone / HEPA Filter Unit: This was a custom-built unit used outdoors that was permitted in ADP 18-3306 for PNW Metal Recycling's 3500 Hoehne Ave., Longview, WA site. Fume from torch cutting adjacent to the air intake was filtered and exhausted vertically. In practice, the HEPA filters would plug, blocking airflow, when water (rain or mist) was drawn into the unit. This limits the ability to use this option during wet weather, or the ability to use this unit in conjunction with water misting. In addition, this option

could only work when the work material was immediately adjacent the air intake (see photo below). Moving all metal pieces close enough to the air intake to allow for fume capture is a significant operational cost. A piece of yard equipment would need to be dedicated to moving materials to the air intake or frequently available, and only one employee could work in the area at a time. For these reasons, SWCAA concurred that this option is not cost-effective or practical to use for all torch cutting. This option that may be used for select items at the discretion of the Permittee as necessary to comply with visible emission limits.



Multi-Clone / HEPA Filter System – January 30, 2020

Water Mist Cannon: The Permittee proposed that operational practices (e.g., cleaning cut areas, cutting on torch table) and misting the work area with a water mist cannon as necessary to maintain visible emissions below 20% opacity meets the requirements of BACT for the control of emissions from torch cutting. SWCAA concurs. SWCAA's observations of this activity on two occasions in 2021 have indicated that the water mist appears to reduce visible emissions significantly, although the degree of particulate matter control is highly speculative. To SWCAA's knowledge, one other facility in Washington uses this method to control fume, and no active control measures are used at other facilities.

- 8.b. BACT Determination - Material Handling. Wet suppression in the scrap yard under conditions that would not result in runoff, and limitation of visible emissions to 0% opacity have been determined to meet the requirements of BACT for the control of fugitive particulate matter emissions from material handling.
- 8.c. BACT Determination - Fugitive Emissions from Vehicle Traffic. Wet suppression or streetsweeper use on the scrap yard, as necessary, has been determined to meet the requirements of BACT for the control of fugitive particulate matter emission from vehicle traffic. Consistent with this BACT determination, visual emissions from vehicle traffic on paved roads will be limited to 0% opacity.
- 8.d. Prevention of Significant Deterioration (PSD) Applicability Determination. This permitting action will not result in a potential increase in emissions equal to or greater than the PSD thresholds. Therefore, PSD review is not applicable to this action.
- 8.e. Compliance Assurance Monitoring (CAM) Applicability Determination. CAM is not applicable to any emission unit at this facility because it will not be a major source and is not required to obtain a Part 70 (Title V) permit.

9. AMBIENT IMPACT ANALYSIS

- 9.a. Criteria Air Pollutant Review. Potential emissions of criteria air pollutants (nitrogen oxides, carbon monoxide, sulfur dioxide, PM₁₀) and volatile organic compounds are all at or below 0.65 tons per year each from the facility. At these emission rates, no adverse ambient air quality impact is anticipated.
- 9.b. Toxic Air Pollutant Review. Torch cutting is the only expected source of toxic air pollutants. Four toxic air pollutants from torch cutting were identified (trivalent chromium compounds, hexavalent chromium compounds, nickel compounds, and zinc oxide. With the exception of hexavalent chromium compounds, potential emissions of each pollutant were below the Small Quantity Emission Rate (SQER) listed in WAC 173-460 (in effect August 21, 1998); therefore, toxic impacts from these compounds are presumed to be below regulatory significance. The Permittee used AERSCREEN version 21112 to model the ambient impact of hexavalent chromium emissions at or beyond the fence line (modeled as 105 meters from the source). The results of the model indicate that the maximum potential concentration (annual average) of hexavalent chromium compounds is 0.0000201 µg/m³, which is less than the Acceptable Source Impact Level (ASIL) of 0.000083 µg/m³.

Conclusions

- 9.c. Operation of the metal recycling facility as proposed in ADP application CO-1044 will not cause the ambient air quality standards established by 40 CFR 50, "National Primary and Secondary Ambient Air Quality Standards" to be violated.
- 9.d. Operation of the metal recycling facility as proposed in ADP application CO-1044 and in accordance with the Air Discharge Permit will not cause the requirements of WAC 173-

460 "Controls for New Sources of Toxic Air Pollutants," (in effect August 21, 1998) or WAC 173-476 "Ambient Air Quality Standards" to be violated.

- 9.e. The metal recycling facility proposed in ADP application CO-1044 can be operated without causing a violation of the applicable emission standards, which include the limits established under SWCAA 400-040 "General Standards for Maximum Emissions."

10. DISCUSSION OF APPROVAL CONDITIONS

SWCAA has made a determination to issue ADP 21-3500 in response to ADP application CO-1044. ADP 21-3500 contains approval requirements deemed necessary to assure compliance with applicable regulations and emission standards, as discussed below.

- 10.a. Supersession of Previous Permits. This is the initial permitting action for the facility.
- 10.b. Emission Limits. No short-term emission limits other than the opacity of visible emissions were imposed because:
- Tracking hourly emission from all but the torch cutting would be impractical;
 - Hourly emissions from all activities do not threaten to cause an exceedance of any ambient air quality standard; and
 - No BACT measure relies on an hourly emission limit.

Annual emission limits were established at the maximum levels of activity proposed by the Permittee. Compliance with the emission limits is determined by rounding actual emissions to the same number of significant figures as the emission limit.

The opacity of visible emissions from torch cutting was limited to 20% consistent with BACT. This standard is enforced in the manner of SWCAA 400-040(1). SWCAA 400-040(1) requires that compliance be determined "...at the emission point, or within a reasonable distance of the emission point..." For a fugitive source such as torch cutting, the "reasonable distance" can vary, but would not include a reading in the immediate vicinity of the torch tip and would need to be read in an area not containing fog or mist from the emission control equipment.

- 10.c. Operational Limits and Requirements. The permit requires removal of all batteries, fluids, refrigerants, and mercury-containing switches from vehicles. This ensures that these materials are not released to the air or other environmental media when the vehicles are dismantled, crushed, or otherwise processed.

SWCAA required monthly inspections of torch cutting by the Permittee. This practice will help assure that operational practices are being followed consistently. If there are compliance issues or validated complaints regarding this activity, SWCAA could investigate the installation of a video camera to increase oversight.

The maximum number of man-hours of torch cutting, and maximum amount of material received are based on the level proposed by the Permittee in ADP application CO-1044.

- 10.d. Monitoring and Recordkeeping Requirements. Sufficient monitoring and recordkeeping was established to document compliance with the emission and operating limits and provide for general requirements (e.g., upset reporting, annual emission inventory submission).
- 10.e. Reporting Requirements. Specific reporting deadlines were established for each reporting requirement. The submittal date refers to the earlier of the date the report is delivered to SWCAA or the postmarked date if sent through the US Post Office.

Upset conditions with the potential to cause excess emissions must be reported immediately in order to qualify for relief from penalty in accordance with SWCAA 400-107 for unavoidable exceedances. In addition, prompt reporting allows for prompt and accurate investigation into the cause of the event and the prevention of similar future incidents.

The ADP requires reporting of the annual air emissions inventory; and reporting of the data necessary to develop the emission inventory.

11. START-UP AND SHUTDOWN/ALTERNATIVE OPERATING SCENARIOS/POLLUTION PREVENTION

- 11.a. Start-up and Shutdown Provisions. Pursuant to SWCAA 400-081 "Start-up and Shutdown," technology-based emission standards and control technology determinations shall take into consideration the physical and operational ability of a source to comply with the applicable standards during start-up or shutdown. Where it is determined that a source is not capable of achieving continuous compliance with an emission standard during start-up or shutdown, SWCAA shall include appropriate emission limitations, operating parameters, or other criteria to regulate performance of the source during start-up or shutdown.

This source is capable of achieving continuous compliance with all applicable requirements; therefore, no start-up or shutdown provisions were included in the ADP.

- 11.b. Alternate Operating Scenarios. SWCAA conducted a review of alternate operating scenarios applicable to equipment affected by this permitting action. The permittee did not propose or identify any applicable alternate operating scenarios. Therefore, none were included in the approval conditions.
- 11.c. Pollution Prevention Measures. SWCAA conducted a review of possible pollution prevention measures for the facility. No pollution prevention measures were identified by either the permittee or SWCAA separate or in addition to those measures required under BACT considerations. Therefore, none were included in the approval conditions.

12. EMISSION MONITORING AND TESTING

Due to the nature and small quantity of air pollutant emissions from the metal recycling facility, no formal emission monitoring or testing requirements have been established as part of this permitting action

13. FACILITY HISTORY

This will be a new facility.

14. PUBLIC INVOLVEMENT OPPORTUNITY

- 14.a. Public Notice for ADP Application CO-1044. Public notice for ADP application CO-1044 was published on the SWCAA website for a minimum of 15 days, beginning on October 27, 2021.
- 14.b. Public/Applicant Comment for ADP Application CO-1044. SWCAA received a comment period request from the public regarding ADP application CO-1044. Therefore, a thirty (30) day public comment period will be provided for this permitting action pursuant to SWCAA 400-171.
- 14.c. State Environmental Policy Act. On April 17, 2018, Cowlitz County issued a Determination of Nonsignificance for the proposed facility. Cowlitz County's DNS indicated it was associated with Permit #18-04-2576.