



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor
Toni Hardesty, Director

February 7, 2005

Certified Mail No. 7000 0520 0016 0850 4035

Mr. Wade Wolcott, President
Dynamic Fabricators, LLC
22515 W. Hwy. 53
Rathdrum, Idaho 83858

RE: Facility ID No. 055-00035, Dynamic Fabricators, LLC, Rathdrum
Modified Permit to Construct

Dear Mr. Wolcott

The Department of Environmental Quality (DEQ) is issuing modified Permit to Construct (PTC) No. P-030141 to Dynamic Fabricators, LLC (Dynamic) in accordance with IDAPA 58.01.01.200 through 228, (*Rules for the Control of Air Pollution in Idaho*). This PTC is effective immediately and is based on your permit application received on November 24, 2003.

If the December 2004 performance tests conducted to satisfy the performance testing requirement of Dynamic's Tier I operating permit demonstrate compliance with this PTC, then no further testing is required.

This permit does not release Dynamic from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances. Please refer to the appropriate permit number when submitting reports required in the Reporting Requirements section of the permit.

A representative of the Coeur d'Alene Regional Office will contact you regarding a meeting with DEQ to discuss the permit terms and requirements. In addition to your facility's plant manager, DEQ recommends the following representatives attend the meeting: your responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with the 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 call Bill Rogers at (208) 373-0502 to address any questions or concerns you may have with the enclosed permit.

Dynamic Fabricators, LLC
Final Modified PTC, February 7, 2005
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If you have any questions about the enclosed permit or the permitting process, please contact Bill Rogers at (208) 373-0502 or wrogers@deq.idaho.gov.

Sincerely,



Martin Bauer, Administrator
Air Quality Division

BR/HE/sd

Permit No. P-030141

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c: Tom Harman, Coeur d'Alene Regional Office
Harbi Elshafei, AQ Division
Bill Rogers, Permit Coordinator
Marilyn Seymore/Pat Rayne, AQ Division
Joan Lechtenberg, AQ Division
Laurie Kral, USEPA Region 10
Permit Binder
Source File
Reading File (Ltr Only)

Ms. Beth Fifield Hodgson, PE
Spring Environmental, Inc.
1011 North Cedar Street
Spokane, WA 99201



Air Quality
PERMIT TO CONSTRUCT
State of Idaho
Department of Environmental Quality

PERMIT No.: P-030141
FACILITY ID No.: 055-00035
AQCR: 062 **CLASS:** A
SIC: 3089 **ZONE:** 11
UTM COORDINATE (km): 502.1, 5290.5

1. **PERMITTEE**
Dynamic Fabricators, LLC

2. **PROJECT**
Permit to Construct Modification

3. MAILING ADDRESS 22515 W. Highway 53	CITY Rathdrum	STATE Idaho	ZIP 83858
4. FACILITY CONTACT Wade Wolcott	TITLE President	TELEPHONE (208) 773-1787	
5. RESPONSIBLE OFFICIAL Wade Wolcott	TITLE President	TELEPHONE (208) 773-1787	
6. EXACT PLANT LOCATION N ½ of SW ¼ of NW ¼ of Section 16, Township 51N, Range 5W			COUNTY Kootenai

7. **GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS**
Fiberglass Fabrication

8. **GENERAL CONDITIONS**

This permit is issued according to IDAPA 58.01.01.200, *Rules for the Control of Air Pollution in Idaho*, and 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.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) 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; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the 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.

This permit is not transferable to another person, place, or piece or set of equipment. This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes of design or equipment may require DEQ approval pursuant to the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.200, et seq.



TONI HARDESTY, DIRECTOR
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED: February 7, 2005

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Acronyms, Units, and Chemical Nomenclature

AQCR	Air Quality Control Region
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
lb/hr	pound per hour
O&M	operations and maintenance
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PTC	permit to construct
SIC	Standard Industrial Classification
T/yr	tons per year
UTM	Universal Transverse Mercator
VOC	Volatile organic compounds

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-030141

Permittee:	Dynamic Fabricators, LLC	Facility ID No. 055-00035	Date Issued:	February 7, 2005
Location:	Rathdrum, Idaho			

1. PERMIT TO CONSTRUCT SCOPE

Purpose

- 1.1 The purpose of this permit to construct (PTC) is to satisfy the requirements of IDAPA 58.01.01.200 et seq., Rules for the Control of Air Pollution in Idaho.
- 1.2 This PTC replaces the following permits, the terms and conditions of which no longer apply:
 - Permit to Construct No. 055-00035, issued to GEA Dynamic Fabricators on August 25, 1994.
 - Permit to Construct No. 055-00035, issued to GEA/Thermal-Dynamic Towers, Inc. on February 5, 1993.

Regulated Sources

Table 1.1 lists all sources of emissions that are regulated in this PTC.

Table 1.1 REGULATED EMISSIONS SOURCES

Permit Sections	Source Description	Emissions Control(s)
2	<u>Manufacturing Fiberglass Reinforced Plastic (FRP) Products</u> Dynamic Fabricators manufactures FRP panel segments, which function as external covering for cooling tower framework. In addition, large diameter FRP cooling tower pipe and corrosive resistant pipe liners are produced. Emissions from the FRP process exhaust to Stack No. 1 and Stack No. 2.	<u>Fiberglass Filter Media System</u> Particulate matter emissions are controlled by two-inch thick fiberglass filter (i.e., Purolator 1172 BWL 24x24x2)

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2. MANUFACTURING FIBERGLASS REINFORCED PLASTIC (FRP) PRODUCTS

2.1 Process Description

Dynamic Fabricators (Dynamic) manufactures FRP panel segments which function as external covering for cooling tower framework. Additionally, large diameter FRP cooling tower pipe and corrosive-resistant pipe liners are produced at the facility.

The fiberglass building is sectioned into a spray booth, a pipe winding area, pump room and curing area. Raw materials used in the production of the FRP product include gel coat, polyester resins containing styrene, fiberglass roving, and catalyst (methyl ethyl ketone peroxide). Resins, gel coat, catalyst, and solvent are stored in a secondary concrete containment area under a canopy attached to the fiberglass building.

When spraying operations are being conducted, the building is flooded with fresh air in order to meet the Occupational Safety and Health Administration (OSHA) workplace standard for styrene. Styrene emissions are generated from resin overspray and the FRP curing processing. Air from this process is exhausted through two identical stacks, identified as Stack No. 1 and Stack No. 2.

2.2 Emissions Control Description

Particulate matter emissions from the manufacturing of FRP are controlled by two-inch thick graduated density fiberglass media which is incorporated into each wall vent. Some particulate matter with an aerodynamic diameter less than or equal to nominal 10 micrometers (PM₁₀) is produced from the fiberglass spray guns. Styrene and non-styrene volatile organic compounds (VOC) emissions are uncontrolled.

Emissions Limits

2.3 Visible Emissions Limit

A person shall not discharge any air pollutant into the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

2.4 PM₁₀ and Styrene Emissions Limits

The combined PM₁₀ emissions and the combined styrene emissions from Stack No. 1 and Stack No. 2 associated with the FRP manufacturing process shall not exceed any corresponding emissions rate limits listed in Table 2.1.

Table 2.1 EMISSIONS LIMITS FOR FRP OPERATIONS

Source Description	PM ₁₀		Styrene	
	lb/hr	T/yr*	lb/hr	T/yr*
Manufacturing FRP Stacks Nos. 1 and 2	2.27	9.92	43.4	54.4

* T/yr is tons of emissions per any consecutive 12-month period

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Operating Requirements**2.5 Throughput Limits**

Resins, gel coat, fiberglass, and catalyst throughput shall not exceed the following limits in any consecutive 12-month period:

- Resins 720 tons per year (T/yr)
- Gel coat 103 T/yr
- Fiberglass 400 T/yr
- Catalyst 17.5 T/yr

2.6 Filter System Monitoring Equipment

The permittee shall, in accordance with manufacturer specifications, install, calibrate, maintain, and operate equipment to continuously measure the pressure differential across the fiberglass filter media system.

2.7 Operations and Maintenance Manual

Within 60 days of permit issuance, the permittee shall have developed an operations and maintenance (O&M) manual for the fiberglass filter media system. The manual shall describe the procedures that will be followed to comply with General Provision 2 and the manufacturer specifications for the filters. The manual shall contain, at a minimum, the pressure drop operating range for the fiberglass filter media system and scheduled maintenance requirements. The manual shall remain on site at all times and shall be made available to DEQ representatives upon request. Within 30 days of O&M manual development, the permittee shall submit a copy of the manual to DEQ.

2.8 Pressure Drop Across the Fiberglass Filter Media System

The pressure drop across the fiberglass filter media system shall be maintained within manufacturer and O&M manual specifications. Documentation of both the manufacturer and O&M manual operating pressure drop specifications shall remain on site at all times and shall be made available to DEQ representatives upon request.

2.9 Fiberglass Filter Media System Operations

The fiberglass filter media system shall be operated during the operation of the manufacturing of FRP products.

2.10 Styrene Monomer Content

- The permittee shall use polyester resins with a styrene monomer content of no more than 35% by weight. This provision shall not apply to the use of gel coat and resin used for mold construction, corrosion-resistant resin, and fire retardant resins.
- Excluding the gel coat and specialty resins, 90% by weight of all polyester resins used by the permittee shall have a styrene monomer content of no more than 35% by weight.
- The permittee shall use a gel coat with a styrene monomer content of no more than 43% by weight.

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2.11 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, considerations 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, oil, 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, where 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

2.12 Operating Parameters

The following parameters shall be monitored and recorded. Records of this information shall remain on site for the most recent two-year period and shall be made available to DEQ representatives upon request.

- Pressure drop across the fiberglass filter system, once daily when the manufacture of the FRP products is operating.
- Resins, gel coat, fiberglass, and catalyst throughput in tons per month and tons per any consecutive 12-month period. Annual throughput of resins, gel coat, fiberglass, and catalyst shall be determined by summing monthly throughput over the previous consecutive 12-month period.
- The weight percent of styrene monomer for each gel coat, resin, and specialty resins used.

2.13 Reasonable Control Measures

The permittee shall conduct a monthly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions, to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive 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 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 emissions, and the date the corrective action was taken.

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Records of this information shall remain on site for the most recent two year period and shall be made available to DEQ representatives upon request.

2.14 Work Practices

- The permittee shall at all times keep all exterior doors and/or windows of the building, used for fiberglass operations, tightly closed except for the explicit purpose of moving necessary equipment, materials, or personnel into or out of the building.
- Airless spray guns shall be used for all spray-up processes including gel coat application.
- Neither Stack No. 1 nor stack No. 2 shall be equipped with a rain cap or any other obstruction that would result in the downward deflection of the exhaust gas stream.
- The permittee shall use closed containers for the disposal of all resins, gel coat, catalyst, and cleaning materials in such a manner as to effectively control styrene and VOC emissions to the surrounding air.
- The permittee shall at no time allow containers of resins, gel coat, catalyst, or cleaning materials to be open to the atmosphere, other than to transfer material to or from the container, or to insert a pump. This shall apply to full, partially full, and empty containers.

Records of this information shall remain on site for the most recent two-year period and shall be made available to DEQ representatives upon request.

2.15 Performance Tests

2.15.1 PM₁₀ Performance Test

Within 60 days after achieving the maximum production rate at which the source will operate, but not later than 180 days after receiving this permit, the permittee shall conduct a performance test to measure PM₁₀ emissions from Stack No. 1 and Stack No. 2 using US EPA Methods 201.a and 202 to demonstrate compliance with Permit Condition 2.4. The results of the performance tests shall be combined to demonstrate compliance with PM₁₀ emissions limits. Performance tests shall be conducted in accordance with IDAPA 58.01.01.157, General Provision 6, and the following requirements:

- Visible Emissions shall be observed during each performance test run using methods specified in IDAPA 58.01.01.625
- Throughput of resins, gel coat, catalyst, and fiberglass shall be recorded in pounds per hour during each performance test run.
- The pressure drop across the fiberglass filter system shall be monitored and recorded during each performance test.

2.15.2 Styrene Performance Test

Within 60 days after achieving the maximum production rate at which the source will operate, but not later than 180 days after receiving this permit, the permittee shall conduct a performance test to measure styrene emissions from Stack No. 1 and Stack No. 2 to demonstrate compliance with Permit Condition 2.4. The results of the performance tests shall be combined to demonstrate compliance with styrene

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emissions limits. The permittee shall receive DEQ approval of proposed test methods prior to scheduling of such testing.

Performance tests shall be conducted in accordance with IDAPA 58.01.01.157, General Provision 6, and the following requirements:

- Visible Emissions shall be observed during each performance test run using methods specified in IDAPA 58.01.01.625
- Throughput of resins, gel coat, catalyst, and fiberglass shall be recorded in pounds per hour during each performance test run.
- The pressure drop across the fiberglass filter system shall be monitored and recorded during each performance test.

Reporting Requirements

2.16 Performance Test Protocol

The permittee shall submit a test protocol to DEQ for approval at least 30 days prior to the performance tests required in Permit Condition 2.15. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the test does not satisfy the testing requirements.

2.17 Performance Test Report

The permittee shall submit a report of the results of the performance tests required in Permit Condition 2.15, including all required process data and in accordance with General Provision 8, to DEQ within 45 days after the date on which the performance tests are conducted.

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Location:	Rathdrum, Idaho			

3. PERMIT TO CONSTRUCT GENERAL PROVISIONS

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 and the *Rules for the Control of Air Pollution in Idaho*, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.
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.
3. The permittee shall allow the director, and/or the authorized representative(s), upon the presentation of credentials:
 - To enter, at reasonable times, upon the premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
 - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and require stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the director.
4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
5. The permittee shall notify DEQ, in writing, of the required information for the following events within 5 working days after occurrence:
 - Initiation of Construction - Date
 - Completion/Cessation of Construction - Date
 - Actual Production Startup - Date
 - Initial Date of Achieving Maximum Production Rate - Production Rate and Date
6. 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.

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.

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Within 45 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.

7. 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.

8. In accordance with IDAPA 58.01.01.123, 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.