

Statement of Basis for the Air Operating Permit—Final

Fibrex Corporation

Burlington, Washington

May 5, 2011



Serving Island, Skagit & Whatcom Counties

AIR OPERATING PERMIT – STATEMENT OF BASIS GENERAL INFORMATION

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SIC: 3084
EPA AFS NUMBER: 53-057-00049

NWCAA ID NUMBER: 379-V-S

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Air Operating Permit Number:	Issuance Date:
021	May 5, 2011
Permit Modifications:	Modification Date:
Supersedes Permit Number:	Expiration Date:
	May 5, 2016
Application Date:	Renewal Application Due:
January 25, 2010	May 5, 2015

TABLE OF CONTENTS

1	Introduction (permitting history)	5
2	Facility Description	6
2.1	Identification	6
2.2	Production System	7
2.3	Emission Units.....	7
2.4	Emissions	8
2.5	Compliance History	8
2.6	Northwest Clean Air Agency Orders	9
3	General Permit Assumptions	11
3.1	Federal Enforceability	11
3.2	Future Requirements	11
3.3	Other Federal Requirements.....	11
3.4	Compliance Options	12
3.5	Gap Filling	12
4	AOP Elements and Basis for Terms and Conditions	14
4.1	Permit Information, Attest, Emission Unit Identification	14
4.2	Standard Terms and Conditions	14
4.3	Standard Terms and Conditions for NESHAP	14
4.4	Generally Applicable Requirements.....	22
4.5	Specific Requirements for Emissions Units	22
4.6	Inapplicable Requirements.....	23
5	Insignificant Emissions Units	24
6	One-time Requirements	25
7	Public Docket	26
8	Definitions and Acronyms	27
	APPENDIX A	28

TABLES AND FIGURES

Table 1 Fibrex criteria pollutant emissions in tons per year.....8
Table 2 Fibrex toxic air pollutant emissions in pounds per year8
Table 3 Inspection Activities for Fibrex9
Table 4 Applicability of General Provisions (Subpart A) to Subpart WWWW of Part 63.....15
Table 5 Insignificant Activities and Emission Units.....24
Table 6 Emission Units and Operations at Fibrex Inc.....28

Figure 1 Overhead View of the Fibrex Facilities in Burlington, WA6
Figure 2 Site Plan of the Fibrex facilities.....7

1 INTRODUCTION (PERMITTING HISTORY)

Fibrex Corporation, also referred to in this document as Fibrex or as the facility, conducts fiberglass fabrication processes at facilities located at 410 Sharon Avenue in Burlington, Washington. Fibrex was originally officially registered as a stationary source in October 31, 1983. On January 12, 1995, Fibrex signed a voluntary Regulatory Order (RO 004) to establish a federally enforceable limit on the emissions of styrene from the facility. Through this Order, emissions of styrene, a regulated hazardous air pollutant listed in section 112(b) of the Federal Clean Air Act, are limited to no more than 19,500 pounds in any calendar year.

On October 14, 2009 (amended November 2, 2009) Fibrex requested that RO 004 be rescinded by the NWCAA. On January 13, 2010, NWCAA did rescind the Order and as of October 14, 2009, Fibrex became a Title V source and is required to have an Air Operating Permit (AOP) because the facility has the potential to emit more than 10 tons per year of styrene. Styrene is released during mixing, layup and subsequent curing of polyester and vinyl ester resins applied at the Fibrex facilities.

Air Operating Permit Chronology:

- Air operating permit (AOP 021) application received on January 25, 2010.
- Completeness determination issued on March 22, 2010.

The purpose of this Statement of Basis (SOB) is to set forth the legal and factual basis for the Fibrex AOP conditions and to provide background information to facilitate review of the AOP by interested parties. This SOB is not a legally enforceable document.

The AOP was first issued as draft on 8 February, 2011. Subsequent to that, it was decided to include the newly revised version of WAC 173-400 into the AOP. As a result, the AOP is re-issued as draft.

2 FACILITY DESCRIPTION

2.1 Identification

Fibrex is located in Burlington, Washington, and manufactures and provides engineering services for custom fiberglass reinforced plastic (FRP) composite products. These activities are classified under the North American Industry Classification System (NAICS) Code 326122, Plastic Pipes and Pipe Fitting Manufacturing. Fibrex Corporation is a leading manufacturer of application-specific (custom) fiberglass pipe, headers and duct systems for corrosive industrial applications. Premium vinyl ester and polyester resins are used, specifically formulated for corrosion, high-temperature, and fire resistance.

An overhead photograph of the Fibrex Street facilities is shown in Figure 1 of this SOB. There are five buildings or structures at the facility. In addition, there is some outside storage of raw materials and occasional outdoor fabrication work. The emission units at the Fibrex facilities are identified in Table 1 of the AOP, and also included in this document as Table 6 in Appendix A. A site plan of the Fibrex facilities is shown in Figure 2.

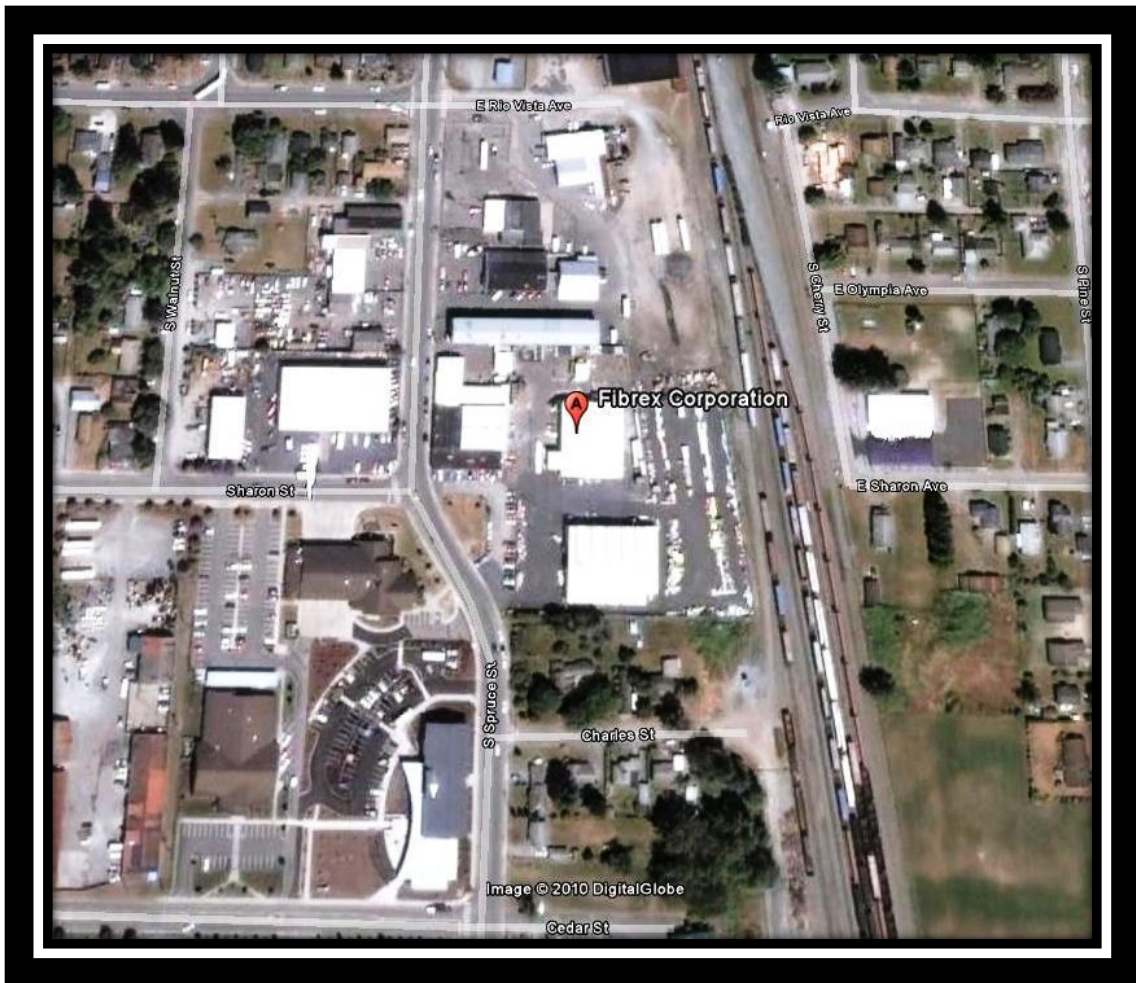


Figure 1 Overhead View of the Fibrex Facilities in Burlington, WA

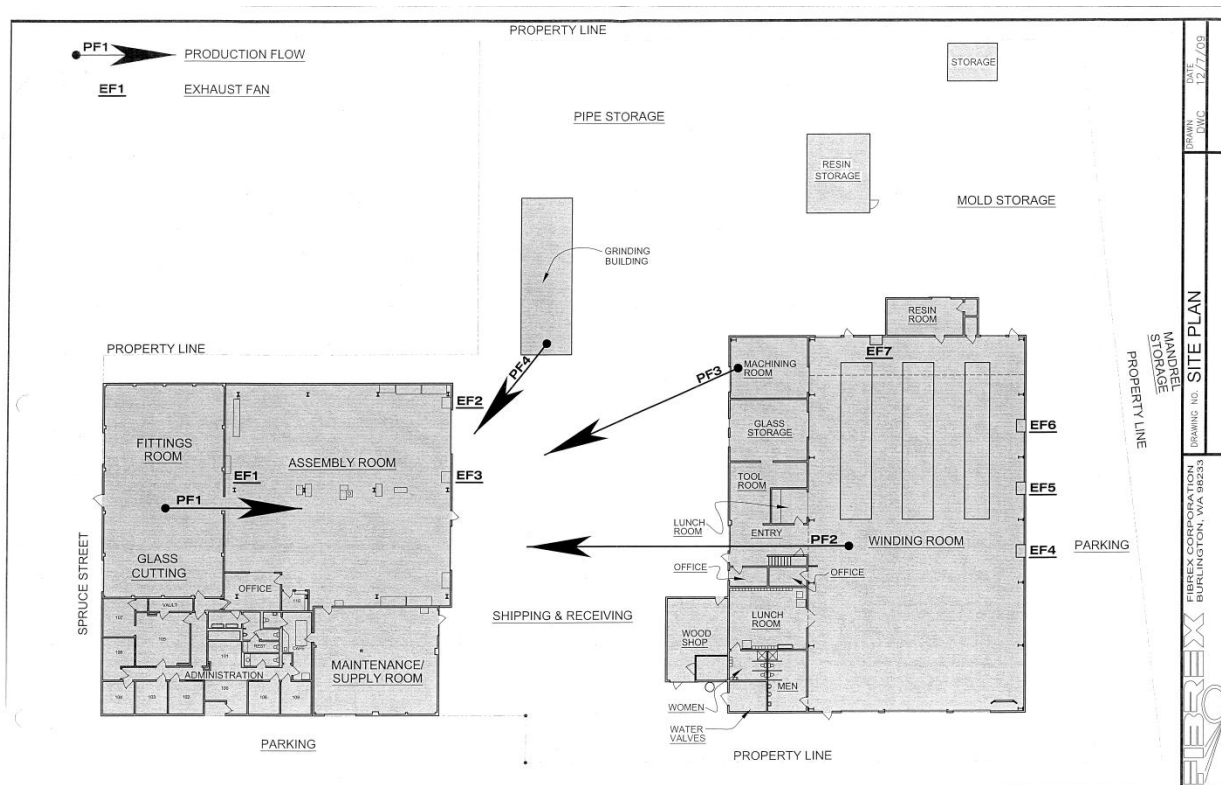


Figure 2 Site Plan of the Fibrex facilities

2.2 Production System

In general, fiberglass and catalyzed polyester resin are applied to molds that are purchased or constructed at the facility. Depending on the piece being constructed, the resin/fiberglass composite is applied via hand layup, spray layup or filament winding layup. After the resin hardens the piece is removed from the mold and is trimmed, machined and, if necessary, attached to other pieces to construct the final product. Finally, the product is crated and loaded on trucks or trains for shipment.

Fibrex also manufactures pipes and tubes of varying sizes. The mold in that case consists of a cylinder mandrel secured between two support stocks. The cylinder rotates, and a carriage slides longitudinally back and forth, applying the resin and fiberglass until the desired tube thickness is reached. Filament winding is sometimes supplemented with spray chop applied resin/glass.

2.3 Emission Units

The emission units at the Fibrex facilities are identified in Table 1 of the AOP, and also included in this document as Table 6 in Appendix A. Three emission units are identified:

1. Process #1: Filament Winding Lay-up, in Building 2
Filament winding is the process of applying resin-impregnated fibers onto a rotating mandrel surface.
2. Process #2: Hand Lay-up, in Building 2
Hand lay-up is a process where woven fiberglass and catalyzed resin mix are applied manually to a rotating mandrel.
3. Process #3: Manual Lay-up, in Building 1

Manual lay-up is a fiberglass fabrication process in which the reinforcing fibers are manually applied to a mold wetted with catalyzed resin mix. Reinforcing material and resin mix are layered to build laminate thickness. Squeegees, brushes and rollers are used to smooth, compact and shape the product.

2.3.1 Insignificant emission units

Other emission units or activities present at Fibrex are categorically insignificant or insignificant on the basis of size or production rate (see Table 5 of this document, in Section 5). There are no combustion units at the facility other than pipeline-supplied natural gas-fired comfort heating equipment and portable propane heaters used to heat the buildings. These heating devices are insignificant emission units according to WAC 173-401-533(r).

2.4 Emissions

Emissions from the fiberglass reinforced composites production process are shown in Table 1 and Table 2 below. VOC emissions from the facility during the last 4 years have averaged approximately 9.4 tons per year.

2.4.1 Criteria pollutant emissions in tons per year

Table 1 Fibrex criteria pollutant emissions in tons per year

	2006	2007	2008	2009
TSP	0	0	0	0
PM ₁₀	0	0	0	0
PM _{2.5}	0	0	0	0
SO ₂	0	0	0	0
NO _x	0	0	0	0
VOC	8.6	8.9	9.1	11.0
CO	0	0	0	0
GHG ¹	0	0	0	0

2.4.2 Toxic air pollutant emissions

Table 2 Fibrex toxic air pollutant emissions in pounds per year

	2006	2007	2008	2009
Styrene	17144	17732	18286	22061

2.5 Compliance History

NWCAA conducts unannounced annual inspections at all major sources at least annually, and will respond to citizen complaints when the facility is named as a potential source of undesirable air emissions. This response may involve a site visit as well as general surveillance around the plant. Table 3 lists recent inspection activity at the Fibrex facilities. NOV and penalties levied by the NWCAA are discussed in section 2.5.2.

¹ Fibrex does not have any stationary sources emitting greenhouse gases.

2.5.1 **Inspection Activity**

Table 3 Inspection Activities for Fibrex

Date	Notes	Inspector
09.16.2010	Compliance inspection, with Uhrich	Christoforou
08.25.2009	Compliance inspection, with Christoforou	Uhrich
09.11.2008	Compliance inspection	Uhrich
09.21.2007	Compliance inspection	Uhrich
09.19.2006	Annual inspection	Brown
11.06.2005	Compliance inspection	Uhrich
09.22.2004	Annual inspection	Uhrich
06.03.2003	Annual inspection	Brown
03.07.2002	Annual Inspection	Evenson

2.5.2 **NOV Activity**

Fibrex was initially registered by the NWCAA on October 31, 1983. To date, Fibrex has been issued one NOV, which is described below.

Notice of Violation 2528, issued on August 8, 1995

Fiberglass/resin dust from grinding operations was deposited on nearby property outside of the Fibrex property boundary. It should be noted that Fibrex expressly denied that the violation occurred.

A fine of \$500 was levied, \$250 of which was suspended provided that Fibrex complied with the following terms in an Assurance of Discontinuance (AOD):

1. Fibrex moves any overlay preparation operations away from ventilation fans
2. Fibrex completes construction of a solid wall (up to 11 feet high) on the property line at the discharge of the ventilation fan
3. Fibrex conducts further employee training on the importance of air quality and good housekeeping.

It should be noted that since AOD terms are valid for five years, the terms above are no longer enforceable.

2.6 **Northwest Clean Air Agency Orders**

Fibrex has not received any Orders of Approval to Construct from the NWCAA. Prior to becoming a Title V source, Fibrex was a synthetic minor source. On January 12, 1995, Fibrex accepted a voluntary emission limit in order to stay out of the Title V program. This voluntary emission limit and conditions are recorded in Regulatory Order No. 004, issued by the NWCAA on January 12, 1995, and are summarized below:

- Emissions of styrene shall not exceed 19,500 pounds in any calendar year.

- Fibrex shall use AP-42 – based calculation methods to demonstrate compliance with the styrene emission limit.
- For each resin type, the quantities of resin in inventory, the quantities of resin additive used, the method of layup and the amount of resin applied by that method shall be recorded monthly in a logbook.
- The emission calculation results shall be submitted quarterly to the NWCAA.

Fibrex requested to withdraw from Regulatory Order 004 with a letter to the NWCAA dated October 14, 2009 (later amended on November 2, 2009). The NWCAA acknowledged the request with a letter to Fibrex dated January 23, 2010. As a result, Fibrex became subject to the Title V program on October 14, 2010.

3 GENERAL PERMIT ASSUMPTIONS

3.1 Federal Enforceability

Federally enforceable requirements are terms and conditions required under the Federal Clean Air Act (FCAA) or under any of its applicable requirements. Local and state regulations may become federally enforceable by formal approval and incorporation into the State Implementation Plan or through other delegation mechanisms. Federally enforceable requirements are enforceable by the EPA and citizens. All applicable requirements in the AOP including standard terms and conditions, generally applicable requirements, and specifically applicable requirements are federally enforceable unless they are identified in the AOP as enforceable only by the state. Two different versions (identified by the date) of the same regulatory citation may apply to the source if federal approval/delegation lags behind changes made to the Washington Administrative Code (WAC) or to the NWCAA Regulation. For Washington Administrative Code (WAC) regulations, the date represents the State Effective date. For NWCAA regulations, the date represents the most recent Board of Directors adoption date, which is identified as the "Passed" or "Amended" date in the NWCAA Regulation. For Federal rules, the date is the rule's most recent promulgation date prior to AOP issuance.

Chapter 173-401 WAC is not federally enforceable although the requirements of this regulation are based on federal requirements for the air operating permit program. Upon issuance of the AOP, the terms based on Chapter 173-401 WAC will become federally enforceable for the source.

3.2 Future Requirements

Promulgated applicable requirements with future effective compliance dates may be included as applicable requirements in the AOP.

Some requirements that are not applicable until triggered by an action, such as the requirement to file an application prior to constructing a new source, are addressed within the standard terms and conditions section of the AOP. There is presently no pending application to construct a new source at Fibrex. Fibrex has certified in the permit application that the facility will meet any future applicable requirements on a timely basis.

3.3 Other Federal Requirements

3.3.1 Compliance Assurance Monitoring (CAM)

The requirements of Compliance Assurance Monitoring are contained in 40 CFR 64, and they apply to a pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit provided the unit satisfies all criteria as delineated in 40 CFR 64.2(a)(1)-(3). In particular 40 CFR 64.2(a)(2) stipulates that the emission unit uses a control device to achieve compliance .

Fibrex does not use any control devices, as these are defined in 40 CFR 64.1, to achieve compliance, and therefore Fibrex is not subject to the CAM rule.

3.3.2 Chemical Accident Prevention Provisions

The goal of 40 CFR 68 and the risk management program it requires is to prevent accidental releases of substances that can cause serious harm to the public and the environment from short-term exposures and to mitigate the severity of releases that do occur. If a tank, drum, container, pipe, or other process at a facility contains any of the extremely hazardous toxic and flammable substances listed in Table 1 to 40 CFR 68.130 in an amount above the "threshold quantity" specified for that substance, the facility operator is required to develop and implement a risk management program.

According to the AOP application submitted, Fibrex does not have any of the substances in the threshold quantities listed in Table 1 to 40 CFR 68.130 and therefore it is not subject to the requirements of 40 CFR 98.

3.3.3 **Mandatory Greenhouse Gas Reporting**

The requirements for the mandatory greenhouse gas reporting are contained in 40 CFR 98. In order for a facility to be subject to 40 CFR 98, it must meet the requirements of either 1, 2, or 3 below:

1. A facility that contains any source category that is listed in Table A-3 of 40 CFR 98 Subpart A.
2. A facility that contains any source category that is listed in Table A-4 of 40 CFR 98 Subpart A that emits 25,000 metric tons CO₂e or more per year in combined emissions from stationary fuel combustion units.
3. A facility that has stationary fuel combustion units with an aggregate maximum rated heat input of 30 mmBtu/hr or greater, and the facility emits 25,000 metric tons CO₂e or more per year in combined emissions from all stationary fuel combustion sources.

Fibrex does not contain any source category that is listed in tables A-3 or A-4 to subpart A to 40 CFR 98, and has no fuel combustion sources with an aggregate maximum rated heat input of 30 mmBtu/hr.

As a result, Fibrex is not subject to the requirements of 40 CFR 98.

3.4 **Compliance Options**

Fibrex did not request emissions trading provisions or specify more than one operating scenario in the AOP application so the permit does not address these options. The Fibrex AOP does not condense overlapping applicable requirements (streamlining) nor does it provide any alternative emission limitations.

Fibrex is subject to 40 CFR Part 63 Subpart WWWW (National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production). 40 CFR 63.5810 allows affected sources to use one of the following methods for demonstrating compliance:

- (a) Demonstrate that an individual resin or gel coat, as applied, meets the applicable emission limit in Table 3 or 5 to subpart WWWW.
- (b) Demonstrate that, on average, the source meets the individual organic HAP emissions limits for each combination of operation type and resin application method or gel coat type.
- (c) Demonstrate compliance with a weighted average emission limit.
- (d) Meet the organic HAP emissions limit for one application method and use the same resin(s) for all application methods of that resin type.

Fibrex has chosen to comply with the weighted average emission limit option (c) above, but other options may be chosen in the future.

3.5 **Gap Filling**

On August 19, 2008, the U.S. Court of Appeals vacated EPA's 2006 interpretive rule that prohibited states from enhancing monitoring in Title V permits. As a result, permitting authorities again must ensure that monitoring in each permit is sufficient to assure compliance with the terms and conditions of the permit. Some air pollution rules and regulations and "Notice of Construction" approval conditions do not specifically call out a monitoring, reporting, or recordkeeping method(s) that would demonstrate compliance with the applicable requirement. In such cases the permitting agency develops site-specific requirements that the source must follow. The inclusion of these customized requirements is called "gap filling". Nuisance rules and opacity requirements commonly have specific gap-filled obligations for the source. Where gap-filling has taken place, the MR&R for that term will state "Directly Enforceable" above the gap-filling requirements. The following describes the derivation of site specific compliance monitoring in the Fibrex AOP.

Compliance with opacity and particulate emission limitations is assured via monthly monitoring by visually observing and recording whether there are any emissions from stacks. The particulate emitted from grinding and sanding operations from the facility is of a size that emissions should be observed at an opacity reading of significantly less than the opacity standard of twenty percent. If any visible emissions are observed during the monthly check or at any other time, immediate corrective action is triggered or, if

visible emissions cannot be eliminated, monitoring by the Washington Department of Ecology Method 9A must be performed. With regard to mass particulate emission rates, although particulate emission rate is only loosely related to opacity, a zero percent opacity action level will likely ensure that emissions are less than the 0.1 grains/dscf emission standard. This approach is taken because proper operation of the facility presently results in zero opacity. The monitoring period is once-per-month for plantwide emissions, however, there is a continuous obligation for compliance. If greater than zero percent opacity is observed from any emission point at any time and no corrective action is taken or Method 9A monitoring is not implemented, then there would be a violation of the AOP monitoring terms.

Requirements related to fugitive particulate and fugitive gaseous emissions are monitored by limiting outdoor grinding and layup operations and keeping lids on containers of volatile materials. The majority of the facility grounds are paved and traffic dust has not historically been a problem. Requirements related to nuisance emissions are monitored by responding to complaints received from the NWCAA or the public, by checking for mechanical or operational problems that may cause nuisance, taking actions to reduce emissions that may cause nuisance odors, and recording and reporting any actions taken. In any case, the facility is subject to a notice of violation if the NWCAA confirms the presence of a nuisance caused by Fibrex irrespective of the monitoring, recordingkeeping and reporting requirement.

4 AOP ELEMENTS AND BASIS FOR TERMS AND CONDITIONS

The Fibrex AOP is divided into the following sections:

General Information

Attest

Emission Unit Identification

Standard Terms and Conditions

Standard Terms and Conditions for National Emission Standards for Hazardous Air Pollutants

Generally Applicable Requirements

Specifically Applicable Requirements

Inapplicable Requirements

4.1 Permit Information, Attest, Emission Unit Identification

The Permit Information section identifies the source and provides general information about the AOP, the responsible corporate official, and the Agency personnel responsible for AOP preparation, review and issuance. The Attest section provides NWCAA authorization for the source to operate under the terms and conditions contained in the AOP.

The Emission Unit Identification delineates applicability of the AOP and describes the process. A listing of the emission unit process names, emission points and control devices in place at the time of AOP issuance is presented in Table 1 of the AOP and is included in Appendix A of this document. Only air emissions from the emission units in place at the time of AOP issuance and air emissions from insignificant emission units are approved via the AOP at this facility. Detailed information about the facility may be found in the AOP application and in supplementary files.

4.2 Standard Terms and Conditions

The Standard Terms and Conditions section of the AOP specifies administrative and other requirements that apply to all Title V sources within the jurisdiction of the NWCAA. Standard Terms and Conditions have no ongoing compliance monitoring requirements. The legal authority for the Standard Terms and Conditions is provided in the citations in Section 2 of the AOP. Where there is a difference between the paraphrased term and the language of the cited regulation, the language of the cited regulation takes precedence. The terms and conditions have been grouped by function rather than numerically in an effort to make the section more readable. In some cases, similar requirements at the state and local authority level have been grouped together.

Applicable requirements that simply prohibit certain actions are included in the "Prohibitions" section of the Standard Terms and Conditions. A number of requirements that would not be applicable until triggered have also been included in this section. The requirement for a source to submit an application for New Source Review is an example of such a requirement. This section also includes references to broadly applicable prohibitions such as "Concealment and Masking," which are applicable requirements but have no ongoing compliance monitoring.

4.3 Standard Terms and Conditions for NESHAP

Section 3 of the AOP includes the standard terms and conditions that are contained in Subpart A of 40 CFR 63. Such standard terms and conditions are administrative, notification, and/or other requirements that typically have no ongoing compliance monitoring requirements.

Whenever a NESHAP applies to a facility, that NESHAP provides a table that specifies which parts of Subpart A (General Provisions) to 40 CFR 63 also apply. Specified parts of Subpart A to 40 CFR 63 apply to Fibrex, as indicated in Table 4 below. Section 3 in the AOP is designed to summarize Subpart A to 40 CFR 63. The NWCAA has attempted to provide the essence of the applicable portions of Subpart A

by way of paraphrasing in Section 3. In the event of a conflict between Section 3 of the AOP and 40 CFR 63 Subpart A, the latter rules. The applicability table (Table 15 to Subpart WWWW to 40 CFR 63) is presented in full as Table 4 below.

Table 4 Applicability of General Provisions (Subpart A) to Subpart WWWW of Part 63

The general provisions reference . . .	That addresses . . .	And applies to subpart WWWW of part 63	Subject to the following additional information . . .
§63.1(a)(1)	General applicability of the general provisions	Yes	Additional terms defined in subpart WWWW of Part 63, when overlap between subparts A and WWWW of Part 63 of this part, subpart WWWW of Part 63 takes precedence.
§63.1(a)(2) through (4)	General applicability of the general provisions	Yes	
§63.1(a)(5)	Reserved	No	
§63.1(a)(6)	General applicability of the general provisions	Yes	
§63.1(a)(7) through (9)	Reserved	No	
§63.1(a)(10) through (14)	General applicability of the general provisions	Yes	
§63.1(b)(1)	Initial applicability determination	Yes	Subpart WWWW of Part 63 clarifies the applicability in §§63.5780 and 63.5785.
§63.1(b)(2)	Reserved	No.	
§63.1(b)(3)	Record of the applicability determination	Yes	
§63.1(c)(1)	Applicability of this part after a relevant standard has been set under this part	Yes	Subpart WWWW of Part 63 clarifies the applicability of each paragraph of subpart A to sources subject to subpart WWWW of Part 63.
§63.1(c)(2)	Title V operating permit requirement	Yes	All major affected sources are required to obtain a title V operating permit. Area sources are not subject to subpart WWWW of Part 63.
§63.1(c)(3) and (4)	Reserved	No	
§63.1(c)(5)	Notification requirements for an area source that increases HAP emissions to major source levels	Yes	
§63.1(d)	Reserved	No	
§63.1(e)	Applicability of permit program before a relevant standard has been set under this part	Yes	

The general provisions reference . . .	That addresses . . .	And applies to subpart WWWW of part 63	Subject to the following additional information . . .
§63.2	Definitions	Yes	Subpart WWWW of Part 63 defines terms in §63.5935. When overlap between subparts A and WWWW of Part 63 occurs, you must comply with the subpart WWWW of Part 63 definitions, which take precedence over the subpart A definitions.
§63.3	Units and abbreviations	Yes	Other units and abbreviations used in subpart WWWW of Part 63 are defined in subpart WWWW of Part 63.
§63.4	Prohibited activities and circumvention	Yes	§63.4(a)(3) through (5) is reserved and does not apply.
§63.5(a)(1) and (2)	Applicability of construction and reconstruction	Yes	Existing facilities do not become reconstructed under subpart WWWW of Part 63.
§63.5(b)(1)	Relevant standards for new sources upon construction	Yes	Existing facilities do not become reconstructed under subpart WWWW of Part 63.
§63.5(b)(2)	Reserved	No	
§63.5(b)(3)	New construction/reconstruction	Yes	Existing facilities do not become reconstructed under subpart WWWW of Part 63.
§63.5(b)(4)	Construction/reconstruction notification	Yes	Existing facilities do not become reconstructed under subpart WWWW of Part 63.
§63.5(b)(5)	Reserved	No	
§63.5(b)(6)	Equipment addition or process change	Yes	Existing facilities do not become reconstructed under subpart WWWW of Part 63.
§63.5(c)	Reserved	No	
§63.5(d)(1)	General application for approval of construction or reconstruction	Yes	Existing facilities do not become reconstructed under subpart WWWW of Part 63.
§63.5(d)(2)	Application for approval of construction	Yes	
§63.5(d)(3)	Application for approval of reconstruction	No	
§63.5(d)(4)	Additional information	Yes	
§63.5(e)(1) through (5)	Approval of construction or reconstruction	Yes	
§63.5(f)(1) and (2)	Approval of construction or reconstruction based on prior State preconstruction review	Yes	
§63.6(a)(1)	Applicability of compliance with standards and maintenance requirements	Yes	

The general provisions reference . . .	That addresses . . .	And applies to subpart WWWW of part 63	Subject to the following additional information . . .
§63.6(a)(2)	Applicability of area sources that increase HAP emissions to become major sources	Yes	
§63.6(b)(1) through (5)	Compliance dates for new and reconstructed sources	Yes	Subpart WWWW of Part 63 clarifies compliance dates in §63.5800.
§63.6(b)(6)	Reserved	No	
§63.6(b)(7)	Compliance dates for new operations or equipment that cause an area source to become a major source	Yes	New operations at an existing facility are not subject to new source standards.
§63.6(c)(1) and (2)	Compliance dates for existing sources	Yes	Subpart WWWW of Part 63 clarifies compliance dates in §63.5800.
§63.6(c)(3) and (4)	Reserved	No	
§63.6(c)(5)	Compliance dates for existing area sources that become major	Yes	Subpart WWWW of Part 63 clarifies compliance dates in §63.5800.
§63.6(d)	Reserved	No	
§63.6(e)(1) and (2)	Operation & maintenance requirements	Yes	
§63.6(e)(3)	Startup, shutdown, and malfunction plan and recordkeeping	Yes	Subpart WWWW of Part 63 requires a startup, shutdown, and malfunction plan only for sources using add-on controls.
§63.6(f)(1)	Compliance except during periods of startup, shutdown, and malfunction	No	Subpart WWWW of Part 63 requires compliance during periods of startup, shutdown, and malfunction, except startup, shutdown, and malfunctions for sources using add-on controls.
§63.6(f)(2) and (3)	Methods for determining compliance	Yes	
§63.6(g)(1) through (3)	Alternative standard	Yes	
§63.6(h)	Opacity and visible emission Standards	No	Subpart WWWW of Part 63 does not contain opacity or visible emission standards.
§63.6(i)(1) through (14)	Compliance extensions	Yes	
§63.6(i)(15)	Reserved	No	
§63.6(i)(16)	Compliance extensions	Yes	
§63.6(j)	Presidential compliance exemption	Yes	
§63.7(a)(1)	Applicability of performance testing requirements	Yes	
§63.7(a)(2)	Performance test dates	No	Subpart WWWW of Part 63 initial compliance requirements are in §63.5840.

The general provisions reference . . .	That addresses . . .	And applies to subpart WWWW of part 63	Subject to the following additional information . . .
§63.7(a)(3)	CAA Section 114 authority	Yes	
§63.7(b)(1)	Notification of performance test	Yes	
§63.7(b)(2)	Notification rescheduled performance test	Yes	
§63.7(c)	Quality assurance program, including test plan	Yes	Except that the test plan must be submitted with the notification of the performance test.
§63.7(d)	Performance testing facilities	Yes	
§63.7(e)	Conditions for conducting performance tests	Yes	Performance test requirements are contained in §63.5850. Additional requirements for conducting performance tests for continuous lamination/casting are included in §63.5870.
§63.7(f)	Use of alternative test method	Yes	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes	
§63.7(h)	Waiver of performance tests	Yes	
§63.8(a)(1) and (2)	Applicability of monitoring requirements	Yes	
§63.8(a)(3)	Reserved	No	
§63.8(a)(4)	Monitoring requirements when using flares	Yes	
§63.8(b)(1)	Conduct of monitoring exceptions	Yes	
§63.8(b)(2) and (3)	Multiple effluents and multiple monitoring systems	Yes	
§63.8(c)(1)	Compliance with CMS operation and maintenance requirements	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(c)(2) and (3)	Monitoring system installation	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(c)(4)	CMS requirements	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(c)(5)	Continuous Opacity Monitoring System (COMS) minimum procedures	No	Subpart WWWW of Part 63 does not contain opacity standards.

The general provisions reference . . .	That addresses . . .	And applies to subpart WWWW of part 63	Subject to the following additional information . . .
§63.8(c)(6) through (8)	CMS calibration and periods CMS is out of control	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(d)	CMS quality control program, including test plan and all previous versions	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(e)(1)	Performance evaluation of CMS	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(e)(2)	Notification of performance evaluation	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(e)(3) and (4)	CMS requirements/alternatives	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(e)(5)(i)	Reporting performance evaluation results	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(e)(5)(ii)	Results of COMS performance evaluation	No	Subpart WWWW of Part 63 does not contain opacity standards.
§63.8(f)(1) through (3)	Use of an alternative monitoring method	Yes	
§63.8(f)(4)	Request to use an alternative monitoring method	Yes	
§63.8(f)(5)	Approval of request to use an alternative monitoring method	Yes	
§63.8(f)(6)	Request for alternative to relative accuracy test and associated records	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(g)(1) through (5)	Data reduction	Yes	
§63.9(a)(1) through (4)	Notification requirements and general information	Yes	
§63.9(b)(1)	Initial notification applicability	Yes	

The general provisions reference . . .	That addresses . . .	And applies to subpart WWWW of part 63	Subject to the following additional information . . .
§63.9(b)(2)	Notification for affected source with initial startup before effective date of standard	Yes	
§63.9(b)(3)	Reserved	No	
§63.9(b)(4)(i)	Notification for a new or reconstructed major affected source with initial startup after effective date for which an application for approval of construction or reconstruction is required	Yes	
§63.9(b)(4)(ii) through (iv)	Reserved	No	
§63.9(b)(4)(v)	Notification for a new or reconstructed major affected source with initial startup after effective date for which an application for approval of construction or reconstruction is required	Yes	Existing facilities do not become reconstructed under subpart WWWW of Part 63.
§63.9(b)(5)	Notification that you are subject to this subpart for new or reconstructed affected source with initial startup after effective date and for which an application for approval of construction or reconstruction is not required	Yes	Existing facilities do not become reconstructed under subpart WWWW of Part 63.
§63.9(c)	Request for compliance extension	Yes	
§63.9(d)	Notification of special compliance requirements for new source	Yes	
§63.9(e)	Notification of performance test	Yes	
§63.9(f)	Notification of opacity and visible emissions observations	No	Subpart WWWW of Part 63 does not contain opacity or visible emission standards.
§63.9(g)(1)	Additional notification requirements for sources using CMS	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.9(g)(2)	Notification of compliance with opacity emission standard	No	Subpart WWWW of Part 63 does not contain opacity emission standards.
§63.9(g)(3)	Notification that criterion to continue use of alternative to relative accuracy testing has been exceeded	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.9(h)(1) through (3)	Notification of compliance status	Yes	
§63.9(h)(4)	Reserved	No	

The general provisions reference . . .	That addresses . . .	And applies to subpart WWWW of part 63	Subject to the following additional information . . .
§63.9(h)(5) and (6)	Notification of compliance status	Yes	
§63.9(i)	Adjustment of submittal deadlines	Yes	
§63.9(j)	Change in information provided	Yes	
§63.10(a)	Applicability of recordkeeping and reporting	Yes	
§63.10(b)(1)	Records retention	Yes	
§63.10(b)(2)(i) through (v)	Records related to startup, shutdown, and malfunction	Yes	Only applies to facilities that use an add-on control device.
§63.10(b)(2)(vi) through (xi)	CMS records, data on performance tests, CMS performance evaluations, measurements necessary to determine conditions of performance tests, and performance evaluations	Yes	
§63.10(b)(2)(xii)	Record of waiver of recordkeeping and reporting	Yes	
§63.10(b)(2)(xiii)	Record for alternative to the relative accuracy test	Yes	
§63.10(b)(2)(xiv)	Records supporting initial notification and notification of compliance status	Yes	
§63.10(b)(3)	Records for applicability determinations	Yes	
§63.10(c)(1)	CMS records	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.10(c)(2) through (4)	Reserved	No	
§63.10(c)(5) through (8)	CMS records	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.10(c)(9)	Reserved	No	
§63.10(c)(10) through (15)	CMS records	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.10(d)(1)	General reporting requirements	Yes	
§63.10(d)(2)	Report of performance test results	Yes	
§63.10(d)(3)	Reporting results of opacity or visible emission observations	No	Subpart WWWW of Part 63 does not contain opacity or visible emission standards.
§63.10(d)(4)	Progress reports as part of extension of compliance	Yes	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	Yes	Only applies if you use an add-on control device.

The general provisions reference . . .	That addresses . . .	And applies to subpart WWWW of part 63	Subject to the following additional information . . .
§63.10(e)(1) through (3)	Additional reporting requirements for CMS	Yes	This section applies if you have an add-on control device and elect to use a CEM to demonstrate continuous compliance with an emission limit.
§63.10(e)(4)	Reporting COMS data	No	Subpart WWWW of Part 63 does not contain opacity standards.
§63.10(f)	Waiver for recordkeeping or reporting	Yes	
§63.11	Control device requirements	Yes	Only applies if you elect to use a flare as a control device.
§63.12	State authority and delegations	Yes	
§63.13	Addresses of State air pollution control agencies and EPA Regional Offices	Yes	
§63.14	Incorporations by reference	Yes	
§63.15	Availability of information and confidentiality	Yes	

4.4 Generally Applicable Requirements

Requirements that limit current emissions and apply broadly to the facility are identified in the Generally Applicable Requirements section (Section 4) of the AOP. With some exceptions, each of these requirements applies non-specifically to sources. For example, NWCAA Regulation Section 455.1 prohibits particulate emissions that exceed 0.10 gr/dscf from any emissions unit. However, some requirements apply to only certain types of emissions units. For example, NWCAA Regulation Section 455.11 applies only to combustion equipment and WAC 173-400-060 applies only to general process units. Despite these differences in applicability, these requirements have been listed together in the Generally Applicable Requirements section of the AOP.

The first column of Table 2 of the AOP lists term numbers used to identify listed conditions. The requirements specified in the second column of Table 2 of the AOP are applicable plant-wide to all emission units at the source, including insignificant emission units. The third column of Table 2 of the AOP is a brief description of the applicable requirements for informational purposes only and is not enforceable. The fourth column identifies monitoring, recordkeeping, and reporting requirements (MR&R) the source must follow to assure compliance with the applicable requirement as required by the WAC 173-401-605(1) and WAC 173-401-615(1) and (2). This column is enforceable except that the NWCAA has determined that the MR&R requirements in Table 2 of the AOP are not necessary for the insignificant emission units.

4.5 Specific Requirements for Emissions Units

Section 5 of the AOP is formatted in a similar manner to Section 4, and it lists applicable requirements that apply uniquely to a process unit or to specific types of process units. The National Emission Standards for Hazardous Air Pollutants (NESHAP) for the reinforced plastics composites industry, first promulgated on April 21, 2003 and subsequently amended on August 25, 2005 and again on April 20, 2006, has given several options to sources such as Fibrex for complying with the standards for open molding (see 40 CFR 63.5810).

Fibrex has chosen to comply with the standards for open molding using the methods set forth in 40 CFR 63.5810(c). Permit terms 5.3 and 5.4 describe the procedure that must be followed. This option allows Fibrex to demonstrate compliance with a weighted average emissions limit for all open molding operations. The weighted averages are calculated on a rolling 12-month period average. The calculation is done in three steps:

1. First calculate the weighted average emissions limit. This is calculated as the sum of each emissions limit² multiplied by the amount of each corresponding material used divided by the total material used.
2. Calculate a weighted average emissions factor. The process is similar to step 1 above but uses the equations in Table 1 to Subpart WWWW of Part 63 to 40 CFR to estimate actual emissions.
3. Compare the weighted average emissions limit to the weighted average emissions factor. If the emissions factor is less than or equal to the emission limit, Fibrex would be in compliance.

In addition, Table 4 to Subpart WWWW of Part 63 to 40 CFR includes work practice standards with which Fibrex must comply. These work practice standards are included in AOP term 5.5.

4.6 Inapplicable Requirements

Chapter 173-401-640 WAC requires the permitting authority to issue a determination regarding the applicability of requirements with which the source must comply. Table 4 in the AOP lists requirements deemed inapplicable to the facility and provides the basis for each determination.

² The emissions limit is found on Table 3 to Subpart WWWW of Part 63 to 40 CFR, and depends on the operation type and the application method for the resin.

5 INSIGNIFICANT EMISSIONS UNITS

Some categorically exempt insignificant emissions units listed in Chapter 173-401-532 WAC are present at the Fibrex facilities. Because these categorically exempt emissions units normally have low emissions they are considered insignificant by the WAC regulation.

Certain other emissions units are present at the facility that are insignificant on the basis of size or production rate (WAC 173-401-533). Other equipment and activities listed in Table 5 may occur in the future on the site and qualify as insignificant emissions units on the basis of size or production rate.

The insignificant emission units are listed in Section 7 of the AOP. The Generally Applicable requirements in Section 4 of the AOP apply to these units, although the monitoring, recordkeeping, and reporting requirements have been determined not to apply.

Emission units at the Fibrex facilities that have been determined to be categorically exempt as allowed in WAC 173-401-532 and those found to be insignificant on the basis of size or production rate as defined in WAC 173-401-530 and WAC 173-401-533 are listed below. Insignificant emission units are still subject to all general requirements.

Table 5 Insignificant Activities and Emission Units

Exempt Unit	WAC Citation	Comment
Room vents	WAC 173-401-532(9)	Vents from rooms, buildings and enclosures that contain permitted emissions units or activities from which local ventilation, controls and separate exhaust are provided.
Facility vehicles	WAC 173-401-532(10)	Internal combustion engines for propelling or powering a vehicle.
General plant upkeep	WAC 173-401-532(33)	Plant upkeep including routine housekeeping, preparation for and painting of structures or equipment, retarring roofs, applying insulation to buildings in accordance with applicable environmental and health and safety requirements and paving or stripping parking lots.
Forklift propane fuel tanks	WAC 173-401-533(d)	Operation, loading and unloading storage of butane, propane, or liquified petroleum gas (LPG), storage tanks, vessel cuapcity under forty thousand gallons.
Space heaters and hot water heaters	WAC 173-401-533(r)	Space heaters and hot water heaters using natural gas, propane, or kerosene and generating less than five million Btu per hour

6 ONE-TIME REQUIREMENTS

Requirements that are only required once, and that have already been completed are removed from the requirements in the AOP and are placed in this section of the Statement of Basis.

Paragraph 63.5840 of 40 CFR 63 Subpart WWWW requires sources to submit the applicable notifications found in Table 13 to Subpart WWWW. Fibrex fulfilled that requirement by submitting an initial applicability notification containing the information specified in 40 CFR 63.9(b)(2) to the NWCAA on January 25, 2010.

7 PUBLIC DOCKET

Copies of the Fibrex Air Operating Permit, permit application, and technical support documents are available at the following location:

Northwest Clean Air Agency
1600 South Second Street
Mount Vernon, WA 98273-5202

8 DEFINITIONS AND ACRONYMS

Definitions are assumed to be those found in the underlying regulation. A short list of definitions has been included below:

An "applicable requirement" is a provision, standard, condition or requirement in any of the listed regulations or statutes as it applies to an emission unit or facility at a stationary source.

An "emission unit" is any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant.

A "permit" means, for the purposes of the air operating permit program, an air operating permit issued pursuant to Title 5 of the 1990 Federal Clean Air Act.

"State" means, for the purposes of the air operating permit program, the NWCAA or the Washington State Department of Ecology.

The following is a list of Acronyms used in the Air Operating Permit and/or Statement of Basis:

AOP	Air Operating Permit
CFR	Code of Federal Regulations
dscf	Dry Standard Cubic Foot
EPA	Environmental Protection Agency
EU	Emissions Unit
FCAA	Federal Clean Air Act
HAP	Hazardous Air Pollutant
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOC	Notice of Construction
NSR	New Source Review
NWCAA	Northwest Clean Air Agency
OAC	Order of Approval to Construct
PM	Particulate Matter
RCW	Revised Code of Washington
SOB	Statement of Basis
WAC	Washington Administrative Code
WDOE	Washington Department of Ecology

APPENDIX A

Table 6 Emission Units and Operations at Fibrex Inc.

Emission Unit Process Name	Emission Points	Control Device	Process Description
Filament Winding Lay-up (Process #1)	Building 2 – Fan EF4 Building 2 – Fan EF5 Building 2 – Fan EF6 Building 2 – Fan EF7	None None None None	Filament winding is the process of applying resin-impregnated fibers onto a rotating mandrel surface. Filament winding activities emit styrene.
Hand Lay-up (Process #2)	Building 2 – Fan EF4 Building 2 – Fan EF5 Building 2 – Fan EF6 Building 2 – Fan EF7	None None None None	Hand lay-up is a process where woven fiberglass and catalyzed resin mix are applied manually to a rotating mandrel. Hand lay-up process activities emit styrene.
Manual Lay-up (Process #3)	Building 1 – Stack EF1 Building 1 – Fan EF2 Building 1 – Fan EF3	None None None	Manual lay-up is a fiberglass fabrication process in which the reinforcing fibers are manually applied to a mold wetted with catalyzed resin mix. Reinforcing material and resin mix are layered to build laminate thickness. Squeegees, brushes and rollers are used to smooth, compact and shape the product. Manual lay-up activities emit styrene.