

October 6, 2021

Mr. Peter Hatfield, HS&E Manager
Thompson Metal Fab, Inc.
P.O. Box 5276
Vancouver, WA 98668

Subject: Preliminary Air Discharge Permit for New Plasma Cutters

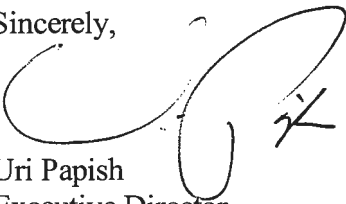
Dear Mr. Hatfield:

A preliminary determination to issue Air Discharge Permit 21-3481 (ADP 21-3481) has been completed for ADP Application CL-3173 pursuant to Section 400-110(4) of the General Regulations for Air Pollution Sources of the Southwest Clean Air Agency (SWCAA). Public notice for ADP Application CL-3173 was published in the permit section of SWCAA's internet website on August 20, 2021. This permitting action requires a mandatory public comment period pursuant to SWCAA 400-171(2)(a). Therefore, a 30-day public comment period will be provided prior to a final determination.

Electronic copies of ADP 21-3481 and the associated Technical Support Document are available for public review in the permit section of SWCAA's internet website (<http://www.swcleanair.org/permits/publiccomments.asp>). Original copies are enclosed for your files. Also enclosed is a copy of the newspaper notice that SWCAA will publish one time in the legal notice section of The Columbian. The cost of this publication will be billed to Thompson Metal Fab as prescribed in SWCAA 400-109(4). If you are not satisfied with this public notice, please contact SWCAA within three business days of receiving this letter. If you have any comments on this preliminary determination please notify SWCAA within the specified comment period. If no comments are received, your final Air Discharge Permit will be issued at the conclusion of the comment period.

If you have any comments, or desire additional information, please contact me or Wess Safford at (360) 574-3058, extension 126.

Sincerely,



Uri Papish
Executive Director

UP:wls

Attachment – ADP 21-3481 and Technical Support Document

Cc: Air Permits and Toxics Branch
R10_Air_Permits@epa.gov





SWCAA
Southwest Clean Air Agency

**AIR DISCHARGE PERMIT
21-3481**

Preliminary Date: October 6, 2021

DRAFT

Facility Name: Thompson Metal Fab, Inc.
Physical Location: 3000 SE Hidden Way
Vancouver, WA 98661

SWCAA ID: 954

REVIEWED BY: _____
Clint Lamoreaux, Acting Chief Engineer

APPROVED BY: _____
Uri Papish, Executive Director

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Appendix A Emission Testing Requirements Plasma Cutter Dust Collectors	

1. Equipment/Activity Identification

ID No.	Generating Equipment/Activity	Control Measure/Equipment
1	Welding – Metal Fabrication Shops	Building Enclosure
2	Peddinghaus Plasma Cutter	Process Enclosure, Cartridge Collector (Torit – 1,500 acfm)
3	Sandblast Room	Process Enclosure Baghouse 1 (FabriPulse – 20,000 acfm)
4	Sandblast Room	Process Enclosure Baghouse 2 (FabriPulse – 20,000 acfm)
5	Spray Coating (Bay 9)	Building Enclosure Paint Arrestor Filters
6	Portable Surface Prep and Spray Coating Operations	Portable Dust Collector #1 (Torit – 14,000 acfm)
7	Portable Surface Prep and Spray Coating Operations	Portable Dust Collector #2 (Farr – 15,000 acfm)
8	Outdoor Surface Prep and Spray Coating Operations	Process Enclosure, Dust Collectors, Vacuum Units
9	Portable Engines Outdoor Operations	Engine Age Restriction Operational Limitations Ultra-low Sulfur Fuel ($\leq 0.0015\%$ by wt)
10	Portable Engine PD 2100-D Skid-Mounted Vacuum	EPA Tier 1 Certification Ultra-low Sulfur Fuel ($<0.0015\%$ by wt)
11	PD 2100-D Skid Mounted Vacuum	Cartridge-style Fabric Filters
12	Portable Natural Gas Fired Heaters	Low Sulfur Fuel (natural gas)
13	Portable Engine Whisper Watt Generator	Ultra-low Sulfur Fuel ($<0.0015\%$ by wt)
14	PC-600 Pipe Profiling Machine	Pipe Cutter Dust Collector (Avani – 2,340 acfm)
15	Machitech Plasma Cutting Table	Process Enclosure Dust Collector (Camfil – 6,900 acfm)
16	BeamCut Beamline System	Process Enclosure Dust Collector (Camfil – 3,150 acfm)

2. Approval Conditions

The following tables detail the specific requirements of this permit. In addition to the requirements listed below, equipment at this facility may be subject to other federal, state, and local regulations. The permit requirement number is identified in the left-hand column. The text of the permit requirement is contained in the middle column. The emission unit, equipment, or activity to which the permit requirement applies is listed in the right-hand column.

This Permit supersedes Air Discharge Permit 10-2953R3 in its entirety.

Emission Limits

No.	Emission Limits	Equipment/ Activity																		
1.	<p>Combined PM₁₀/PM_{2.5} emissions from welding operations must not exceed 0.95 tpy.</p> <p>Annual emissions must be calculated from actual welding rod consumption and applicable emission factors consistent with methodology from Section 6 of the Technical Support Document.</p>	1																		
2.	<p>PM emission concentrations, as measured at the exhaust of each dust collector and vacuum unit must not exceed 0.005 gr/dscf (1-hr avg).</p>	2-4, 6-8, 15-16																		
3.	<p>Emissions from the Peddinghaus Plasma Cutter must not exceed the following:</p> <table border="0" data-bbox="256 674 873 783"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>NO_x</td> <td>5.89 tpy</td> </tr> <tr> <td>PM₁₀/PM_{2.5}</td> <td>0.28 tpy</td> </tr> </tbody> </table> <p>Annual emissions must be calculated based on actual hours of operation consistent with methodology from Section 6 of the Technical Support Document.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	NO _x	5.89 tpy	PM ₁₀ /PM _{2.5}	0.28 tpy	2												
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NO _x	5.89 tpy																			
PM ₁₀ /PM _{2.5}	0.28 tpy																			
4.	<p>PM₁₀ emissions from dust collector operation must not exceed the following:</p> <table border="0" data-bbox="256 951 1068 1098"> <thead> <tr> <th><u>Dust Collectors</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>Sandblast Room (all units combined)</td> <td>8.00 tpy</td> </tr> <tr> <td>Portable Dust Collector #1 (Torit)</td> <td>2.63 tpy</td> </tr> <tr> <td>Portable Dust Collector #2 (Farr)</td> <td>2.82 tpy</td> </tr> </tbody> </table> <p>Annual emissions must be calculated based on actual hours of operation consistent with methodology from Section 6 of the Technical Support Document.</p>	<u>Dust Collectors</u>	<u>Emission Limit</u>	Sandblast Room (all units combined)	8.00 tpy	Portable Dust Collector #1 (Torit)	2.63 tpy	Portable Dust Collector #2 (Farr)	2.82 tpy	3-4, 6-7										
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5.	<p>Facility-wide emissions from spray coating operations must not exceed:</p> <table border="0" data-bbox="256 1262 873 1591"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>VOC</td> <td>50.00 tpy</td> </tr> <tr> <td>HAP (combined)</td> <td>24.00 tpy</td> </tr> <tr> <td>MEK</td> <td>20.00 tpy</td> </tr> <tr> <td>MIBK</td> <td>9.00 tpy</td> </tr> <tr> <td>Toluene</td> <td>9.00 tpy</td> </tr> <tr> <td>Xylene</td> <td>9.00 tpy</td> </tr> <tr> <td>Cadmium</td> <td>0.05 lb/yr</td> </tr> <tr> <td>Manganese</td> <td>1,138 lb/yr</td> </tr> </tbody> </table> <p>Compliance must be determined by summing total emissions for successive 12 consecutive month periods rolled in monthly increments. Annual emissions must be calculated using actual material throughput/consumption and material balance methodology.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	VOC	50.00 tpy	HAP (combined)	24.00 tpy	MEK	20.00 tpy	MIBK	9.00 tpy	Toluene	9.00 tpy	Xylene	9.00 tpy	Cadmium	0.05 lb/yr	Manganese	1,138 lb/yr	5-8
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No.	Emission Limits	Equipment/ Activity										
6.	<p>Facility-wide emissions of individual TAP compounds from spray coating operations not listed individually in Condition #5 above must not exceed the lesser of 9.0 tpy or the applicable SQER pursuant to WAC 173-460 (effective August 21, 1998).</p> <p>Annual emissions must be calculated using actual material throughput/consumption and material balance methodology.</p>	5-8										
7.	<p>Particulate matter emissions from spray coating operations in Bay 9 must not exceed:</p> <table border="0" data-bbox="240 499 862 611"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>PM₁₀</td> <td>0.72 tpy</td> </tr> <tr> <td>PM_{2.5}</td> <td>0.17 tpy</td> </tr> </tbody> </table> <p>Annual emissions must be calculated based on actual material consumption consistent with methodology from Section 6 of the Technical Support Document.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	PM ₁₀	0.72 tpy	PM _{2.5}	0.17 tpy	5				
<u>Pollutant</u>	<u>Emission Limit</u>											
PM ₁₀	0.72 tpy											
PM _{2.5}	0.17 tpy											
8.	<p>Combined emissions from dust collectors used in support of outdoor operations must not exceed:</p> <table border="0" data-bbox="240 814 862 926"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>PM₁₀</td> <td>1.00 tpy</td> </tr> <tr> <td>PM_{2.5}</td> <td>0.23 tpy</td> </tr> </tbody> </table> <p>Annual emissions must be calculated based on actual hours of operation consistent with methodology from Section 6 of the Technical Support Document.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	PM ₁₀	1.00 tpy	PM _{2.5}	0.23 tpy	8				
<u>Pollutant</u>	<u>Emission Limit</u>											
PM ₁₀	1.00 tpy											
PM _{2.5}	0.23 tpy											
9.	<p>Combined emissions from portable engines used in support of outdoor operations must not exceed:</p> <table border="0" data-bbox="240 1125 862 1310"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>NO_x</td> <td>6.00 tpy</td> </tr> <tr> <td>CO</td> <td>7.60 tpy</td> </tr> <tr> <td>PM₁₀/PM_{2.5}</td> <td>0.68 tpy</td> </tr> <tr> <td>VOC</td> <td>0.88 tpy</td> </tr> </tbody> </table> <p>Annual emissions must be calculated based on actual hours of operation consistent with methodology from Section 6 of the Technical Support Document.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	NO _x	6.00 tpy	CO	7.60 tpy	PM ₁₀ /PM _{2.5}	0.68 tpy	VOC	0.88 tpy	9
<u>Pollutant</u>	<u>Emission Limit</u>											
NO _x	6.00 tpy											
CO	7.60 tpy											
PM ₁₀ /PM _{2.5}	0.68 tpy											
VOC	0.88 tpy											
10.	<p>Emissions from the PD 2100-D Skid-Mounted Vacuum System Engine must not exceed:</p> <table border="0" data-bbox="240 1474 862 1659"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>NO_x</td> <td>1.02 tpy</td> </tr> <tr> <td>CO</td> <td>0.27 tpy</td> </tr> <tr> <td>PM₁₀/PM_{2.5}</td> <td>0.06 tpy</td> </tr> <tr> <td>VOC</td> <td>0.11 tpy</td> </tr> </tbody> </table> <p>Annual emissions must be calculated based on actual hours of operation consistent with methodology from Section 6 of the Technical Support Document.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	NO _x	1.02 tpy	CO	0.27 tpy	PM ₁₀ /PM _{2.5}	0.06 tpy	VOC	0.11 tpy	10
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VOC	0.11 tpy											

No.	Emission Limits	Equipment/ Activity										
11.	<p>PM₁₀/PM_{2.5} emissions from the PD 2100-D Skid-Mounted Vacuum System exhaust must not exceed 0.005 gr/dscf (1-hr avg) and 0.07 tpy.</p> <p>Annual emissions must be calculated based on actual hours of operation consistent with methodology from Section 6 of the Technical Support Document.</p>	11										
12.	<p>Emissions from process space heater operation must not exceed:</p> <table border="0" data-bbox="250 470 870 651"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>NO_x</td> <td>1.76 tpy</td> </tr> <tr> <td>CO</td> <td>1.48 tpy</td> </tr> <tr> <td>PM₁₀/PM_{2.5}</td> <td>0.14 tpy</td> </tr> <tr> <td>VOC</td> <td>0.10 tpy</td> </tr> </tbody> </table> <p>Annual emissions must be calculated based on actual fuel consumption consistent with methodology from Section 6 of the Technical Support Document.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	NO _x	1.76 tpy	CO	1.48 tpy	PM ₁₀ /PM _{2.5}	0.14 tpy	VOC	0.10 tpy	12
<u>Pollutant</u>	<u>Emission Limit</u>											
NO _x	1.76 tpy											
CO	1.48 tpy											
PM ₁₀ /PM _{2.5}	0.14 tpy											
VOC	0.10 tpy											
13.	<p>Emissions from the Whisper Watt generator engine must not exceed:</p> <table border="0" data-bbox="250 819 870 999"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>NO_x</td> <td>0.56 tpy</td> </tr> <tr> <td>CO</td> <td>0.12 tpy</td> </tr> <tr> <td>PM₁₀/PM_{2.5}</td> <td>0.04 tpy</td> </tr> <tr> <td>VOC</td> <td>0.05 tpy</td> </tr> </tbody> </table> <p>Annual emissions must be calculated based on actual hours of operation consistent with methodology from Section 6 of the Technical Support Document.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	NO _x	0.56 tpy	CO	0.12 tpy	PM ₁₀ /PM _{2.5}	0.04 tpy	VOC	0.05 tpy	13
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VOC	0.05 tpy											
14.	<p>Emissions from the pipe cutter dust collector must not exceed:</p> <table border="0" data-bbox="250 1167 870 1276"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>PM₁₀</td> <td>0.44 tpy</td> </tr> <tr> <td>PM_{2.5}</td> <td>0.10 tpy</td> </tr> </tbody> </table> <p>Annual emissions must be calculated based on actual hours of operation consistent with methodology from Section 6 of the Technical Support Document.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	PM ₁₀	0.44 tpy	PM _{2.5}	0.10 tpy	14				
<u>Pollutant</u>	<u>Emission Limit</u>											
PM ₁₀	0.44 tpy											
PM _{2.5}	0.10 tpy											
15.	<p>Emissions from the Machitech Plasma Cutting Table must not exceed the following:</p> <table border="0" data-bbox="250 1444 870 1554"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>NO_x</td> <td>5.89 tpy</td> </tr> <tr> <td>PM₁₀/PM_{2.5}</td> <td>1.30 tpy</td> </tr> </tbody> </table> <p>Annual emissions must be calculated based on actual hours of operation consistent with methodology from Section 6 of the Technical Support Document.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	NO _x	5.89 tpy	PM ₁₀ /PM _{2.5}	1.30 tpy	15				
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NO _x	5.89 tpy											
PM ₁₀ /PM _{2.5}	1.30 tpy											
16.	<p>Emissions from the BeamCut Beamline System must not exceed the following:</p> <table border="0" data-bbox="250 1722 870 1831"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>NO_x</td> <td>5.89 tpy</td> </tr> <tr> <td>PM₁₀/PM_{2.5}</td> <td>0.59 tpy</td> </tr> </tbody> </table> <p>Annual emissions must be calculated based on actual hours of operation consistent with methodology from Section 6 of the Technical Support Document.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	NO _x	5.89 tpy	PM ₁₀ /PM _{2.5}	0.59 tpy	16				
<u>Pollutant</u>	<u>Emission Limit</u>											
NO _x	5.89 tpy											
PM ₁₀ /PM _{2.5}	0.59 tpy											

No.	Emission Limits	Equipment/ Activity						
17.	<p>Visible emissions must not exceed the values listed below for more than 3 minutes in any one hour period as determined by a Certified Observer in accordance with SWCAA Method 9.</p> <table data-bbox="240 331 1039 445"> <thead> <tr> <th data-bbox="240 331 852 369"><u>Emission Unit</u></th> <th data-bbox="852 331 1039 369"><u>Opacity Limit</u></th> </tr> </thead> <tbody> <tr> <td data-bbox="240 369 852 407">Diesel engine exhaust</td> <td data-bbox="852 369 1039 407">5%*</td> </tr> <tr> <td data-bbox="240 407 852 445">All other equipment</td> <td data-bbox="852 407 1039 445">0%</td> </tr> </tbody> </table> <p>* The opacity limit for diesel engine exhaust is not applicable during periods of cold start-up. Cold start-up ends when the earlier of the following operating events occurs:</p> <ul style="list-style-type: none"> (a) The engine has reached normal operating temperature; or (b) The engine has been operating for 15 minutes. 	<u>Emission Unit</u>	<u>Opacity Limit</u>	Diesel engine exhaust	5%*	All other equipment	0%	1-16
<u>Emission Unit</u>	<u>Opacity Limit</u>							
Diesel engine exhaust	5%*							
All other equipment	0%							

Operating Limits and Requirements

No.	Operating Limits and Requirements	Equipment/ Activity
18.	Reasonable precautions must be taken at all times to prevent and minimize fugitive emissions from plant operations.	Facility-wide
19.	The permittee must use recognized good practice and procedures to reduce odors to a reasonable minimum.	Facility-wide
20.	Each pollution control device/measure must be in use whenever the associated production equipment is in operation. Control devices must be operated and maintained in accordance with the manufacturer's specifications and operated in a manner that minimizes emissions.	1-16
21.	Emission units identified in this Permit must be maintained and operated in total and continuous conformity with the conditions identified in this Permit. SWCAA reserves the right to take any and all appropriate action to maintain the conditions of this Permit, including directing the facility to cease operations until corrective action can be completed.	1-16
22.	Each dust collector and baghouse must be equipped with an operable pressure gauge capable of continuously measuring the differential pressure across filtration media in the unit.	2-4, 6-8, 15-16
23.	Differential pressure across the filtration media in the Peddinghaus Plasma Cutter cartridge collector must not exceed 6.0" w.c.	2
24.	Doors and entryways in Bay 9 and the sandblasting room must remain closed at all times during active use.	3-5
25.	All containers of VOC containing materials must be kept securely closed with a lid in place except when in active use. Open containers for storage, transfer or disposal of VOC containing materials are prohibited. In addition, all VOC containing materials used to clean and/or flush spray equipment or lines during clean up must be collected and stored in a closed container.	5-8

No.	Operating Limits and Requirements	Equipment/ Activity
26.	The VOC content of coatings used to coat miscellaneous metal parts and products and architectural coatings at the facility must not exceed the limitations contained in SWCAA 490-205(2) and SWCAA 493-300, respectively.	5-8
27.	Portable and outdoor surface prep and spray coating activities must be fully enclosed at all times during active operation. Enclosures must be exhausted to a dust collector or other control device which will reliably achieve 99.9% control efficiency or better for particulate matter with an aerodynamic diameter of 0.5 microns or larger.	6-8
28.	Outdoor surface prep and spray coating operations must only be utilized when the pieces being processed are too large to be reasonably accommodated in the facility's regular surface prep equipment and/or spray coating bays.	8-9
29.	Portable engines must be used in support of outdoor operations only when landline utility power is not reasonably available for the same purpose.	9
30.	Portable engines used in support of outdoor operations must be no more than 10 model years old.	9
31.	Individual engines used in support of outdoor operations must not operate in excess of 1,000 hr/yr.	9
32.	Combined power output from portable engines used in support of outdoor operations must not exceed 800,000 hp-hr/yr. Compliance with this limit must be determined by summing total power output for successive 12 consecutive month periods rolled in monthly increments.	9
33.	Diesel engines must only be fired on #2 diesel or better. The sulfur content of the fuel fired in the diesel engine must not exceed 0.0015% by weight (15 ppm). A fuel certification from the fuel supplier may be used to demonstrate compliance with this requirement. Alternate fuels may be proposed, but each alternate fuel must be approved by SWCAA prior to use.	9-10, 13
34.	The PD 2100-D Skid-Mounted Vacuum System must not operate more than 1,500 hr/yr. A nonresettable time totalizer must be installed and used to measure hours of operation.	10-11
35.	The Whisper Watt generator must not operate more than 200 hr/yr. A nonresettable time totalizer must be installed and used to measure hours of operation.	13
36.	When discharging directly to the ambient atmosphere, exhaust from the pipe cutter dust collector must be discharged vertically. Any device that obstructs or prevents vertical discharge is prohibited.	14
37.	Exhaust from plasma cutter dust collectors must be discharged vertically. Any rain cap that interferes with vertical dispersion is prohibited.	15-16

Monitoring and Recordkeeping Requirements

No.	Monitoring and Recordkeeping Requirements	Equipment/ Activity																										
38.	All air quality related complaints, including odor complaints, received by the permittee and the results of any subsequent investigation or corrective action must be recorded for each occurrence.	Facility-wide																										
39.	With the exception of data logged by a computerized data acquisition system, each record required by this Permit must include the date and the name of the person making the record entry. If a control device or process is not operating during a specific time period, a record must be made to that effect.	1-16																										
40.	All records required by this Permit must be kept for a minimum period of no less than five years and must be maintained in a form readily available for inspection by SWCAA representatives.	1-16																										
41.	Excess emissions and upset conditions must be recorded for each occurrence.	1-16																										
42.	<p>The following emission related information must be collected, recorded at the intervals specified below, and maintained readily available on-site for inspection:</p> <table border="0" data-bbox="203 808 1315 1323"> <tbody> <tr> <td>(a) Dust collector/baghouse differential pressure</td> <td>Recorded weekly</td> </tr> <tr> <td>(b) Dust collector/baghouse operation (hr/unit)</td> <td>Recorded monthly</td> </tr> <tr> <td>(c) Coating and solvent consumption</td> <td>Recorded monthly</td> </tr> <tr> <td>(d) Welding rod consumption</td> <td>Recorded monthly</td> </tr> <tr> <td>(e) Space heater fuel consumption</td> <td>Recorded monthly</td> </tr> <tr> <td>(f) Portable engine operation (hr/unit)</td> <td>Recorded monthly</td> </tr> <tr> <td>(g) PD 2100-D Vacuum System operation</td> <td>Recorded monthly</td> </tr> <tr> <td>(h) Whisper Watt Generator operation</td> <td>Recorded monthly</td> </tr> <tr> <td>(i) Air emissions</td> <td>Recorded monthly</td> </tr> <tr> <td>(j) Make, model, serial number and horsepower rating of portable engines</td> <td>Recorded for each portable engine</td> </tr> <tr> <td>(k) Sulfur certification for engine fuel</td> <td>Recorded for each fuel delivery</td> </tr> <tr> <td>(l) Type and quantity of hazardous waste disposal</td> <td>Recorded for each occurrence</td> </tr> <tr> <td>(m) Equipment repair and maintenance activity</td> <td>Recorded for each occurrence</td> </tr> </tbody> </table>	(a) Dust collector/baghouse differential pressure	Recorded weekly	(b) Dust collector/baghouse operation (hr/unit)	Recorded monthly	(c) Coating and solvent consumption	Recorded monthly	(d) Welding rod consumption	Recorded monthly	(e) Space heater fuel consumption	Recorded monthly	(f) Portable engine operation (hr/unit)	Recorded monthly	(g) PD 2100-D Vacuum System operation	Recorded monthly	(h) Whisper Watt Generator operation	Recorded monthly	(i) Air emissions	Recorded monthly	(j) Make, model, serial number and horsepower rating of portable engines	Recorded for each portable engine	(k) Sulfur certification for engine fuel	Recorded for each fuel delivery	(l) Type and quantity of hazardous waste disposal	Recorded for each occurrence	(m) Equipment repair and maintenance activity	Recorded for each occurrence	1-16
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Emission Monitoring and Testing Requirements

No.	Emission Monitoring and Testing Requirements	Equipment/ Activity
43.	<p>If SWCAA documents excess visible emissions from a plasma cutter dust collector, the permittee may be required to perform an emission test and/or periodic emission testing of the affected dust collector. Under this provision, periodic emission testing of the affected baghouse is limited to a maximum frequency of once every 60 months. All emission testing must be conducted in accordance with Appendix A of this Permit.</p> <p>Nothing in this requirement restricts SWCAA's authority under SWCAA 400-106 to order or conduct emission testing.</p>	15-16

Reporting Requirements

No.	Reporting Requirements	Equipment/ Activity
44.	All air quality related complaints received by the permittee must be reported to SWCAA within three days of receipt.	Facility-wide
45.	<p>Excess emissions must be reported to SWCAA as follows:</p> <ul style="list-style-type: none"> • As soon as possible, but no later than 12 hours after discovery for emissions that represent a potential threat to human health or safety; • As soon as possible, but no later than 48 hours after discovery for emissions which the permittee wishes to claim as unavoidable pursuant to SWCAA 400-107; and • No later than 30 days after the end of the month of discovery for all other excess emissions. 	Facility-wide
46.	<p>The permittee must notify SWCAA at least seven days in advance of the use of any new material which results in the emission of toxic or hazardous air pollutants not listed in Section 6 of the Technical Support Document for this Permit. In response to the notification, SWCAA may require that a written report be submitted with the following:</p> <ol style="list-style-type: none"> (a) A description of the proposed change(s) in materials with an SDS for each new material, (b) The date the change(s) is (are) to be made, (c) The change(s) in emissions of VOCs, HAPs and TAPs occurring as a result of the change, and (d) A summary of any applicable requirement(s) that would apply as a result of the change(s). <p>If the proposed emission rate of a new TAP exceeds the applicable SQER and/or other emission limits established by this Permit or otherwise circumvents an applicable requirement, New Source Review may be required prior to making the proposed change. Any new product used only for testing purposes does not need to be reported to SWCAA prior to use, provided the quantity of usage does not exceed five (5) gallons.</p>	Facility-wide
47.	An annual emissions inventory report must be submitted in accordance with SWCAA 400-105(1). In addition to the emissions information required under SWCAA 400-105(1), each annual report must include an estimate of annual emission quantities for each TAP compound listed in the Technical Support Document for this Permit.	1-16
48.	<p>The following emission related data must be reported to SWCAA by September 15 and March 15 for the preceding periods of January to June and July to December, respectively:</p> <ol style="list-style-type: none"> (a) Monthly coating and solvent consumption; (b) Monthly welding rod consumption; (c) Monthly process space heater fuel consumption; (d) Hours of operation for each dust collector and baghouse; (e) Hours of operation for PD 2100-D Vacuum System; (f) Hours of operation for Whisper Watt Generator; (g) Type and quantity of hazardous waste disposal; and (h) A summary of monthly air emissions during the reporting period. 	1-16

No.	Reporting Requirements	Equipment/ Activity
49.	At least 15 days prior to conducting a temporary outdoor operation, the Permittee must submit a written report to SWCAA containing a description of all portable equipment proposed for use with the pending project. Equipment descriptions must include, at a minimum, the following information for each proposed unit: <ul style="list-style-type: none"> (a) Equipment classification (dust collector, generator, air compressor, etc.); (b) Identification of power source (electric, engine driven, etc.); (c) Rated capacity (flowrate, power rating, fuel consumption rate, etc.); (d) Expected operating schedule; and (e) Make, model, serial number and horsepower rating of associated portable engines. 	8-9
50.	Within 30 days of completing a temporary outdoor operation, the Permittee must submit a written report to SWCAA containing the following information for each project: <ul style="list-style-type: none"> (a) Total operation of each piece of portable equipment (hours); (b) Rated capacity of each piece of portable equipment (flowrate, power rating, etc.); (c) Make, model, serial number, and horsepower rating of each portable engine used in support of the project; (d) Total operation of each portable engine used in support of the project; (e) Cumulative portable engine power output for the project (hp-hr); and (f) A summary of air emissions resulting from the project. 	8-9
51.	Emission test results must be reported to SWCAA in writing within 45 days of test completion.	15-16
52.	Initial start-ups of SWCAA approved emission units must be reported to SWCAA via letter within 10 days	15-16

3. General Provisions

No.	General Provisions
A.	For the purpose of ensuring compliance with this Permit, duly authorized representatives of the Southwest Clean Air Agency must be permitted access to the permittee's premises and the facilities being constructed, owned, operated and/or maintained by the permittee for the purpose of inspecting said facilities. These inspections are required to determine the status of compliance with this Permit and applicable regulations and to perform or require such tests as may be deemed necessary.
B.	The provisions, terms and conditions of this Permit bind the permittee, its officers, directors, agents, servants, employees, successors and assigns, and all persons, firms, and corporations acting under or for the permittee.
C.	The requirements of this Permit survive any transfer of ownership of the source or any portion thereof.
D.	This Permit must be posted conspicuously at or be readily available near the source.
E.	This Permit will be invalid if construction has not commenced within eighteen (18) months from date of issuance, if construction is discontinued for a period of eighteen (18) months or more, or if construction is not completed within a reasonable time.

No.	General Provisions
F.	This Permit does not supersede requirements of other Agencies with jurisdiction and further, this Permit does not relieve the permittee of any requirements of any other governmental Agency. In addition to this Permit, the permittee may be required to obtain permits or approvals from other agencies with jurisdiction.
G.	Compliance with the terms of this Permit does not relieve the permittee from the responsibility of compliance with SWCAA General Regulations for Air Pollution Sources, previously issued Regulatory Orders, RCW 70.15A, Title 173 WAC or any other applicable emission control requirements, nor from the resulting liabilities and/or legal remedies for failure to comply.
H.	If any provision of this Permit is held to be invalid, all unaffected provisions of the Permit will remain in effect and be enforceable.
I.	No change in this Permit will be made or be effective except as may be specifically set forth by written order of the Southwest Clean Air Agency upon written application by the permittee for the relief sought.
J.	The Southwest Clean Air Agency may, in accordance with RCW 70.15A impose such conditions as are reasonably necessary to assure the maintenance of compliance with the terms of this Permit, the Washington Clean Air Act, and the applicable rules and regulations adopted under the Washington Clean Air Act.

Air Discharge Permit 21-3481 - Appendix A
Emission Testing Requirements
Plasma Cutter Dust Collectors

1. Introduction:

The purpose of this testing is to quantify emissions from the plasma cutter dust collectors and demonstrate compliance with the requirements of this Permit and applicable air quality regulations.

2. Testing Requirements:

- a. **Testing Schedule.** Each dust collector required by SWCAA to emission test due to excess visible emissions, must be emission tested no later than 90 days following notification to the source. Periodic emission testing may also be required with a frequency not to exceed once every 60 months. Emission testing conducted more than three months prior to a scheduled due date will not satisfy the periodic source emission testing requirement unless prior written approval is obtained from SWCAA.
- b. **Test Plan.** A comprehensive test plan must be submitted to SWCAA for review and approval at least 10 business days prior to each test. SWCAA personnel must be informed at least five business days prior to testing so that a representative may be present during testing.
- c. **Test Location.** Sampling must be conducted at the dust collector exhaust stack.
- d. **Test Runs/Reference Test Methods.** A minimum of three (3) test runs must be for each constituent listed below to ensure the data are representative. Compliance must be demonstrated by averaging the results of the individual sampling runs.

<u>Constituent</u>	<u>Reference Test Method</u>	<u>Minimum Test Run Duration</u>
Flow rate, temperature	EPA Methods 1 and 2	N/A
O ₂ , CO ₂ content	EPA Method 3*	N/A
Moisture content	EPA Method 4	60 minutes
PM	EPA Method 5	60 minutes
Opacity	SWCAA Method 9	6 minutes**

* Ambient concentrations of O₂ and CO₂ can be assumed instead of using Method 3

** If visible emissions are observed during any 6 minute test run, the affected test run must be extended to a length of 60 minutes.

3. Source Operation:

- a. **Source Operations.** Source operations during the emissions test must be representative of maximum intended operating conditions.
- b. **Record of Production Parameters.** Production related parameters and equipment operating conditions must be recorded during emissions testing to correlate operating conditions with emissions. All recorded production parameters must be documented in the test results report. At a minimum, the following parameters must be recorded:
 - (1) Differential pressure across filtration media,
 - (2) Type of material being cut, and
 - (3) Process startups/shutdowns

Air Discharge Permit 21-3481 - Appendix A
Emission Testing Requirements
Plasma Cutter Dust Collectors

4. Reporting Requirements:

- a. **Test Report.** A final emission test report must be prepared and submitted to SWCAA within 45 calendar days of test completion. Unless otherwise directed, test reports must be provided in hard copy (paper) and an electronic format acceptable to SWCAA. Each test report must include, at a minimum, the following information:
- (1) Description of the source including manufacturer, model number and design capacity of the equipment, and the location of the sample ports or test locations,
 - (2) Time and date of the test and identification and qualifications of the personnel involved, including SWCAA personnel who observed the testing,
 - (3) Summary of results, reported in units and averaging periods consistent with the applicable emissions standard or unit,
 - (4) Summary of control system or equipment operating conditions,
 - (5) Summary of production related parameters cited in Section 3.b,
 - (6) A description of the test methods or procedures used including all field data, quality assurance/quality control procedures and documentation,
 - (7) A description of the analytical procedures used including all laboratory data, quality assurance/quality control procedures and documentation,
 - (8) Copies of field data and example calculations,
 - (9) Chain of custody information,
 - (10) Calibration documentation,
 - (11) Discussion of any abnormalities associated with the results, and
 - (12) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.
- b. **Test Results.** PM emissions must be reported in units of gr/dscf and lb/hr. All test results must be reported as measured.

5. Changes to Testing Requirements:

Emission testing must be conducted as specified in the sections above. The Permittee may submit a written request to SWCAA for approval of minor modifications to the requirements above or the testing schedule. Upon review of the request and in accordance with EPA delegation, SWCAA will inform the Permittee in writing of any approved modifications.

State Environmental Policy Act

DETERMINATION OF NONSIGNIFICANCE (DNS) – SWCAA 21-028

Description of proposal:

ADP Application CL-3173: Installation of two new plasma cutting units (Machitech cutting table, BeamCut beamline system) and removal of three existing units from service (MG cutting table, PCD baghouse, Wheelabrator unit). The proposed project will install the new equipment in an existing work bay. The project will not alter current use or method of operation at the facility. Impact to all media other than air will be consistent with current operations. Air emissions from operation of the new units will be controlled with process enclosure and high efficiency filtration.

Proponent: Thompson Metal Fab, LLC (Peter Hatfield, HS&E Manager)

Location of proposal, including street address if any:

3000 Hidden Way, Vancouver, Washington 98661

Lead agency: Southwest Clean Air Agency

The lead agency for this proposal has determined that it does not have a probable significant impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

- There is no comment period for this DNS.
- This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period in the DNS.
- This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 15 days from the date below. Comments must be submitted by _____.

Responsible official: Clint Lamoreaux, P.E.
Position/title: Chief Engineer (*acting*)

Address: Southwest Clean Air Agency
11815 NE 99th St, Suite 1294
Vancouver, WA 98682-2322
Phone: (360) 574-3058, ext 130

Signature: Clint H. Lamoreaux

Date: 10/6/2021



PUBLIC NOTICE

Notice to the public is hereby given that the Southwest Clean Air Agency (SWCAA) is providing a 30 day public comment period for the preliminary determination to issue Air Discharge Permit 21-3481 to Thompson Metal Fab. This preliminary determination approves installation of new plasma cutting equipment and removal of existing equipment at a metal fabrication facility located at 3000 SE Hidden Way in Vancouver, Clark County, Washington. Emissions from operation of the new plasma equipment will be controlled with process enclosure and high efficiency filtration. No other changes will be made to the facility or associated approval conditions.

Copies of the preliminary Air Discharge Permit and associated Technical Support Document are available for review at 11815 NE 99th Street, Suite 1294, Vancouver, Washington, Monday through Friday from 7:00 a.m. to 5:30 p.m. Electronic copies are available for review in the permit section of SWCAA's internet website (www.swcleanair.org/permits/publiccomments.asp). This material will be made available in other media, if necessary. All written or oral comments must be received by SWCAA within thirty (30) days after the date of publication. If there is a demonstrated significant public interest, a public meeting may be held at the close of the public comment period.