

Air Quality

PERMIT TO CONSTRUCT

Permittee YMC, Inc.
Permit Number P-2016.0038
Project ID 61745
Facility ID 001-00147
Facility Location 2975 East Lanark Street
Meridian, Idaho 83642

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 DRAFT XX, 2016

Morrie Lewis, Permit Writer

Mike Simon, Stationary Source Manager

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1 Permit Scope

Purpose

1.1 This is the initial permit to construct (PTC) a metal 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	Control Equipment
2	<u>Laser Cutting Machine</u> Manufacturer: Mazak Laser or equivalent ^(a) Model: Optiplex 3015 II Maximum Capacity: 250 linear inches/min Maximum Operation: 2,024 hr/yr (31 million linear inches/yr) Date of Installation: 2014	<u>Robovent Fume Extraction System</u> Manufacturer: Robovent Model: Plas 3
2	<u>Plasma Cutting Table</u> Manufacturer: Multicam Plasma or equivalent ^(a) Model: 3000 Maximum Capacity: 105 linear inches/min Maximum Operation: 1,250 hr/yr (8 million linear inches/yr) Date of Installation: 2006	<u>Robovent Fume Extraction System</u> Manufacturer: Robovent Model: Plas 3
2	<u>Chop Saw</u> Manufacturer/model: Kalamazoo or equivalent ^(a) Maximum Operation: 50 hr/yr (0.32 million linear inches/yr) Date of Installation: 2001	Reasonable control of fugitive emissions
3	<u>Welding Machines</u> Manufacturer/model: Premier Arc 6 or equivalent ^(a) Maximum Operation: 2,000 lb/yr FCAW electrode 2,800 lb/yr GMAW electrode Date of Installation: (unknown)	Reasonable control of fugitive emissions (some activities may be captured and vented to a fume collector)
4	<u>Surface Finishing Machine</u> Manufacturer: Maquinas or equivalent ^(a) Model: DM1600C Maximum Operation: 2,204 lb/yr abrasive materials Date of Installation: 2016	<u>Wet Dust Collector</u> Manufacturer: ATI Model: Wet Dust Collector

<p><u>Infrared Radiant Tube Heaters (UH1 through UH6)</u></p> <p>Manufacturers: Renzor, Wondaice, Lennox, or equivalent ^(a)</p> <p>Models: VR75, RAD100, LF24-145A-5</p> <p>Maximum Capacity: 0.60 MMBtu/hr combined (0.075–0.144 MMBtu/hr each)</p> <p>Date of Installation: 7/2011</p> <p>Fuel: natural gas</p>	None
<p><u>Heaters (UH7 through UH10)</u></p> <p>Manufacturers: Renzor or equivalent ^(a)</p> <p>Models: UDAP 150</p> <p>Maximum Capacity: 0.150 MMBtu/hr each</p> <p>Date of Installation: 10/2009, 10/2010, and 09/2013</p> <p>Fuel: natural gas</p>	None
<p><u>Radiant Heaters (UH11 through UH13)</u></p> <p>Manufacturers: Renzor or equivalent ^(a)</p> <p>Models: X3C, X3L</p> <p>Maximum Capacity: 0.066 MMBtu/hr each</p> <p>Date of Installation: (unknown)</p> <p>Fuel: natural gas</p>	None
<p><u>Package Units (RTU1 through RTU5)</u></p> <p>Manufacturers: York, Carrier, or equivalent ^(a)</p> <p>Models: ZF036N08, 48PDGC05</p> <p>Maximum Capacity: 0.30 MMBtu/hr combined (0.046 or 0.1 MMBtu/hr each)</p> <p>Date of Installation: (unknown)</p> <p>Fuel: natural gas</p>	None

(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. 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.

2 Metal Cutting Operations

2.1 Process Description

The facility performs cutting operations using the Laser Cutting Machine, Plasma Cutting Table, and Chop Saw. Fumes from laser and plasma metal cutting operations are collected and controlled by Robovents.

2.2 Control Device Descriptions

Table 2.1 Metal Cutting Operation Description

Source Descriptions	Control Equipment
Laser Cutting Machine	<u>Robovent Fume Extraction System</u> Manufacturer: Robovent Model: Plaser 3 Particulate filtration method: Endurex cartridge filters or equivalent PM/PM ₁₀ /PM _{2.5} Efficiency: 99.9% or greater
Plasma Cutting Table	<u>Robovent Fume Extraction System</u> Manufacturer: Robovent Model: Plaser 3 Particulate filtration method: Endurex cartridge filters or equivalent PM/PM ₁₀ /PM _{2.5} Efficiency: 99.9% or greater
Chop Saw	Reasonable control of fugitive emissions

Emission Limits

2.3 Opacity Limit

Emissions from the Laser Cutting Machine Robovent stack and the Plasma Cutting Table Robovent stack, or any other stack, vent, or functionally equivalent opening associated with either the Laser Cutting Machine or Plasma Cutting Table 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.

2.4 Reasonable Control of Fugitive Emissions

All reasonable precautions shall be taken to prevent particulate matter (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. Some of the reasonable precautions include, but are not limited to, the following:

- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.
- Application, where practical, of asphalt, water, or suitable chemicals to, or covering of, dirt roads, material stockpiles, and other surfaces which can create dust.
- Installation and use, where practical, of hoods, fans, and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.

- Covering, when practical, of open bodied trucks transporting materials likely to give rise to airborne dusts.
- Paving of roadways and their maintenance in a clean condition, where practical.
- Prompt removal of earth or other stored material from streets, where practical.

Operating Requirements

2.5 Robovent Operation

The permittee shall operate the relevant Robovents at all times when the Laser Cutting Machine or the Plasma Cutting Table is operating. Any period of time that the Laser Cutting Machine or the Plasma Cutting Table is in operation while the corresponding Robovent 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.

2.6 Metal Cutting Operation Limits

Operation of the Laser Cutting Machine shall not exceed 2,024 hours per year (hr/yr).

Operation of the Plasma Cutting Table shall not exceed 1,250 hr/yr.

Operation of the Chop Saw shall not exceed 50 hr/yr.

Monitoring and Recordkeeping Requirements

2.7 Metal Cutting Operation Monitoring

Each calendar month, the permittee shall monitor and record the operating hours of the Laser Cutting Machine for the previous month in hours per month (hr/mo) and for the previous 12 calendar months in hours per year (hr/yr) to demonstrate compliance with Metal Cutting Operation Limits.

Each calendar month, the permittee shall monitor and record the operating hours of the Plasma Cutting Table for the previous month in hours per month (hr/mo) and for the previous 12 calendar months in hours per year (hr/yr) to demonstrate compliance with Metal Cutting Operation Limits.

Each calendar month, the permittee shall monitor and record the operating hours of the Chop Saw for the previous month in hours per month (hr/mo) and for the previous 12 calendar months in hours per year (hr/yr) to demonstrate compliance with Metal Cutting Operation Limits.

Records shall be maintained in accordance with the monitoring and recordkeeping requirements included in the General Provisions of this permit.

3 Welding Operations

3.1 Process Description

The facility performs Flux Cored Arc welding (FCAW) and Gas Metal Arc welding (GMAW) operations using welding machines. Although not required by this permit, fumes from some welding operations may be collected and controlled by fume collectors with filtration.

3.2 Control Device Descriptions

Table 3.1 Welding Operations

Source Descriptions	Control Equipment
Welding Machines	Reasonable control of fugitive emissions (some activities may be captured and vented to a fume collector)

Emission Limits

3.3 Opacity Limit

Emissions from each fume collector stack, or any other stack, vent, or functionally equivalent opening associated with a welding machine 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.

3.4 Reasonable Control of Fugitive Emissions

All reasonable precautions shall be taken to prevent particulate matter (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. Some of the reasonable precautions include, but are not limited to, the following:

- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.
- Application, where practical, of asphalt, water, or suitable chemicals to, or covering of, dirt roads, material stockpiles, and other surfaces which can create dust.
- Installation and use, where practical, of hoods, fans, and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.
- Covering, when practical, of open bodied trucks transporting materials likely to give rise to airborne dusts.
- Paving of roadways and their maintenance in a clean condition, where practical.
- Prompt removal of earth or other stored material from streets, where practical.

Operating Requirements

3.5 Welding Material Usage Limits

The maximum amount of all FCAW electrode materials used shall not exceed 2,000 pounds per calendar year (lb/yr).

The maximum amount of all GMAW electrode materials used shall not exceed 2,800 pounds per calendar year (lb/yr).

Monitoring and Recordkeeping Requirements

3.6 Welding Material Monitoring

Each calendar month, the permittee shall monitor and record of the amount of FCAW electrode materials used in welding operations for the previous month in pounds per month (lb/mo) and for the previous 12 calendar months (lb/yr) to demonstrate compliance with Welding Material Usage Limits.

Each calendar month, the permittee shall monitor and record of the amount of GMAW electrode materials used in welding operations for the previous month in pounds per month (lb/mo) and for the previous 12 calendar months (lb/yr) to demonstrate compliance with Welding Material Usage Limits.

Records shall be maintained in accordance with the monitoring and recordkeeping requirements included in the General Provisions of this permit.

4 Surface Finishing Operations

4.1 Process Description

The facility performs surface finishing operations using the Surface Finishing Machine. Fumes from surface finishing operations are collected and controlled by the Wet Dust Collector.

4.2 Control Device Descriptions

Table 4.1 Surface Finishing Operations Description

Source Descriptions	Control Equipment
Surface Finishing Machine	<u>Wet Dust Collector</u> Manufacturer: ATI Model: Wet Dust Collector Particulate filtration method: cartridge filters PM/PM ₁₀ /PM _{2.5} Efficiency: 99.3% or greater

Emission Limits

4.3 Opacity Limit

Emissions from the Wet Dust Collector stack, or any other stack, vent, or functionally equivalent opening associated with the Surface Finishing Machine, 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

4.4 Wet Dust Collector Operation

The permittee shall operate the Wet Dust Collector at all times when the Surface Finishing Machine is operating. Any period of time that the Surface Finishing Machine is in operation while the Wet Dust Collector 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.

4.5 Abrasive Material Usage Limit

The maximum amount of all abrasive materials used in the Surface Finishing Machine shall not exceed 2,204 pounds per year (lb/yr) on a 12-month rolling basis. Abrasive materials that are reclaimed and re-used in the Surface Finishing Machine shall be counted toward this limit.

Monitoring and Recordkeeping Requirements

4.6 Throughput Monitoring

Each calendar month, the permittee shall monitor and record of the amount of abrasive materials used in the Surface Finishing Machine for the previous month in pounds per month (lb/mo) and for the previous 12 calendar months (lb/yr) to demonstrate compliance with the Abrasive Material Usage Limit. The amount of abrasive materials reclaimed and re-used shall also be monitored in pounds per month (lb/mo) and included in the monthly (lb/mo) and annual (lb/yr) totals. Records shall be maintained in accordance with the monitoring and recordkeeping requirements included in the General Provisions of this permit.

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, 5/1/94]

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, 5/1/94]

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, 5/1/94]

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, 5/1/94]

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 4/11/15]

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, 5/1/94]

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, 4/5/00]

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, 5/1/94]

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, 3/23/98]

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, 3/23/98]

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, 4/11/06]

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, 5/1/94]