



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 N Hilton Street, Boise, ID 83706
(208) 373-0502

Brad Little, Governor
Jess Byrne, Director

July 29, 2021

Kyle Davis, Mechanical Engineer
Inventive LLC dba In the Ditch Towing Products
2915 Industrial Way
Mountain Home, ID 83647

RE: Facility ID No. 039-00036, Inventive LLC dba In the Ditch Towing Products, Mountain Home
Final Permit Letter

Dear Mr. Davis:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2011.0070 Project 62577 to Inventive LLC dba In the Ditch Towing Products located at Mountain Home for the permit modification to increase coating usage and install additional equipment. This PTC is issued in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho) and is based on the certified information provided in your PTC application received February 8, 2021.

This permit is effective immediately and replaces PTC No. P-2011.0070 issued on September 27, 2018. This permit does not release Inventive LLC dba In the Ditch Towing Products from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

Pursuant to the Construction and Operation Notification General Provision of your permit, it is required that construction and operation notification be provided. Please provide this information as listed to DEQ's Boise Regional Office, 1445 N. Orchard, Boise, ID 83706, Fax (208) 373-0287.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a permit handoff meeting with David Luft, Air Quality Manager, at (208) 373-0201 to review and discuss the terms and conditions of this permit. Should you choose to schedule this meeting, DEQ recommends that the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any other staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a

Mr. Davis
July 29, 2021
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contested case, I encourage you to contact Aaron Hoberg at (208) 373-0502 or aaron.hoberg@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,

A handwritten signature in cursive script, appearing to read "Mike Simon".

Mike Simon
Stationary Source Bureau Chief
Air Quality Division

MS\ajh

Permit No. P-2011.0070 PROJ 62577

Enclosures

Air Quality

PERMIT TO CONSTRUCT

Permittee Inventive LLC dba In The Ditch Towing Products
Permit Number P-2011.0070
Project ID 62577
Facility ID 039-00036
Facility Location 2915 Industrial Way
Mountain Home, ID 83647

Permit Authority

This permit (a) is issued according to the “Rules for the Control of Air Pollution in Idaho” (Rules), IDAPA 58.01.01.200–228; (b) pertains only to emissions of air contaminants regulated by the State of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with the application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; and (g) in no manner implies or suggests that the Idaho Department of Environmental Quality (DEQ) or its officers, agents, or employees assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment, or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200–228.

Date Issued July 29, 2021



Aaron Hoberg, Permit Writer



Mike Simon, Stationary Source Bureau Chief

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1 Permit Scope

Purpose

- 1.1 This is a modified permit to construct (PTC) to eliminate wet coating processes, increase powder coating usage, remove equipment at the previous manufacturing building, and install additional equipment in a new manufacturing building co-located on the property.
- 1.2 Those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and on the right-hand margin.
- 1.3 This PTC replaces Permit to Construct No. P-2011.0070 issued on September 27, 2018.

Regulated Sources

Table 1.1 lists all sources of regulated emissions in this permit.

Table 1.1 Regulated Sources

Permit Section	Source	Control Equipment
2	<p><u>(9) Natural Gas Sources:</u></p> <p><u>H1 and H2 – Make-up Air Units:</u> Manufacturer: Cambridge Engineering Model: M130 Manufacture Date: 2021 Heat input rating: 2.476 MMBtu/hr Fuel: Natural Gas</p> <p><u>H3 – Burn-off Oven:</u> Manufacturer: Pollution Control Products, Co. Model: PRC-150 Manufacture Date: 2021 Heat input rating: 0.48 MMBtu/hr Fuel: Natural Gas</p> <p><u>H4 – Manual Powder Spray Booth Burner:</u> Manufacturer: Steelman Industries Model: 8810 GSP-OB Manufacture Date: Unknown Heat input rating: 0.50 MMBtu/hr Fuel: Natural Gas</p> <p><u>H5 – Automated Powder Coating Line – Washer Heater:</u> Manufacturer: Industrial Process Equipment Model: N/A Manufacture Date: 2021 Heat input rating: 1.224 MMBtu/hr Fuel: Natural Gas</p>	None

Table 1.2 Regulated Sources (continued)

Permit Section	Source	Control Equipment
2	<p><u>H6 – Automated Powder Coating Line – Dry-off Oven:</u> Manufacturer: Industrial Process Equipment Model: N/A Manufacture Date: 2021 Heat input rating: 2.040 MMBtu/hr Fuel: Natural Gas</p> <p><u>H7 – Automated Powder Coating Line – Cure Oven #1:</u> Manufacturer: Industrial Process Equipment Model: N/A Manufacture Date: 2021 Heat input rating: 2.040 MMBtu/hr Fuel: Natural Gas</p> <p><u>H8 – Automated Powder Coating Line – Cure Oven #2:</u> Manufacturer: Industrial Process Equipment Model: N/A Manufacture Date: 2021 Heat input rating: 2.040 MMBtu/hr Fuel: Natural Gas</p> <p><u>H9 – Automated Powder Coating Line – Pre-Gel IR Unit:</u> Manufacturer: Industrial Process Equipment Model: N/A Manufacture Date: 2021 Heat input rating: 0.816 MMBtu/hr Fuel: Natural Gas</p>	None
3	<p><u>Paint Spray Booth:</u> Manufacturer: Steelman Industries, Inc. Model: 8810 GSP-OB Manufacture Date: 2018 Booth Type: Side 07/29/2021 Spray Gun: GEMA OptiFlex 2F - HVLP</p> <p><u>Paint Spray Booth:</u> Manufacturer: Global Finishing Solutions Model: PRBW-101013 Manufacture Date: 2021 Booth Type: Cross 07/29/2021 Spray Gun: GEMA OptiFlex 2F - HVLP</p> <p><u>Paint Spray Booth:</u> Manufacturer: Industrial Process Equipment Model: Automatic Line Manufacture Date: 2021 Booth Type: Side 07/29/2021 Spray Gun: Nordson Encore LT - HVLP</p>	<p><u>Steeleman Booth Control:</u> Manufacturer: APEL Model: C106B2 Type: Dry Filters PM₁₀ control efficiency: 90% Gun Transfer Efficiency: 85%</p> <p><u>Global Booth Control:</u> Manufacturer: Midwesco/TDC Model: QX Filter Media Type: Dry Filters PM₁₀ control efficiency: 88% Gun Transfer Efficiency: 85%</p> <p><u>Industrial Booth Control:</u> Manufacturer: Nordson Model: PowderGrid Cartridge Type: Dry Filters PM₁₀ control efficiency: 99.9% Gun Transfer Efficiency: 85%</p>

Table 1.3 Regulated Sources (continued)

Permit Section	Source	Control Equipment
4	<u>(17) Welders:</u> <u>W1 to W17 – Welders:</u> Manufacturer: Lincoln Electric, Millermatic, and Miller Invision Models: 350P, 251, 252, and 352 Manufacture Date: Unknown Type: Gas Metal Arc Welding (GMAW) and MigTig	None
	<u>(3) Laser Cutters:</u> <u>L1 to L3 – Laser Cutters:</u> Manufacturer: Mazak Models: Optiplex 3015 III 8000W and FT 150 Manufacture Date: 2021 Fuel: Electric	<u>Dust Collector:</u> Manufacturer: Robovent Model: Plaser 3 Filter Type: Endurex B16 ePTFE PM ₁₀ control efficiency: 99.9%
	<u>(3) Metal Saw Cutters:</u> <u>M1 to M3 – Metal Saw Cutters:</u> Manufacturer: Marvel and Ellis Model: 380A PC3360, PA 10/3EPC, 1600 Manufacture Date: Unknown	None

2 Combustion Sources

2.1 Process Description

Nine natural gas sources provide space heating and coat curing. The nine sources are located throughout the facility.

2.2 Control Device Descriptions

Table 2.1 Combustion Sources Description

Emissions Units / Processes	Control Devices	Emission Points
H1 and H2 – Make-up Air Units	None	H1 and H2 heater exhaust
H3 – Burn-off Oven	None	H3 oven exhaust
H4 – Manual Powder Spray Booth Burner	None	Spray booth exhaust
H5 – Automated Powder Coating Line – Washer Heater	None	H5 heater exhaust
H6 – Automated Powder Coating Line – Dry-off Oven	None	H6 oven exhaust
H7 – Automated Powder Coating Line – Cure Oven #1	None	H7 oven exhaust
H8 – Automated Powder Coating Line – Cure Oven #2	None	H8 oven exhaust
H9 – Automated Powder Coating Line – Pre-Gel IR Unit	None	H9 heater exhaust

[07/29/2021]

Emission Limits

2.3 Emission Limits

The emissions from the Combustion Sources stacks shall not exceed any corresponding emissions rate limits listed in Table 2.2.

Table 2.2 Combustion Sources Emission Limits^(a)

Source Description	PM _{2.5} /PM ₁₀ ^(b)		SO ₂		NO _x		CO		VOC	
	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)
H1-H9 Combustion Sources	0.035	0.15	0.003	0.01	0.455	2.00	0.383	1.68	0.025	0.11

- In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
- Particulate matter with an aerodynamic diameter less than or equal to a nominal two point five (2.5) and ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
- Pounds per hour, as determined by AP-42 emission factors published by the EPA and fuel usage.
- Tons per any consecutive 12-calendar month period.

[07/29/2021]

2.4 Opacity Limit

Emissions from the Combustion Sources or any other stack, vent, or functionally equivalent opening associated with the Combustion Sources, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[07/29/2021]

Operating Requirements

2.5 Fuel-Burning Equipment

The permittee shall not discharge to the atmosphere from any fuel-burning equipment PM in excess of 0.015 grains per dry standard cubic foot (gr/dscf) of effluent gas corrected to 3% oxygen by volume for gas.

[09/27/2018]

2.6 Fuel Restriction

The Fuel-Burning Equipment shall combust natural gas, exclusively. Natural Gas throughput shall not exceed 39.9 MMscf per any consecutive 12-month period.

[07/29/2021]

Monitoring and Recordkeeping Requirements

2.7 Natural Gas Throughput Limits Monitoring

Each calendar month, the permittee shall monitor and record the usage of natural gas at the facility for the previous month in MMscf per month. The monthly usage of natural gas shall be determined by summing the monthly usage of natural gas over the previous consecutive 12-month period to demonstrate compliance with the Fuel Restriction Operating Requirements Permit Condition.

[07/29/2021]

3 Coating Operations

3.1 Process Description

Powder coating is performed in two manual powder coating booths and in an automated powder coating line. The manual booths utilize GEMA OptiFlex 2F HVLP spray guns and the automated line utilizes a Nordson Encore LT HVLP powder coating gun. Prior to coating, work parts are prepared and cleaned in a washing process using DURALINK 450, DURATEC 602, and GF CLEAN 1052.

3.2 Control Device Descriptions

Table 3.1 Coating Operations Description

Emissions Units / Processes	Control Devices	Emission Points
Paint Spray Booth: Steelman Industries, Inc.	APEL Dry Filters	Paint Booth Exhaust
Paint Spray Booth: Global Finishing Solutions	Midwesco/TDC Dry Filters	Paint Booth Exhaust
Paint Spray Booth: Industrial Process Equipment	Nordson Dry Filters	Paint Booth Exhaust
Washing Process	None	N/A

[07/29/2021]

Emission Limits

3.3 Emission Limits

The emissions from the paint booth stacks and washing process stack shall not exceed any corresponding emissions rate limits listed in Table 3.2.

Table 3.2 Coating and Washing Emission Limits^(a)

Source Description	PM _{2.5} /PM ₁₀ ^(b)	
	lb/hr ^(c)	T/yr ^(d)
Coating and Washing Operations	0.113	0.42

- a) In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
- b) Particulate matter with an aerodynamic diameter less than or equal to a nominal two point five (2.5) and ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
- c) Pounds per hour, as determined by AP-42 transfer efficiencies published by the EPA and filter particulate control efficiencies.
- d) Tons per any consecutive 12-calendar month period.

[07/29/2021]

3.4 Opacity Limit

Emissions from the coating and washing operations stacks, or any other stack, vent, or functionally equivalent opening associated with the coating and washing operations, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[07/29/2021]

Operating Requirements

3.5 Coating Process Throughput Limits

The throughput for the coating process shall not exceed the coating usage limits in Table 3.3.

The coating usage limits have demonstrated compliance with the Coating and Washing Emission Limits, the Screening Emission Rates, and Modeled Concentration Limits.

Table 3.3 Approved Coating Usage Limits

Coating Material	Coating Usage Limits ^(a)	
	lb/day (gal/day)	T/yr (gal/yr)
LC SD Novae Black II 9930-92357	75 (6.92)	11.7 (2,158.67)
TEX Black 9012-9000	75 (6.00)	11.7 (1,870.50)

a) Pounds of material converted to gallons using the density of material.

[07/29/2021]

3.6 Spray Gun and Spray Booth Filter System

All coating at the facility shall be conducted inside one of the three spray booths with filters in place, fan(s) operating, and door(s) closed.

All coating at the facility shall utilize a GEMA OptiFlex 2F HVLP coating gun in the manual spray booths and a Nordson Encore LT with nLighten HVLP coating gun in the automated line.

The permittee shall install, maintain, and operate according to the manufacturer's specifications and recommendations, a control filter system with a minimum capture efficiency of no less than 88% for particulates as documented by the filter manufacturer.

[07/29/2021]

3.7 Washing Process Throughput Limits

The throughput for the washing process shall not exceed the washing usage limits in Table 3.4. The washing usage limits have demonstrated compliance with the Coating and Washing Emission Limits, the Screening Emission Rates, and Modeled Concentration Limits.

Table 3.4 Approved Washing Usage Limits

Washing Material	Washing Usage Limits		
	gal/day ^(a)	gal/month	gal/year
Duralink 450	2.29	55	660
Duralink 602	2.29	55	660
GF Clean 1052	6.88	165	1,980

a) Gallons per day assumes 24 working days per month.

[07/29/2021]

Alternative Coating and Washing Usage Scenarios

Unless using an Approved Coating or Washing Usage Scenario for which compliance has previously been determined in Tables 3.3 and 3.4, such as when new or reformulated materials are introduced, each day before new materials are used the permittee shall follow the procedures of this section. The permittee shall not use any new material until TAP compliance and Emission Limit compliance has been demonstrated for that material according to the following permit conditions.

3.8 Propose a Daily Coating and Washing Usage Scenario

The permittee shall propose and record maximum daily usage limits for each new coating and washing material that will be used, in gallons per day (gal/day). The permittee shall not use or implement any material that does not have a recorded maximum daily usage limit.

The permittee shall estimate emissions of PM₁₀/PM_{2.5}, VOC, and all TAP listed in Table 3.5 in pounds per day (lb/day) for each pollutant using the procedures described below.

The permittee shall not use any materials that do not demonstrate compliance with the approved emission limits or TAP compliance.

The daily usage limits and emissions estimates used in determining emission limit and TAP compliance shall be based on estimated emissions from all coating and washing operations at the facility (facility-wide).

[07/29/2021]

3.9 Estimating Coating and Washing TAP Emissions

TAP emissions shall be estimated for all TAP listed in Table 3.5 using the methods described in this section.

- Emissions shall be estimated by multiplying each maximum daily usage rate in gallons per day (gal/day) by the pounds per gallon (lb/gal) of the TAP concentration as calculated based on the SDS weight percentage and density of the material. TAP emissions that are designated as a particulate in Table 3.5 may also use the spray gun transfer efficiency and documented filtration system control efficiency.
- For TAP concentrations where a range is listed on the SDS, the highest value of the range shall be used to estimate emissions.
- When the TAP concentration is listed as below the detection on the SDS or other documentation, the TAP concentration shall be assumed equal to the density divided by 100 (1% of the density in lb/gal).

[07/29/2021]

3.10 Demonstrating TAP Compliance

For each new material, the permittee shall estimate TAP emissions and compare against the TAP Screening Emission Rates and Modeled Concentration Limits in Table 3.5

- The permittee shall compare estimated TAP emissions for all coatings and washing materials used in the facility (facility-wide) against the Screening Emission Rates in Table 3.5. For emissions equal or less than the Screening Emission Rate, a modeling analysis is not required. For emissions exceeding the Screening Emission Rate, a modeling analysis is required to determine the maximum modeled concentration.
- All modeling analyses shall use an EPA approved model and follow relevant guidance in the most recent version of the “State of Idaho Guideline for Performing Air Quality Impact Analyses”.

Table 3.5 TAP Screening Emission Rates and Modeled Concentration Limits

TAP	CAS	Particulate?	Screening Emission Rate (lb/day)^(a)	Modeled Concentration Limit (mg/m³)
Acetone	67-64-1	No	2856	89
Acrylamide	79-06-1	No	0.0001224	0.00000077
Aluminum - Metal and Oxide	7429-90-5	Yes	16.008	0.5
Aluminum - Soluble Salts	7429-90-5	Yes	3.192	0.1
n-Amyl Acetate	628-63-7	No	847.2	26.5
Antimony & Compounds, as Sb	7440-36-0	Yes	0.792	0.025
Barium (Soluble Compounds), as Ba	7440-39-3	Yes	0.792	0.025
Benzene	71-43-2	No	0.0192	1.20E-04
Benzoyl peroxide	94-36-0	No	7.992	0.25
Bis (2-Ethylhexyl) Phthalate (DEHP)	117-81-7	No	0.672	0.0042
2-Butoxyethanol	111-76-2	No	192	6
2-Butoxyethyl Acetate	112-07-2	No	199.92	1.25
n-Butyl Acetate	123-86-4	No	1135.2	35.5
n-Butyl Alcohol	71-36-3	No	240	7.5
Calcium Carbonate	1317-65-3	Yes	16.008	0.5
Carbon Black	1333-86-4	Yes	5.52	0.175
Carbon Tetrachloride	56-23-5	No	0.01056	0.067
Chromium Metal, Chromium (III) Compounds as Cr	7440-47-3, 16065-83-1	Yes	0.792	0.025
Cumene	98-82-8	No	391.2	12.25
Cyclohexane	110-82-7	No	1680	52.5
Cyclohexanone	108-94-1	No	160.08	5
Diacetone Alcohol	123-42-2	No	384	12
Dibutyl Phthalate	84-74-2	No	7.992	0.25
1,4-Dichlorobenzene	106-46-7	No	720	22.5
o-Dichlorobenzene	95-50-1	No	480	15
Diethyl Phthalate	84-66-2	No	7.992	0.25
Diisobutyl Ketone	108-83-8	No	232.08	7.25
Dimethylphthalate	131-11-3	No	7.992	0.25
Dipropylene Glycol Methyl Ether	34590-94-8	No	960	30
2,6-Di- <i>tert</i> -butyl-p-cresol (butylated hydroxytoluene)	128-37-0	No	16.008	0.5
Ethyl Acetate	141-78-6	No	2239.2	70
Ethyl Alcohol	64-17-5	No	3000	94
Ethyl Benzene	100-41-4	No	696	21.75
Ethylene Glycol Vapor	107-21-1	No	20.304	6.35
Formaldehyde	50-00-0	No	0.01224	7.70E-05
Heptane (n-Heptane)	142-82-5	No	2616	82
Hexamethylene Diisocyanate	822-06-0	No	0.048	0.0015

Table 3.5 TAP Screening Emission Rates and Modeled Concentration Limits (continued)

Hexane (n-Hexane)	110-54-3	No	288	9
Hydroquinone	123-31-9	No	3.192	0.1
Iron Oxide Fume (Fe ₂ O ₃) as Fe	1309-37-1	Yes	7.992	0.25
Isobutyl Acetate	110-19-0	No	1120.8	35
Isobutyl Alcohol	78-83-1	No	240	6
Isophorone Diisocyanate	4098-71-9	No	0.144	0.0045
Isopropyl Alcohol	67-63-0	No	1567.2	49
Isopropyl Acetate	108-21-4	No	1663.2	52
Kaolin	1332-58-7	Yes	3.192	0.1
Manganese as Mn, Dust & Compounds	7439-96-5	Yes	7.992	0.25
Magnesite	546-93-0	Yes	16.008	0.5
Methacrylic Acid	79-41-4	No	112.08	3.5
Methanol	67-56-1	No	415.2	13
1-Methoxy-2-Propanol Acetate	108-65-6	No	576	3.6
2-Methoxyethyl Acetate	110-49-6	No	38.4	1.2
Methyl Acetate	79-20-9	No	976.8	30.5
Methyl n-Amyl Ketone	110-43-0	No	376.8	11.75
Methyl Chloroform	71-55-6	No	3048	95.5
Methyl Ethyl Ketone (MEK)	78-93-3	No	943.2	29.5
Methyl Isoamyl Ketone	110-12-3	No	384	12
Methyl Isobutyl Carbinol	108-11-2	No	166.32	5.2
Methyl Isobutyl Ketone (MIBK)	108-10-1	No	328.8	10.25
Methyl Methacrylate	80-62-6	No	655.2	20.5
Methylene Chloride	75-09-2	No	0.0384	2.40E-04
Methylene Diisocyanate (MDI)	101-68-8	No	0.072	0.0025
Methyl Propyl Ketone	107-87-9	No	1120.8	35
Mica (Respirable Dust)	12001-26-2	Yes	4.8	0.15
Molybdenum as Mo	7439-98-7	Yes	7.992	0.25
Naphthalene	91-20-3	No	79.92	2.5
Nickel	7440-02-0	Yes	0.000648	4.20E-06
Nonane	111-84-2	No	1680	52.5
Pentane	109-66-0	No	2832	88.5
Phenol	108-95-2	No	30.48	0.95
Phosphoric Acid	7664-38-2	No	1.608	0.05
Propionic Acid	79-09-4	No	48	1.5
n-Propyl Acetate	109-60-4	No	1344	42
Propyl Alcohol	71-23-8	No	799.2	25
Selenium	7782-49-2	Yes	0.312	0.01

Table 3.5 TAP Screening Emission Rates and Modeled Concentration Limits (continued)

Silica – Amorphous, including: • Diatomaceous Earth (uncalcined) • Precipitated Silica • Silica Gel	61790-53-2 112926-00-8	Yes	16.008	0.5
Silica - Crystalline - Cristobalite	14464-46-1	Yes	0.0792	0.0025
Silica - Crystalline Quartz & Fused Silica	14808-60-7	Yes	0.1608	0.005
Stoddard Solvent	8052-41-3	No	840	26.25
Styrene	100-42-5	No	160.08	1
Tetrahydrofuran	109-99-9	No	943.2	29.5
Toluene	108-88-3	No	600	18.75
Triethylamine	121-44-8	No	6.48	0.2
Trimethyl Benzene (Mixed and Individual Isomers)	25551-13-7	No	196.8	6.15
Vinyl Acetate	108-05-4	No	55.2	1.75
VM&P Naphtha	8032-32-4	No	2191.2	68.5
Xylene (o-, m-, p-isomers)	1330-20-7	No	696	21.75
Zinc	7440-66-6	Yes	16.008	0.5
Zinc Oxide Dust	1314-13-2	Yes	16.008	0.5

- a) Worst-case pounds of emissions from all coating operations (combined) per day, as calculated using procedures in this permit to estimate TAP emissions, or as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference method, or DEQ-approved alternative.
- b) Milligrams of toxic air pollutant (TAP) per cubic meter, modeling proposed emission rates calculated using a daily averaging period.

[07/29/2021]

3.11 Demonstrate Emission Limit Compliance

For each new material used, emissions from all Coating and Washing Process operations shall be estimated and compared against the Emission Limits in Table 3.2.

- PM₁₀/PM_{2.5} emissions shall be estimated by multiplying each maximum daily usage rate (gal/day) by the solids content (lb/gal) of that material, and summing the total emissions from all materials (lb/day). Emissions may also use the spray gun transfer efficiency and documented filtration system control efficiency when control equipment will be applied to such emissions.
- VOC emissions shall be estimated by multiplying each maximum daily usage rate (gal/day) by the VOC content (lb/gal) for that material, and summing the total emissions from all materials (lb/day).
- HAP emissions shall be estimated by multiplying each maximum daily usage rate (gal/day) by the HAP content (lb/gal) for each material, and summing the total emissions from all materials (lb/day).
- For solids content, VOC content, and HAP content, if a range is presented on the SDS for a material, the highest value of the range shall be used when estimating emissions.
- When the solids content, VOC content, or HAP content is listed as below detection on SDS or other documentation, the HAP content shall be assumed equal to the density divided by 100 (1% of density in lb/gal) when estimating emissions.

- The permittee shall compare estimated emissions for all materials against the Coating and Washing Emission Limits in Table 3.2. The permittee shall not use or implement any Scenario that exceeds those emission limits.

[09/27/2018]

Monitoring and Recordkeeping Requirements

3.12 Coating and Washing Material Usage Monitoring

Each calendar day, the permittee shall monitor and record the coating and washing material used throughout the day. The daily usage rates shall comply with the approved daily usage rates in Table 3.3 and Table 3.4. If new materials are used, documentation showing TAP compliance and Emission compliance shall be recorded.

- The permittee shall maintain documentation such as material SDS for each material used in the coating and washing process, manufacturer's specification sheets for spray guns and control devices, any engineering assumptions relied upon in emission calculations, and purchase records for the materials.

[07/29/2021]

3.13 Coating Usage Scenario Reporting

Each year, for Coating Usage Scenarios that have not already been submitted, the permittee shall submit a report by May 1st on all unapproved Daily Coating Usage Scenarios used each calendar day during the previous 365-day period. The report shall include documentation supporting the TAP compliance demonstrations and the Coating Emission Limit compliance demonstrations relied upon for each Daily Coating Usage Scenario, and any modeling analyses conducted in each coating TAP compliance demonstration. Documentation should be in sufficient detail, including documentation of all calculations and electronic copies of modeling files, such that DEQ can verify the analysis. The report shall be titled "Permit-Required TAP Compliance Report" and shall be sent to:

DEQ State Office
Air Quality Division
1410 N. Hilton
Boise, ID 83706

[07/29/2021]

4 Fabrication

4.1 Process Description

Sheets and tubes of steel, stainless steel, and aluminum are cut using three Mazak laser cutters. Metal sheets are cut using two Mazak OptiPlex 3015 III 8000W Fiber lasers while tubes are cut using a Mazak FT 150 tube laser. Particulate emissions are captured using a Robovent Plaser 3 dust collector equipped with Endurex B16 ePTFE filters.

Welding is performed using a total of 17 welders, including four Lincoln Electric robot welders and thirteen manual welders. Manual welders include four Millermatic 350P, five Millermatic 252, two Millermatic 251, and one Miller Invision 352 Mpa with D74 Mpa Plus wire feeder. Welding is primarily Gas Metal Arc Welding (GMAW) and MigTig with aluminum, carbon steel, and stainless steel wire. Welding wire used includes: Hobart MaxalMig 4043 aluminum (404304712P and 404304723L), Hobart Premier Arc 6 ER70S-6, and Lincoln Electric SuperArc L56 ER70S-6.

Cutting of steel, stainless steel, and aluminum tubes and rods using metal saws occur in the Breezeway room using three dry cutting metal saws. The dry cutting saws include a Marvel Saw 380A PC3360, a Marvel Spartan Saw PA10/3EPC, and a smaller Ellis Saw 1600 for R&D. Emissions from these metal saws are vented indoors at insignificant rates and are therefore not regulated with this permit.

4.2 Control Device Descriptions

Table 4.1 Fabrication Description

Emissions Units / Processes	Control Devices	Emission Points
Laser cutting	Robovent Plaser 3 Dust Collector	Dust Collector Vent
Welding	None	Building Vents

[07/29/2021]

Emission Limits

4.3 Emission Limits

The emissions from the fabrication stacks or vents shall not exceed any corresponding emissions rate limits listed in Table 4.2.

Table 4.2 Fabrication Emission Limits^(a)

Source Description	PM _{2.5} /PM ₁₀ ^(b)	
	lb/hr ^(c)	T/yr ^(d)
Laser cutting	6.59E-02	3.30E-05
Welding	0.21	0.30

- In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
- Particulate matter with an aerodynamic diameter less than or equal to a nominal two point five (2.5) and ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
- Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
- Tons per any consecutive 12-calendar month period.

[07/29/2021]

4.4 Opacity Limit

Emissions from the Fabrication stacks, or any other stack, vent, or functionally equivalent opening associated with the Fabrication Processes, shall not exceed 20% opacity for a period or

periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[07/29/2021]

Operating Requirements

4.5 Welding Wire usage and Process Throughput Limits

The Welding process shall only use the Welding Wires and Throughput Limits as specified in Table 4.3.

Table 4.3 Welding Wire Throughput Limits

Welding Wire Description	Throughput Limits
Hobart ER4043, 404304712P, 3/64", 12 lb. spool	6,144 lbs/yr
Hobart ER4043, 404304723L, 3/64", 100 lb. drum	7,373 lbs/yr
Hobart Premier Arc 6, ER70S-6, PA6035X45, 0.035 inch, 45 lbs. spool	36,864 lbs/yr
Lincoln Electric SuperArc L56, ER70S-6, ED029915, 0.045 inch, 250 lb. drum	62,669 lbs/yr

[07/29/2021]

4.6 Laser Cutting Operating Hours

The Laser Cutting process shall not exceed 7,488 hours of operation per any consecutive 12-month period for the three combined laser cutters.

[07/29/2021]

Monitoring and Recordkeeping Requirements

4.7 Welding Process Throughput Limits Monitoring

Each calendar month, the permittee shall monitor and record the Welding Wire usage for all welding performed for the previous month in pounds per month. Annual usage rates shall be determined by summing the monthly usage rates over the previous consecutive 12-month period to demonstrate compliance with the Welding Wire Throughput Limits permit condition.

[07/29/2021]

4.8 Laser Cutting Annual Hours of Operation Limits Monitoring

Each calendar month, the permittee shall monitor and record the operating hours of the Laser Cutting process for each laser for the previous month in hours per month. Annual operation shall be determined by summing the monthly operation over the previous consecutive 12-month period to demonstrate compliance with the Laser Cutting Operating Hours permit condition.

[07/29/2021]

5 General Provisions

General Compliance

5.1 The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the “Rules for the Control of Air Pollution in Idaho.” The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit, the “Rules for the Control of Air Pollution in Idaho,” and the Environmental Protection and Health Act (Idaho Code §39-101, et seq).

[Idaho Code §39-101, et seq.]

5.2 The permittee shall at all times (except as provided in the “Rules for the Control of Air Pollution in Idaho”) maintain in good working order and operate as efficiently as practicable all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[IDAPA 58.01.01.211, 5/1/1994]

5.3 Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules, and regulations.

[IDAPA 58.01.01.212.01, 5/1/1994]

Inspection and Entry

5.4 Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:

- Enter upon the permittee’s premises where an emissions source is located, emissions-related activity is conducted, or where records are kept under conditions of this permit;
- Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

Construction and Operation Notification

5.5 This permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year.

[IDAPA 58.01.01.211.02, 5/1/1994]

5.6 The permittee shall furnish DEQ written notifications as follows:

- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;
- A notification of the date of any suspension of construction, if such suspension lasts for one year or more; and

- A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211.01, 5/1/1994]

- A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and
- A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date.

[IDAPA 58.01.01.211.03, 5/1/1994]

Performance Testing

5.7 If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

5.8 All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

5.9 Within 60 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/2000 and 4/11/2015]

Monitoring and Recordkeeping

5.10 The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Monitoring records shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/1994]

Excess Emissions

- 5.11** The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130–136 for excess emissions due to start-up, shut-down, scheduled maintenance, safety measures, upsets, and breakdowns.

[IDAPA 58.01.01.130–136, 4/5/2000]

Certification

- 5.12** All documents submitted to DEQ—including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification—shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/1994]

False Statements

- 5.13** No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/1998]

Tampering

- 5.14** No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/1998]

Transferability

- 5.15** This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/2006]

Severability

- 5.16** The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[IDAPA 58.01.01.211, 5/1/1994]