

Air Quality

PERMIT TO CONSTRUCT

Permittee Western Idaho Cabinets
Permit Number P-2016.0047
Project ID 61765
Facility ID 001-00145
Facility Location 7979 West Woodlark Avenue
Boise, Idaho 83709

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

Contents

1	Permit Scope.....	3
2	Coating and Chipping Operations	5
3	General Provisions.....	10

1 Permit Scope

Purpose

- 1.1 This is a revised permit to construct (PTC) a wood furniture manufacturing facility. This project allows for operation of an additional paint spray booth and an increase in painting activities.
- 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-040013, issued on September 27, 2004.

Regulated Sources

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

Table 1.1 Regulated Sources

Permit Section	Source Descriptions	Control Equipment
2	<u>Paint Spray Booth #1</u> Manufacturer/Model: Global Finishing Solutions Wave ^(a) Maximum Operation: as limited by Paint Spray Booth Emission Limits for all booths (Table 2.2) Date of Construction: 10/1/2004	<u>Filter system</u> Manufacturer: Global Finishing Solutions ^(a) Model: Chemical DUO filter media ^(a)
2	<u>Paint Spray Booth #2</u> Manufacturer/Model: Global Finishing Solutions FP-2086.125 ^(a) Maximum Operation: as limited by Paint Spray Booth Emission Limits for all booths (Table 2.2) Date of Construction: 10/1/2004	<u>Filter system</u> Manufacturer: Global Finishing Solutions ^(a) Model: Chemical DUO filter media ^(a)
2	<u>Paint Spray Booth #3</u> Manufacturer/Model: Global Finishing Solutions FP-2086.125 ^(a) Maximum Operation: as limited by Paint Spray Booth Emission Limits for all booths (Table 2.2) Date of Construction: 10/1/2004	<u>Filter system</u> Manufacturer: Global Finishing Solutions ^(a) Model: Chemical DUO filter media ^(a)
2	<u>Paint Spray Booth #4</u> Manufacturer/Model: Makor Automated Flatline Spray System ^(a) Maximum Operation: as limited by Paint Spray Booth Emission Limits for all booths (Table 2.2) Date of Construction: 6/15/2014	<u>Filter system</u> Manufacturer: Global Finishing Solutions ^(a) Model: Com-Pleat PAF or Research Products 3032 filter media ^(a)
2	<u>Chipper (CH1)</u> Manufacturer/Model: Weima WL-8 ^(a) Maximum Operation: 10.5 cubic yards of chipped materials/day (approx. 1 trailer load per day) Date of Construction: 7/3/2015	<u>Cyclone (CY1)</u> Manufacturer: (unknown)
2	Cutting, routing, and sanding activities	Reasonable control of fugitive emissions (activities may be captured and vented to bag filters or NFK Baghouse)

Table 1.1 (continued)

Permit Section	Source Descriptions	Control Equipment
2	<u>Make-Up Air Unit (MAU)</u> Manufacturer/Model: Global Finishing Solutions CFA 36 Maximum Capacity: 3.629 MMBtu/hr Date of Construction: 8/4/2004 Fuel: natural gas	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.

[DRAFT XX, 2016]

2 Coating and Chipping Operations

2.1 Process Description

Cutting, routing, sanding, and surface coating activities are completed at the facility in the manufacture of wood cabinets and other wood furniture. Particulate matter (PM) emissions from these activities either are exhausted to bag filters located interior to the fabrication building, or to the NFK Baghouse located outside the building. Coating operations are conducted within paint booths, with PM emissions controlled by paint booth filtration systems.

2.2 Control Device Descriptions

Table 2.1 Coating and Chipping Operations Description

Source Descriptions	Control Equipment
Paint Spray Booth #1	<u>Filter system</u> Manufacturer: Global Finishing Solutions ^(a) Model: Chemical DUO filter media ^(a) PM/PM ₁₀ /PM _{2.5} Efficiency: 98.2% or greater
Paint Spray Booth #2	<u>Filter system</u> Manufacturer: Global Finishing Solutions ^(a) Model: Chemical DUO filter media ^(a) PM/PM ₁₀ /PM _{2.5} Efficiency: 98.2% or greater
Paint Spray Booth #3	<u>Filter system</u> Manufacturer: Global Finishing Solutions ^(a) Model: Chemical DUO filter media ^(a) PM/PM ₁₀ /PM _{2.5} Efficiency: 98.2% or greater
Paint Spray Booth #4	Filter system Manufacturer: Global Finishing Solutions ^(a) Model: Com-Pleat PAF or Research Products 3032 filter media ^(a) PM/PM ₁₀ /PM _{2.5} Efficiency: 98.2% or greater
Paint Spray Booth Spray Guns (for Booths #1-4)	<u>Coating spray guns</u> Manufacturer: Kremlin Rexson, C.A. Technologies, or equivalent Model: Xcite, M250, ATX, Bobcat, or equivalent Type: air-assisted airless, airless, HVLP, or equivalent Transfer Efficiency: 65% or greater
Chipper (CH1)	<u>Cyclone (CY1)</u> Manufacturer: (unknown) PM/PM ₁₀ /PM _{2.5} Efficiency: 99.3% or greater
Cutting, routing, and sanding activities	Reasonable control of fugitive emissions (activities may be captured and vented to bag filters or NFK Baghouse)
Make-Up Air Unit (MAU)	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.

[DRAFT XX, 2016]

Emission Limits

2.3 Paint Spray Booth Emission Limits

Emissions from the paint spray booth stacks (#1, #2, #3, and #4) shall not exceed the emission rate limits in Table 2.2.

Table 2.2 Paint Spray Booth Emission Limits ^(a)

Source Description	PM _{2.5} ^(b)		VOC ^(c)		Individual HAP ^{(d)(e)}	Total HAP ^{(d)(f)}	Individual TAP ^(g)
	lb/hr ^(h)	T/yr ⁽ⁱ⁾	lb/hr ^(h)	T/yr ⁽ⁱ⁾	T/yr ⁽ⁱ⁾	T/yr ⁽ⁱ⁾	lb/hr ^(h)
Paint Spray Booth #1, Paint Spray Booth #2, Paint Spray Booth #3, and Paint Spray Booth #4 (combined)	0.131	0.408	31.0	96.7	5.0	9.4	EL ^(g)

- 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) Hazardous air pollutants (HAP).
- e) Emission limit for each HAP.
- f) Emission limit for total of all HAP (combined).
- g) Toxic air pollutants (TAP); emission limits are screening emission levels (EL) in IDAPA 58.01.01.585–586 (Sections 585–586) for each TAP emitted. Compliance with EL shall be determined using average emission rates for the relevant monitoring period as specified in the Paint Spray Booth Emissions Monitoring condition.
- h) Pounds of emissions from all paint spray booth stacks (combined) per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference method, or DEQ approved alternative.
- i) Tons of emissions from all paint spray booth stacks (combined) per any consecutive 12 calendar month period.

[DRAFT XX, 2016]

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 paint spray booth stack (#1, #2, #3, and #4), cyclone stack, make-up air unit stack, or any other stack, vent, or functionally equivalent opening associated with a paint spray booth, chipper, or make-up air unit 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.

[DRAFT XX, 2016]

Operating Requirements

2.6 Natural Gas Usage

The rolling 12-calendar month natural gas used by the facility shall not exceed 266,630 therms per year (thm/yr). The Make-Up Air Unit shall combust natural gas fuel only.

[DRAFT XX, 2016]

2.7 Spray Gun and Filter System Operation

The permittee shall install, maintain, and operate each filter system in accordance with manufacturer's specifications. The corresponding filter system shall be operated at all times when the paint spray booth is operating. Any period of time that the paint spray booth is in operation while the corresponding filter 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.

- All coating activities at this facility shall be conducted inside a paint spray booth with filter system in place and exhaust fans operating.
- All painting shall be conducted with air-assisted airless, airless, HVLP, or equivalent technology, with a minimum 65% transfer efficiency as documented by the spray gun manufacturer.
- The permittee shall install, maintain, and operate according to the manufacturer's specifications and recommendations, a spray booth filter system with a minimum control efficiency of 98.2% for particulate emissions as documented by the filter manufacturer.

[DRAFT XX, 2016]

2.8 Cyclone

The permittee shall install, maintain, and operate the cyclone in accordance with manufacturer's specifications. Any period of time that the chipper is operating without a cyclone 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.

[DRAFT XX, 2016]

2.9 NFK Baghouse

The permittee shall install, maintain, and operate the NFK Baghouse in accordance with manufacturer's specifications.

[DRAFT XX, 2016]

2.10 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.

Monitoring and Recordkeeping Requirements

2.11 Odor Complaint Monitoring

The permittee shall maintain records of all odor complaints received to demonstrate compliance with the Odors limit. 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.

[DRAFT XX, 2016]

2.12 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 therms per month (thm/mo) and for the previous 12 calendar months (thm/yr) to demonstrate compliance with the Natural Gas Usage limit.

[DRAFT XX, 2016]

2.13 Paint Spray Booth Emissions Monitoring

The permittee shall maintain records onsite demonstrating that emissions from coating operations do not exceed Paint Spray Booth Emission Limits, and do not exceed all emission screening levels in IDAPA 58.01.01.585–586 (Sections 585 and 586). Emissions shall be evaluated on a pollutant-by-pollutant basis.

- Each week that coatings are used, the permittee shall monitor and record the amount of each coating material used in all paint spray booths in gallons per week (gal/week).
- Each calendar month, the permittee shall monitor and record the amount of each coating material used in all paint spray booths for the previous month in gallons per month (gal/mo) and for the previous 12 calendar months (gal/yr).
- Each week, the permittee shall monitor and record emissions from all paint spray booths of each Section 585 TAP emitted in average pounds per hour over the 168-hour weekly averaging period (lb/hr). Each average emission rate (lb/hr) shall be compared to the relevant screening emission level (EL) to determine compliance with Section 585 TAP Paint Spray Booth Emission Limits. For emissions in excess of TAP EL, the permittee shall comply with excess emission procedures and requirements included in the General Provisions of this permit.
- Each calendar month, the permittee shall monitor and record emissions from all paint spray booths of each Section 586 TAP emitted in pounds per month for the previous month (lb/mo), in pounds per year for the previous rolling 12 calendar month period (lb/yr), and in average pounds per hour over the 12 calendar month averaging period (lb/hr). Each average emission rate (lb/hr) shall be compared to the relevant EL to determine compliance with Section 586 TAP Paint Spray Booth Emission Limits. For emissions in excess of TAP EL, the permittee shall comply with excess emission procedures and requirements included in the General Provisions of this permit.

- Each calendar month, the permittee shall monitor and record emissions from all paint spray booths of each individual HAP, the total of all HAP, VOC, and PM_{2.5} emitted in tons per month for the previous month (T/mo), and tons per year for the previous 12 calendar month period (T/yr) to demonstrate compliance with annual HAP, VOC, and PM_{2.5} Paint Spray Booth Emission Limits.
- Documentation such as manufacturer's specification sheets that supports filter efficiencies, transfer efficiencies, capture efficiencies, and other engineering assumptions relied upon in emission calculations shall be maintained onsite.

[DRAFT XX, 2016]

2.14 Material Purchase Records and Safety Data Sheets

For each material used at the facility, including but not limited to primers, stains, basecoats, glazes, sealers, lacquers, thinners, solvents, and reducers, the permittee shall record and maintain the following records:

- Material purchase records
- Safety Data Sheets (SDS)

[DRAFT XX, 2016]

2.15 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 3.2 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.

3 General Provisions

General Compliance

- 3.1 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.]
- 3.2 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]
- 3.3 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

- 3.4 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

- 3.5 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]
- 3.6 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

3.7 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.

3.8 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.

3.9 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

3.10 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

- 3.11** 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

- 3.12** 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

- 3.13** 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

- 3.14** 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

- 3.15** 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

- 3.16** 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]