



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, ID 83706 • (208) 373-0502
www.deq.idaho.gov

Brad Little, Governor
John Tippetts, Director

April 28, 2020

Steve Burgess, Vice President Concrete Products
CXT Incorporated
6701 E. Flamingo Avenue
Suite 300
Nampa, ID 83687

RE: Facility ID No. 027-00182, CXT Incorporated, Nampa
Final Permit Letter

Dear Mr. Burgess:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2020.0007 Project 62393 to CXT Incorporated located in Nampa for a precast concrete products fabrication facility. 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 19, 2020.

This permit is effective immediately. This permit does not release CXT Incorporated 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 St., Boise, ID 83706, Fax (208) 373-0287.

In order to fully understand the compliance requirements of this permit, as requested, David Luft, Air Quality Manager at (208) 373-0201, will schedule a permit handoff meeting to review and discuss the terms and conditions of this permit. Please note that this meeting should be scheduled once the permitted emissions units are operating and some representative records required by the permit have been generated by the facility. 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 contested case, I encourage you to contact Morrie Lewis at (208) 373-0502 or Morrie.Lewis@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,

A handwritten signature in black ink that reads "Mike Simon".

Mike Simon
Stationary Source Program Manager
Air Quality Division

MS\ml
Permit No. P-2020.0007 PROJ 62393
Enclosures

Air Quality

PERMIT TO CONSTRUCT

Permittee CXT Incorporated
Permit Number P-2020.0007
Project ID 62393
Facility ID 027-00182
Facility Location 6701 E. Flamingo Ave. Suite 300
Nampa, ID 83687

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 April 28, 2020



Morrie Lewis, Permit Writer



Mike Simon, Stationary Source Manager

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1 Permit Scope

Purpose

1.1 This is an initial permit to construct (PTC) a precast concrete products fabrication facility.

Regulated Sources

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

Table 1.1 Regulated Sources

Permit Section	Source Descriptions	Control Equipment
<i>Concrete Curing and Rubber Form Moldmaking Operations</i>		
2	<u>Curing</u> Form Release Agent: Dayton Clean Strip Ultra J3 Maximum Operation: 5.0 gal/day and 500 gal/yr, or as limited by Alternate Daily Curing, Moldmaking, and Coating Usage Scenario	<u>None</u>
	<u>Moldmaking</u> Mold Rubber Components: Polytek Liquid Rubber Parts A & B – Poly 74-Series and Poly 75-Series Maximum Operation: Unlimited use of Poly 74-Series and Poly 75-Series, or as limited by Alternate Daily Curing, Moldmaking, and Coating Usage Scenario	<u>None</u>
	<u>Ready-Mix Concrete Trucks</u>	<u>Vehicle Exhaust Systems (HR-1 and HR-2)</u> Manufacturer: Car-Mon or equivalent ^(a) Model: TSR-P exhaust hose and DXi exhaust fan, or equivalents ^(a)

<i>Coating Operations</i>		
2	<u>Spray Guns</u> Manufacturer/Model: Wagner GM-4700AC, Graco AirPro HVLP, or high-volume, low-pressure (HVLP) equivalent ^(a) Transfer Efficiency: 65% ^(a) Maximum Operation: 150 gal/day and 20,000 gal/yr for all water-based coatings ^(b) (combined), 25 gal/day and 3,000 gal/yr for all non-water-based coatings ^(b) (combined), and 2.5 gal/day and 780 gal/yr for all preparation/cleaning coatings ^(b) (combined); or as limited by Alternate Daily Curing, Moldmaking, and Coating Usage Scenario	<u>Large Spray Booth and Filtration System (PB-1)</u> Manufacturer: Spray Systems or equivalent ^(a) Model: TB-492018 or equivalent ^(a) Filter: Air Handler Filter Model: 2W002 Control Efficiency: 98%
		<u>Small Spray Booth and Filtration System (PB-2)</u> Manufacturer: Standard Tool & Equipment Model or equivalent ^(a) Model: BECF-1000 or equivalent ^(a) Filter: Air Handler Filter Model: 2W001 Control Efficiency: 98%
<i>Welding and Grinding Operations</i>		
3	<u>GMAW and FCAW welders (including W-1 through W-7)</u> Welding Material: E70S and E308 ^(a) Maximum Operation: 6,000 lb/yr GMAW 1,000 lb/yr FCAW	<u>None</u> Control equipment is not required for welding activities, but a fume extraction system similar to that described below may be used whenever practical <u>Mobile Fume Extraction System</u> Manufacturer: Miller Filtair Model: MWX Filter: Merv 15-16 rating Control Efficiency: 90%
	Grinders (handheld)	<u>None</u>
<i>Metal Cutting Operations</i>		
3	<u>Band Saw (MC-1)</u> Manufacturer: Hydmech or equivalent ^(a) Model: M16A or equivalent ^(a) Maximum Operation: 1,872 hr/yr	<u>Dust Collector (DC-MC-1)</u> Manufacturer: unknown Model: unknown Filter: unknown Control Efficiency: 90%
<i>Wood Cutting Operations</i>		
3	<u>Table Saws (WC-1 and WC-2)</u> Manufacturer: Dewalt or equivalent ^(a) Model: DW746 10" or equivalent ^(a)	<u>Dust Collector (DC-WC-1 and DC-WC-2)</u> Manufacturer: JET or equivalent ^(a) Model: DC-500P or equivalent ^(a) Filter: 5μ cloth Control Efficiency: 99%

Process Heating

4	<p><u>Boiler (B-1)</u></p> <p>Manufacturer: Fulton Alliance Horizontal Coil Design Thermal Fluid Heater</p> <p>Model: FT-0240HC</p> <p>Maximum Capacity: 2.4 MMBtu/hr</p> <p>Maximum Operation: 29,000,000 scf/yr for all units facility-wide (combined) (approximately 3,744 hr/yr)</p> <p>Fuel: natural gas</p>	<u>None</u>
	<p><u>Large Spray Booth Heater (MAU-PB-1)</u></p> <p>Manufacturer: Bessamaire</p> <p>Model: MUAJH-40TMF-631</p> <p>Maximum Capacity: 4.3 MMBtu/hr</p> <p>Maximum Operation: 29,000,000 scf/yr for all units facility-wide (combined)</p> <p>Fuel: natural gas</p>	<u>None</u>
	<p><u>Small Spray Booth Heater (MAU-PB-2)</u></p> <p>Manufacturer: Airrite</p> <p>Model: ARTT118</p> <p>Maximum Capacity: 0.758 MMBtu/hr</p> <p>Maximum Operation: 29,000,000 scf/yr for all units facility-wide (combined)</p> <p>Fuel: natural gas</p>	<u>None</u>

<i>Office Heating</i>		
4	<u>Office Heater #1 (F-1)</u> Manufacturer: Carrier or equivalent ^(a) Model: 58SC090E21-20 or equivalent ^(a) Maximum Capacity: 0.088 MMBtu/hr Maximum Operation: 29,000,000 scf/yr for all units facility-wide (combined) Fuel: natural gas	<u>None</u>
	<u>Office Heater #2 (F-2)</u> Manufacturer: Carrier or equivalent ^(a) Model: 58SC090E21-20 or equivalent ^(a) Maximum Capacity: 0.088 MMBtu/hr Maximum Operation: 29,000,000 scf/yr for all units facility-wide (combined) Fuel: natural gas	<u>None</u>
	<u>Office Heater #3 (F-3)</u> Manufacturer: Carrier or equivalent ^(a) Model: 59SP5 080-20 or equivalent ^(a) Maximum Capacity: 0.080 MMBtu/hr Maximum Operation: 29,000,000 scf/yr for all units facility-wide (combined) Fuel: natural gas	<u>None</u>

- (a) “or equivalent” equipment is equipment which has equivalent or less maximum capacity and equivalent or lower pollutant emission rates, whether calculated based on maximum design capacity or based on established permit limits. HVLP-equivalent spray guns shall have 65% or greater transfer efficiency. Use of replacement equipment shall not result in the emission of any regulated air pollutant not previously emitted and shall not result in an emission increase as defined in IDAPA 58.01.01.007.
- (b) Water-based, non-water-based, and preparation/cleaning coating materials as identified in Table 2.3.

2 Curing, Moldmaking, and Coating Operations

2.1 Process Description

CXT Incorporated manufactures precast concrete products such as restrooms, showers, and concession buildings.

Ready-mix concrete is placed into steel forms to create structures. During this activity, the ready-mix concrete truck is connected to a vehicle exhaust system to remove exhaust from the building. Steel forms are coated with an oil release agent, and concrete is placed in the forms and allowed to cure. The steel forms may cure on coils heated by a natural gas boiler, dependent upon the ambient temperature. Metal items are attached to the structures. Some metal items will be cast in place with concrete, and some will be attached after the concrete has cured.

The concrete and metal structures are coated within a paint booth, with particulate matter (PM) emissions controlled by paint booth filtration systems. Rubber templates are created for creating texture on the concrete panels. Polytek Liquid Rubber Part A and B are used to create the rubber forms. Structures are prepared for shipment with wood forms. Some structures may require interior wood framing.

2.2 Control Device Descriptions

Table 2.1 Curing, Moldmaking, and Coating Operations Description

Source Descriptions	Control Equipment
Curing materials	None
Moldmaking materials	None
Coating materials	HVLP spray guns and spray booth filtration systems (PB-1 and PB-2)
Ready-mix concrete truck exhaust	Vehicle exhaust systems (HR-1 and HR-2)

Emission Limits

2.3 Curing, Moldmaking, and Coating Material Emission Limits

Emissions from all curing, moldmaking, and coating operations shall not exceed the emission rate limits in Table 2.2.

Table 2.2 Annual Curing, Moldmaking, and Coating Emission Limits ^(a)

Source Description	PM ₁₀ / PM _{2.5} ^(b)	VOC ^(c)	Individual HAP ^(d)	Total HAP ^(e)
	T/yr ^(f)	T/yr ^(f)	T/yr ^(f)	T/yr ^(f)
Curing, Moldmaking, and Coating Operations	0.70	19.7	7.9	18.9

- (a) In absence of any other credible evidence, compliance is assured by complying with permit operating, monitoring, and record keeping requirements.
- (b) Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (PM_{2.5}), including condensable particulate as defined in IDAPA 58.01.01.006.
- (c) Volatile organic compounds (VOC).
- (d) Emission limit for each individual hazardous air pollutant (HAP).
- (e) Emission limit for the total of all HAP (combined).
- (f) Tons of emissions from all curing, moldmaking, and coating operations (facility-wide, combined) per any consecutive 12-calendar-month period.

2.4 Odors

The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids into the atmosphere of such nature and duration and under such conditions as would be injurious to human health or welfare, to animal or plant life, or to property, or to interfere unreasonably with the enjoyment of life or property in accordance with IDAPA 58.01.01.776.

2.5 Opacity Limit

Emissions from each spray booth stack (PB-1, PB-2), each building vent, or any other stack, vent, or functionally-equivalent opening associated with curing, moldmaking, or coating 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.

Operating Requirements

2.6 Spray Gun and Filtration System Operation

The permittee shall install, maintain, and operate each spray booth filtration system in accordance with manufacturer's specifications. The associated filtration system shall be operated at all times when a spray booth is operating. Any period of time that a spray booth is in operation while the associated filtration system is not in operation shall be treated as an excess emission event, and the permittee shall comply with excess emission procedures and requirements included in the General Provisions of this permit.

2.7 Vehicle Exhaust System Operation

The permittee shall install, maintain, and operate vehicle exhaust systems in accordance with manufacturer's specifications. A vehicle exhaust system shall be operated at all times when a vehicle is operating within a building.

2.8 Operations and Maintenance Manual

The permittee shall maintain an Operations & Maintenance (O&M) manual for the paint booth filtration systems which describes the procedures that will be followed to comply with General Provision 5.2 and the paint booth PM filtration system manufacturer specifications. This manual shall contain, at a minimum, the operating parameters and maintenance schedule of the filtration system. This manual shall remain onsite at all times and shall be made available to DEQ representatives upon request. The permittee shall install, maintain, and operate the control equipment in accordance with the O&M Manual.

2.9 Roll Application of High-Solids Urethane

Sherwin-Williams Armorseal Rextane shall only be roll applied. The permittee shall not spray apply this coating material.

2.10 Approved Moldmaking Materials

Unless the permittee is complying with an Alternate Daily Curing, Moldmaking, and Coating Usage Scenario which demonstrates compliance with Curing, Moldmaking, and Coating Material Emission Limits and Screening Emission Rates, the permittee shall only use moldmaking materials which do not contain toxic air pollutant (TAP) or volatile organic compound (VOC) substances. Isocyanate-containing moldmaking materials shall not be used, unless complying with an Alternate Daily Curing, Moldmaking, and Coating Usage Scenario.

- Poly 74-Series and Poly 75-Series moldmaking materials did not contain TAP and VOC at the time of permit issuance.

2.11 Approved Daily Curing and Coating Material Usage Limits

Unless the permittee is complying with an Alternate Daily Curing, Moldmaking, and Coating Usage Scenario which demonstrates compliance with Curing, Moldmaking, and Coating Material Emission Limits and Screening Emission Rates, the permittee shall comply with the daily coating usage limits in Table 2.3. Isocyanate-containing curing and coating materials shall not be used, unless complying with an Alternate Daily Curing, Moldmaking, and Coating Usage Scenario.

Table 2.3 Approved Daily Coating Usage Scenario

Coating Material	Daily Coating Usage Limit
	(gal/day) ^(a)
Form Release Agent	5.0
Water-based ^(b)	150.0
Non-water-based ^(c)	25.0
Preparation/cleaning ^(d)	2.5

- (a) Gallons per calendar day.
- (b) Water-based coating materials include GAF United Durashell Stain (Accent, Pastel, and White) and FireFree 88.
- (c) Non-water-based coating materials include Sherwin-Williams DTM Alkyd Enamel Coating - Ultradeep Base, GAF Monocryl-50 MS, PPG Industries FD Primer Non-Lift Grey, PPG Industries PSX 700 Light Tint Resin, PPG Industries PSX 700 Neutral Tint Resin, PPG Architectural Coating True Finish Spectracron 110 Fast Dry Alkyd Enamel-Base (QT110HC and QT110HW), and Sherwin-Williams Armorseal Rextthane.
- (d) Preparation/cleaning coating materials include Sherwin-Williams Methyl Ethyl Ketone, Sherwin-Williams Mineral Spirits, PPG Industries Americoat 911 Thinner, PPG Industries PSX 700FD Cure, GAF United Coating Roof Mate Top Coat, Air-O-Jet Safety, Coal Tar Epoxy, XIM UMA Mod, Spectracron 380 Poly-iothan, and PPG HS Urethane Component.

2.12 Approved Annual Coating Material Usage Limits

The permittee shall not exceed the annual coating usage limits in Table 2.4.

Table 2.4 Annual Coating Usage Limits

Coating Material	Annual Coating Usage Limit
	(gal/yr) ^(a)
Form Release Agent	500.0
Water-based ^(b)	20,000
Non-water-based ^(c)	3,000
Preparation/cleaning ^(d)	780

- (a) Gallons per rolling consecutive 12-calendar-month period.
- (b) Water-based coating materials as identified in Table 2.3.
- (c) Non-water-based coating materials as identified in Table 2.3
- (d) Preparation/cleaning coating materials as identified in Table 2.3.

Alternate Daily Curing, Moldmaking, and Coating Usage Scenarios (if applicable)

Unless using an Alternate Daily Curing, Moldmaking, and Coating Usage Scenario for which compliance has previously been determined in Table 2.3, such as when new or reformulated coating, moldmaking, or curing materials are introduced, each day before materials are used the permittee shall follow the procedures of this section. The permittee shall not use any new Daily Curing, Moldmaking, and Coating Usage Scenario until compliance with TAP Screening Emission Rates and Curing, Moldmaking, and Coating Material Emission Limits has been demonstrated for that Scenario according to the following permit conditions.

2.13 Propose a Daily Curing, Moldmaking, and Coating Usage Scenario

Prior to using or implementing a new Daily Curing, Moldmaking, and Coating Usage Scenario:

- The permittee shall propose and record maximum daily curing, moldmaking, and coating usage limits for each material that will be used in the Scenario, in gallons per day (gal/day). The permittee shall not use or implement any Scenario that does not have recorded maximum daily curing, moldmaking, and coating usage limits.
- The permittee shall estimate emissions of PM₁₀/PM_{2.5}, VOC, individual HAP, total HAP, and all TAP listed in Table 2.5 for the Scenario (lb/day for each pollutant), using the procedures described below for estimating emissions.
- The permittee shall demonstrate TAP Screening Emission Rates compliance for the Scenario, using the procedures specified in this section. The permittee shall not use or implement any Scenario that does not demonstrate TAP Screening Emission Rates compliance.
- The permittee shall demonstrate Curing, Moldmaking, and Coating Material Emission Limits compliance for the Scenario, using the procedures specified in this section. The permittee shall not use or implement any Scenario that does not demonstrate Curing, Moldmaking, and Coating Material Emission Limits compliance.
- The daily curing, moldmaking, and coating usage limits and emission estimates used in determining compliance with TAP Screening Emission Rates and Curing, Moldmaking, and Coating Material Emission Limits shall be based on estimated emissions from all curing, moldmaking, and coating materials to be used from all curing, moldmaking, and coating operations at the facility (i.e., facility-wide).

2.14 Estimate Curing, Moldmaking, and Coating TAP Emissions

TAP emissions shall be estimated for all TAP listed in Table 2.5:

- Emissions shall be estimated by multiplying each maximum daily curing, moldmaking, and coating material usage rate (gal/day) by the TAP content (lb/gal) of that material, and summing the total emissions from all materials (lb/day). TAP emissions which are designated as a particulate in Table 2.5 may also be multiplied by one minus the documented spray gun transfer efficiency and by one minus the documented filtration system control efficiency when control equipment will be applied to such emissions.
- TAP content (lb/gal) of a material is specified on the Safety Data Sheet (SDS) for that material, or shall be calculated by multiplying the weight percentage of TAP (%) by the density (lb/gal) of the material from the SDS.
- For TAP 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 TAP content is listed as below detection on SDS or other documentation, the TAP content shall be assumed equal to the material density divided by 100 (i.e., 1% of density in lb/gal) when estimating emissions.
- When the TAP content cannot be determined from SDS or other documentation, the TAP content shall be assumed equal to the density of the material (lb/gal) when estimating emissions.

2.15 Demonstrate Curing, Moldmaking, and Coating TAP Compliance

For each Daily Curing, Moldmaking, and Coating Usage Scenario, the permittee shall estimate TAP emissions from all curing, moldmaking, and coating operations and compare against the TAP Screening Emission Rates in Table 2.5. Compliance is demonstrated if estimated emissions do not exceed all TAP Screening Emission Rates.

Table 2.5 TAP Screening Emission Rates ^(a)

TAP	CAS	Particulate?	HAP?	Screening Emission Rate (lb/day) ^(b)
Acetone	67-64-1	No	No	2856
Acetaldehyde	75-07-0	No	Yes	0.072
Acrylamide	79-06-1	No	Yes	0.0001224
Acrylic Acid	79-10-7	No	Yes	48
Aluminum - Metal and Oxide	7429-90-5	Yes	No	16.008
Aluminum - Soluble Salts	7429-90-5	Yes	No	3.192
n-Amyl Acetate	628-63-7	No	No	847.2
Antimony	7440-36-0	Yes	Yes	0.792
Barium	7440-39-3	Yes	No	0.792
Benzene	71-43-2	No	Yes	0.0192
Benzo(a)pyrene	50-32-8	No	Yes	0.000048
Benzoyl Peroxide	94-36-0	No	No	7.992
Bis (2-Ethylhexyl) Phthalate (DEHP)	117-81-7	No	Yes	0.672
2-Butoxyethanol (EGBE; Ethylene Glycol Monobutyl Ether)	111-76-2	No	No	192
2-Butoxyethyl Acetate	112-07-2	No	Yes	199.92
n-Butyl Acetate	123-86-4	No	No	1135.2
tert-Butyl Acetate	540-88-5	No	No	1519.2
n-Butyl Alcohol	71-36-3	No	No	240
Sec-Butyl Alcohol (2-Butanol)	78-92-2	No	No	487.2
Butyl Hydroxytoluene (2,6-Di-tert-butyl-p-cresol)	128-37-0	No	No	16.008
Calcium Carbonate (Limestone)	1317-65-3	Yes	No	16.008
Calcium Sulfate (Gypsum)	13397-24-5	Yes	No	16.008
Carbon Black	1333-86-4	Yes	No	5.52
Carbon Tetrachloride	56-23-5	No	Yes	0.01056
Chloroform	67-66-3	No	Yes	0.00672
Chromium	7440-47-3, 16065-83-1	Yes	Yes	0.792
Chromium (VI)	18540-29-9	Yes	Yes	0.00001344
Cobalt	7440-48-4	Yes	Yes	0.0792
Copper	7440-50-8	Yes	No	1.608
Cumene	98-82-8	No	Yes	391.2
Cyclohexane	110-82-7	No	No	1680
Cyclohexanone	108-94-1	No	No	160.08
Diacetone Alcohol	123-42-2	No	No	384
Dibutyl Phthalate (DBP)	84-74-2	No	Yes	7.992
1,4-Dichlorobenzene	106-46-7	No	Yes	720
o-Dichlorobenzene	95-50-1	No	No	480
Diethyl Phthalate	84-66-2	No	No	7.992

TAP	CAS	Particulate?	HAP?	Screening Emission Rate (lb/day) ^(b)
Diisobutyl Ketone	108-83-8	No	No	232.08
Dimethylphthalate (DMP)	131-11-3	No	Yes	7.992
Diphenyl (Biphenyl)	92-52-4	No	Yes	2.4
Dipropylene Glycol Methyl Ether	34590-94-8	No	No	960
Ethanolamine (2-Aminoethanol; Monoethanolamine)	141-43-5	No	No	12.792
Ethyl Acetate	141-78-6	No	No	2239.2
Ethyl Alcohol	64-17-5	No	No	3000
Ethyl Benzene	100-41-4	No	Yes	696
Ethylene Glycol	107-21-1	No	Yes	20.304
Ethylenediamine (1,2-Diaminoethane)	107-15-3	No	No	40.08
Formaldehyde	50-00-0	No	Yes	0.01224
Furfuryl Alcohol	98-00-0	No	No	64.08
Heptane (n-Heptane)	142-82-5	No	No	2616
Hexamethylene Diisocyanate ^(c)	822-06-0	No	Yes	0.048
Hexane (n-Hexane)	110-54-3	No	Yes	288
Hydroquinone	123-31-9	No	Yes	3.192
Iron Oxide (Fe ₂ O ₃)	1309-37-1	Yes	No	7.992
Isobutyl Acetate	110-19-0	No	No	1120.8
Isobutyl Alcohol	78-83-1	No	No	240
Isophorone Diisocyanate ^(c)	4098-71-9	No	No	0.144
Isopropyl Alcohol (Isopropanol)	67-63-0	No	No	1567.2
Isopropyl Acetate	108-21-4	No	No	1663.2
Kaolin	1332-58-7	Yes	No	3.192
Lead	7439-92-1	Yes	Yes	0.328
Manganese	7439-96-5	Yes	Yes	7.992
Magnesite (Magnesium Carbonate)	546-93-0	Yes	No	16.008
Methacrylic Acid	79-41-4	No	No	112.08
Methanol	67-56-1	No	Yes	415.2
1-Methoxy-2-Propanol Acetate (PGMEA)	108-65-6	No	No	576
2-Methoxyethyl Acetate (EGMEA; Ethylene Glycol Monomethyl Ether Acetate)	110-49-6	No	Yes	38.4
Methyl Acetate	79-20-9	No	No	976.8
Methyl n-Amyl Ketone (Heptan-2-one)	110-43-0	No	No	376.8
Methyl Chloroform	71-55-6	No	Yes	3048
Methyl Ethyl Ketone (MEK)	78-93-3	No	No	943.2
Methyl Isoamyl Ketone	110-12-3	No	No	384
Methyl Isobutyl Carbinol	108-11-2	No	No	166.32
Methyl Isobutyl Ketone (MIBK)	108-10-1	No	Yes	328.8
Methyl Methacrylate	80-62-6	No	Yes	655.2
o-Methylcyclohexanone	583-60-8	No	No	367.2
Methylene Bis (4-Cyclohexyl Isocyanate) (H12MDI; Dicyclohexylmethane 4,4'-Diisocyanate) ^(c)	5124-30-1	No	No	0.168
Methylene Chloride (Dichloromethane)	75-09-2	No	Yes	0.0384
Methylene Diisocyanate (MDI; 4,4'-Diphenylmethane Diisocyanate) ^(c)	101-68-8	No	Yes	0.072
Methyl Propyl Ketone (2-Pentanone)	107-87-9	No	No	1120.8
Mica	12001-26-2	Yes	No	4.8
Molybdenum	7439-98-7	Yes	No	7.992
Naphthalene	91-20-3	No	Yes	79.92
Nickel	7440-02-0	Yes	Yes	0.000648
Nonane	111-84-2	No	No	1680
Pentane	109-66-0	No	No	2832
Phenol	108-95-2	No	Yes	30.48
Phosphoric Acid	7664-38-2	No	No	1.608

TAP	CAS	Particulate?	HAP?	Screening Emission Rate (lb/day) ^(b)
Portland Cement	65997-15-1	Yes	No	16.008
Propionic Acid	79-09-4	No	No	48
n-Propyl Acetate	109-60-4	No	No	1344
Propyl Alcohol	71-23-8	No	No	799.2
Selenium	7782-49-2	Yes	Yes	0.312
Silica – Amorphous, including: • Diatomaceous Earth (uncalcined) • Precipitated Silica • Silica Gel	61790-53-2 112926-00-8	Yes	No	16.008
Silica - Crystalline – Cristobalite	14464-46-1	Yes	No	0.0792
Silica - Crystalline Quartz & Fused Silica	14808-60-7	Yes	No	0.1608
Silicon Tetrahydride (Silane)	7803-62-5	No	No	11.208
Sodium Hydroxide (Caustic Soda)	1310-73-2	No	No	3.192
Stoddard Solvent	8052-41-3	No	No	840
Styrene	100-42-5	No	Yes	160.08
Tert-Butyl Acetate	540-88-5	No	No	1519.2
Tetrachloroethylene (PCE; Perchloroethylene)	127-18-4	No	Yes	0.312
Tetrahydrofuran	109-99-9	No	No	943.2
Toluene	108-88-3	No	Yes	600
Trichloroethylene (TCE)	79-01-6	No	Yes	0.01224
Triethylamine	121-44-8	No	Yes	6.48
Trimethyl Benzene (Mixed and Individual Isomers)	25551-13-7	No	No	196.8
2,2,4-Trimethylpentane	540-84-1	No	Yes	559.2
Vinyl Acetate	108-05-4	No	Yes	55.2
Vinyl Chloride	75-01-4	No	Yes	0.02256
Vinyl Toluene (Methylstyrene)	25013-15-4	No	No	384
VM&P Naphtha (Petroleum Ether; Ligroin)	8032-32-4	No	No	2191.2
Xylene (o-, m-, p-isomers)	1330-20-7	No	Yes	696
Zinc	7440-66-6	Yes	No	16.008
Zinc Oxide	1314-13-2	Yes	No	16.008
Zirconium	7440-67-7	Yes	No	7.992

- (a) If an alternate curing, moldmaking, or coating is introduced and contains an IDAPA 58.01.01.585-586 substance that is not listed in this table, compliance with each screening emission rate and modeled concentration limit in IDAPA 58.01.01.585-586 shall be demonstrated.
- (b) Worst-case pounds of emissions from all curing, moldmaking, and 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.
- (c) Isocyanate-containing material.

2.16 Demonstrate Curing, Moldmaking, and Coating Emission Limit Compliance

For each Daily Curing, Moldmaking, and Coating Usage Scenario, the permittee shall estimate emissions from all curing, moldmaking, and coating operations and compare against the Curing, Moldmaking, and Coating Material Emission Limits in Table 2.2:

- Daily PM₁₀/PM_{2.5} emissions shall be estimated by multiplying each maximum daily curing, moldmaking, and coating usage rate (gal/day) by the solids content (lb/gal) for that curing, moldmaking, or coating material, and summing the total emissions from all curing, moldmaking, and coating materials (lb/day). Emissions may also be multiplied by one minus the transfer efficiency and by one minus the filter control efficiency when control equipment will be applied to such emissions.
- Daily VOC emissions shall be estimated by multiplying each maximum daily curing, moldmaking, and coating usage rate (gal/day) by the VOC content (lb/gal) for that curing, moldmaking, or coating material, and summing the total emissions from all curing, moldmaking, and coating materials (lb/day).
- Daily HAP emissions shall be estimated by multiplying each maximum daily curing, moldmaking, and coating usage rate (gal/day) by the HAP content (lb/gal) for that curing, moldmaking, or coating material, and summing the total emissions from all curing, moldmaking, and coating materials (lb/day).
- Annual PM₁₀/PM_{2.5}, VOC, and HAP emissions shall be determined by summing daily emissions (lb/day) over the previous consecutive 365-day period and dividing by 2000 pounds per ton (lb/T).
- For solids content, VOC content, and HAP content, if a range is presented on the SDS for a curing, moldmaking, or coating 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 content shall be assumed equal to the curing, moldmaking, or coating material density divided by 100 (i.e., 1% of density in lb/gal) when estimating emissions.
- When the solids content, VOC content, or HAP content cannot be determined from SDS or other documentation, the content shall be assumed equal to the density of curing, moldmaking, or coating material (lb/gal) when estimating emissions.
- The permittee shall compare estimated emissions from all curing, moldmaking, and coating materials against the Curing, Moldmaking, and Coating Material Emission Limits in Table 2.2. Compliance is demonstrated if emissions will not exceed all Curing, Moldmaking, and Coating Material Emission Limits.

Monitoring, Recordkeeping, and Reporting Requirements

2.17 Odor Complaint Monitoring

The permittee shall maintain records of all odor complaints received to demonstrate compliance with the Odors requirement. The permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

2.18 Curing, Moldmaking, and Coating Material Usage Recordkeeping

Each calendar day on which curing, moldmaking, or coating materials are used, the permittee shall collect and maintain records of the quantity of each material used including but not limited to water-based, non-water-based, and preparation/cleaning coating materials to demonstrate compliance with material usage and emission limits.

- If no Alternate Daily Curing, Moldmaking, and Coating Usage Scenario was used, usage rates shall be compared against the Approved Daily Curing and Coating Material Usage Limits and Approved Annual Coating Material Usage Limits. Annual usage shall be determined by summing daily emissions over the previous consecutive 365-day period.
- If an Alternate Daily Curing, Moldmaking, and Coating Usage Scenario was used, emissions from all curing, moldmaking, and coating materials shall be summed and compared against TAP Screening Emission Rates using the estimation procedures provided in the Estimate Curing, Moldmaking, and Coating TAP Emissions permit condition, and compared against Curing, Moldmaking, and Coating Material Emission Limits using the estimation procedures provided in the Demonstrate Curing, Moldmaking, and Coating Emission Limit Compliance permit condition.
- Exceedances of Approved Daily Curing and Coating Material Usage Limits, Approved Annual Coating Material Usage Limits, Curing, Moldmaking, and Coating Material Emission Limits, or TAP Screening Emission Rates shall be treated as excess emission events, and the permittee shall report these in accordance with the excess emission procedures and requirements provided in the General Provisions of this permit.

2.19 Coating Usage Scenario Monitoring

Each calendar day on which an Alternate Daily Curing, Moldmaking, and Coating Usage Scenario will be used, the permittee shall select and record the Alternate Daily Curing, Moldmaking, and Coating Usage Scenario that will be used for that day, and comply with the maximum daily curing, moldmaking, and coating usage limits specified for the selected Scenario.

- Only one Alternate Daily Curing, Moldmaking, and Coating Usage Scenario may be used each calendar day.
- The permittee shall not exceed any daily curing, moldmaking, and coating usage limits for the Scenario selected for that calendar day.

2.20 Curing, Moldmaking, and Coating Material Purchase and Safety Data Sheet Recordkeeping

For each curing, moldmaking, and coating material used at the facility including but not limited to water-based, non-water-based, and preparation/cleaning coating materials, the permittee shall record and maintain the following records:

- Material purchase records
- Material safety data sheets (SDS)
- Manufacturer's specification sheets that support filter control efficiencies, transfer efficiencies, capture efficiencies, and engineering assumptions relied upon in emission calculations

2.21 Curing, Moldmaking, and Coating Usage Scenario Reporting

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

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

3 Welding, Metalworking, and Woodworking Operations

3.1 Process Description

The facility performs gas metal arc welding (GMAW) operations using E70S welding materials. The band saw and table saws are used for metal and wood cutting operations. Emissions from the saws are collected and controlled by filtration systems. Emissions from the welders and grinders are not required to be controlled.

3.2 Control Device Descriptions

Table 3.1 Welding, Metalworking, and Woodworking Operation Descriptions

Source Descriptions	Control Equipment
GMAW and FCAW welders	None (or fume extraction system whenever practical)
Grinders	None
Band saw	Dust collector system (DC-MC-1)
Table saws	Dust collector systems (DC-WC-1 and DC-WC-2)

Emission Limits

3.3 Opacity Limit

Emissions from each welding fume extraction system stack, each dust collector system stack, and each stack, vent, or functionally equivalent opening associated with welding, metal cutting, or wood cutting 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.

Operating Requirements

3.4 Reasonable Control of Fugitive Emissions

All reasonable precautions shall be taken to prevent PM from becoming airborne, in accordance with IDAPA 58.01.01.650-651. In determining what is reasonable, consideration will be given to factors such as the proximity of dust emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of PM. Reasonable precautions include, but are not limited to, the following:

- Installation and use, where practical, of hoods, fans, and fabric filters or equivalent systems to enclose and vent the handling of dusty materials.

3.5 Metal and Wood Cutting Control Equipment

The permittee shall install, maintain, and operate a dust collector for each band saw and for each table saw (Table 1.1) in accordance with manufacturer's specifications. All emissions from metal and wood cutting operations shall be ducted to a dust collector at all times to ensure compliance with emission limits.

3.6 Welding Material Usage

Only E70S electrode materials shall be used in gas metal arc welding (GMAW) operations, and only E308 electrode materials shall be used in flux-cored arc welding (FCAW).

- The maximum amount of all GMAW materials used shall not exceed 6,000 pounds per calendar year (lb/yr).
- The maximum amount of all FCAW materials used shall not exceed 1,000 pounds per calendar year (lb/yr).

3.7 Metal Cutting Operation

Operation of the band saw shall not exceed 1,872 hours per year (hr/yr).

Monitoring and Recordkeeping Requirements

3.8 Visible Emissions Monitoring

The permittee shall conduct a monthly facility-wide inspection of potential sources of visible emissions, during daylight hours and under normal operating conditions. The inspection shall consist of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emission, the permittee shall take appropriate corrective action as expeditiously as practicable to eliminate the visible emissions. Within 24 hours of the initial see/no see evaluation and after the corrective action, the permittee shall conduct a see/no see evaluation of the emissions point in question.

3.9 Fugitive Emissions Monitoring

The permittee shall conduct a monthly facility-wide inspection of potential sources of fugitive PM emissions, during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive dust emissions are effective. If fugitive dust emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each fugitive dust emissions inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive dust emissions, and the date the corrective action was taken.

3.10 Fugitive Emissions Complaint Monitoring

The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records shall include, at a minimum, the date that each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

3.11 Welding Material Usage Monitoring

Each calendar month, the permittee shall monitor and record the type and amount of welding materials used in welding operations for the previous month in pounds per month (lb/mo) and for the previous 12-calendar-month period (lb/yr) to demonstrate compliance with welding material usage limits.

3.12 Metal Cutting Operation Monitoring

Each calendar month, the permittee shall monitor and record the operating hours of the band saw for the previous month in hours per month (hr/mo) and for the previous 12-calendar-month period (hr/yr) to demonstrate compliance with metal cutting operation limits.

4 Process Heating

4.1 Process Description

Paint booth natural gas heaters may be used, and steel forms may cure on coils heated by a natural gas boiler, dependent upon the ambient temperature. For increased flexibility in facility-wide natural gas usage, the office heaters have also been included in monitoring usage facility-wide (Permit Conditions 4.5 and 4.6).

4.2 Control Device Descriptions

Table 4.1 Process Heating Description

Source Descriptions	Control Equipment
Boiler	None
Large spray booth heater	None
Small spray booth heater	None

Emission Limits

4.3 Fuel-Burning Equipment

The permittee shall not discharge PM into the atmosphere from any fuel-burning equipment in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen (O₂) by volume for gas, in accordance with IDAPA 58.01.01.676.

- The boiler (B-1) and office heaters (F-1, F-2, and F-3) are fuel-burning equipment as defined in IDAPA 58.01.01.006.

4.4 Opacity Limit

Emissions from each boiler (B-1) stack, each spray booth heater vent, or any other stack, vent, or functionally-equivalent opening associated with process heating 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.

Operating Requirements

4.5 Natural Gas Usage

The boiler, large spray booth heater, small spray booth heater, office heater #1, office heater #2, and office heater #3 units shall combust natural gas fuel only. The rolling 12-calendar month amount of natural gas used by the facility (for all units combined) shall not exceed 29,000,000 standard cubic feet per year (scf/yr) or 285,500 therms per year.

Monitoring and Recordkeeping Requirements

4.6 Natural Gas Usage Monitoring

Each calendar month, the permittee shall monitor and record the amount of natural gas used by the facility for the previous month in standard cubic feet per month (scf/mo) or in therms per month (therm/mo) and for the previous 12 calendar months (scf/yr or therm/yr) to demonstrate compliance with the Natural Gas Usage limit.

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

[IDAPA 58.01.01.211.03, 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 written 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, 4/5/00 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]