AIR EMISSION PERMIT NO. 09100028- 003

IS ISSUED TO

Brand FX Body Co

BRAND FX BODY CO DBA GLASSTITE
600 North Highway 4
Dunnell, Martin County, MN 56127

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the following permit application(s):

Permit Type	Application Date	Issuance Date	Action Number
Total Facility Operating Permit	October 26, 1999	August 31, 2000	001
Administrative Amendment	May 9, 2005	July 18, 2005	002
Minor Amendment	October 23, 2006	See Below	003

This permit authorizes the Permittee to operate and construct the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: Federal; Pt 70/Limits to Avoid NSR

Issue Date: October 18, 2007

Expiration: Upon reissuance of a Part 70 permit (existing permit expired 08/31/2005 and reissuance application was timely)
Title I Conditions do not expire.

Jeff J. Smith, Manager
Air Quality Permits Section
Industrial Division

for Brad Moore
Commissioner
Minnesota Pollution Control Agency

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NOTICE TO THE PERMITTEE:

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	651-296-6300
Outside Metro Area	1-800-657-3864
TTY	651-282-5332

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

Brand FX Body Co. dba Glastite manufactures fiberglass pick-up truck toppers. The process consists of spraying alternating layers of resin and gelcoat on a mold, removing the product form from the mold, miscellaneous clean up, repair, grinding, gluing painting and oven curing of the paint. Primary emissions are volatile organic compounds from the spraying operations. These Volatile Organic Compounds (VOC) are primarily styrene and methyl methacrylate from the resin and gelcoat operations. The Permittee utilizes a mechanical non-atomized resin application process, which results in lower styrene emissions and minimizes particulate matter emissions. Each spray booth is equipped with panel filters to further reduce the amount of particulate matter emitted to the atmosphere. The grinding operations are exhausted to a fabric filter and emitted inside the building 100 percent of the time. The primary cleaning material used is acetone, which is not categorized as a VOC and therefore does not contribute to overall emissions. The facility also has three natural gas space heaters that also qualify as insignificant activities under Minnesota Rules.

The Permittee proposes to limit VOC emissions to 220 tons per year, based on purchase records. By limiting the quantity of VOC purchased, the quantity of Hazardous Air Pollutants (HAP) and particulate matter are inherently limited as well. After considering the VOC purchase limit, the facility is a major source under the Part 70 permitting program (VOC and HAP) and a non-major source under New Source Review.

ACTION 001: Issuance of Total Facility Part 70 permit

ACTION 002: Administrative Amendment. The amendment was for a change in ownership.

ACTION 003: Minor Amendment: This amendment is for the installation of a new paint primer booth. The installation of new booths is allowed and adherence is required with the total VOC cap for the group by the existing permit language. Therefore, this installation can be performed via a minor amendment.

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Brand FX Body Co dba Glasstite

Permit Number: 09100028 - 003

Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.

Subject Item: **Total Facility**

What to do	Why to do it
This permit establishes limits on the facility to keep it a minor source under New Source Review. The Permittee cannot make any change at the source that would make the source a major source under New Source Review unless and until a major amendment has been issued. This includes changes that might otherwise qualify as insignificant modifications and minor or moderate amendments.	Title I Condition: Limits to avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000
The Permittee shall not begin construction of any project or projects that are connected or phased which will cause a total increase in actual emissions of greater than 99 tons per year for any criteria pollutant without first getting an permit amendment to authorize the project. "Connected" and "phased" have the meanings as defined in Minn. R. 4410.0200 subps 9b and 60. The Permittee shall not begin construction of any other project which is listed in Minn. R. 4410.4300 or Minn. R. 4410.4400 without first getting a permit amendment to authorized the project. Such projects may require the completion of an Environmental Assessment Worksheet or an Environmental Impact Statement prior to the amendment being issued. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 4410.4300 and Minn. R. 4410.4400
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1

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Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
Application for Permit Reissuance: due 180 days before expiration of existing permit.	Minn. R. 7007.0400, subp. 3
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007. 1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007. 0800, subp. 5(B)
Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
Emissions Inventory Report: due April 1 of each year. To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3010
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
40 CFR Part 63, Subp. WWWW Requirements Additional requirements are specified at the EU and GP level in this permit.	hdr
For cleaning operations, do not use cleaning solvents that contain HAP, except that styrene may be used as a cleaner in closed systems, and organic HAP containing cleaners may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin.	40 CFR Section 63.5805
For materials HAP containing materials storage, keep containers that store HAP containing materials closed or covered except during the addition or removal of materials. Bulk HAP containing materials sotrage tanks may be vented as necessary for safety.	40 CFR Section 63.5805
Subp. WWWW Reporting and Recordkeeping Requirements See Table B for additional requirements.	hdr
You must keep records of the information specified in 40 CFR Section 63.5915 including: - copies of notifications and reports, - records of performance tests, design and performance evaluations, - all data, assumptions and calculations used to determine organic HAP emission factors, and - a certified statement that you are in compliance with the work practice requirements in Table 4 to the subpart. Records must be kept for a period of 5 years from the date of generation.	40 CFR Section 63.5915

Facility Name: Brand FX Body Co dba Glasstite

Permit Number: 09100028 - 003

Subject Item: **GP 001 VOC Emitting Operations**

Associated Items: EU 001 Mold Development & Repair Booth/Area (1 gun)

EU 002 Gelcoat Booth (2 guns)

EU 003 Skin Booth (1 gun)

EU 004 HAF Booth #1 (2 guns)

EU 005 HAF Booth #2 (2 guns)

EU 007 Basecoat Booth (1 gun)

EU 008 Clearcoat Booth (1 gun)

EU 011 Glue, cleanup area

EU 012 Primer Booth

What to do	Why to do it
EMISSION AND OPERATING LIMITS	hdr
Volatile Organic Compounds: less than or equal to 220 tons/year using 12-month Rolling Sum , to be calculated by the 15th day of each month for the previous 12-month period, as described in this permit. All VOC-containing materials used in all operations included in GP 001 shall be included in this calculation.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000
Pre-Authorized Changes: The Permittee may replace listed emission units with emission units similar to those listed in GP 001, and may install additional spray equipment in existing booths, provided VOC emissions are tracked and calculated as specified in this permit. If a proposed change triggers an applicable requirement that is not contained in this permit, the change must go through the appropriate procedure in Minn. R. ch. 7007.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000
The Permittee shall vent emissions from all spray booths to control equipment meeting the requirements of GP 002.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies separately to each emission unit in GP 001.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity . This limit applies separately to each emission unit in GP 001.	Minn. R. 7011.0715, subp. 1(B)
MONITORING AND RECORDKEEPING REQUIREMENTS	hdr
Material Content: VOC contents in all materials shall be determined by the Material Safety Data Sheet (MSDS) or Certificate of Analysis (COA) provided by the supplier for each material used. If a material content range is given on the MSDS or COA, the highest number in the range shall be used in all permit calculations. Other alternative methods approved by the MPCA may be used to determine the VOC content. The Commissioner reserves the right to require the Permittee to determine the VOC content of any material according to EPA and/or ASTM reference methods. If an EPA or ASTM reference method is used for material content determination, the data obtained shall supersede the MSDS or COA data.	Minn. R. 7007.0800, supb. 4 and subp. 5
Monthly Recordkeeping - VOC Emissions By the 15th of each month, the Permitee shall calculate and record the following: 1. The total purchases of all VOC containing materials for the previous calendar month. This record shall include the VOC content of each material as determined by the Material Content requirement of this permit. 2. The VOC emissions for the previous month using the formulas specified in this permit. 3. The 12-month rolling sum of VOC emissions for the previous 12 months, by summing the monthly VOC emissions calculated for the previous 12 months.	Minn. R. 7007.0800, subp. 4 and subp. 5

Facility Name: Brand FX Body Co dba Glasstite

Permit Number: 09100028 - 003

Monthly Calculation -- VOC Emissions The Permittee shall calculate VOC emissions using the following equations: VOC (tons/month) = S + M + V S = (A1 x B1 / 2000) + (A2 x B2 / 2000) + (A3 x B3 / 2000) + ... M = (C1 x D1 / 2000) + (C2 x D2 / 2000) + (C3 x D3 / 2000) + ... V = (E1 x F1) + (E2 x F2) + (E3 x F3) + ... where: S = styrene emissions in tons per month A# = Amount of styrene-containing resin/gelcoat material purchased, in tons B# = Emission factor for styrene, based on weight percent styrene and the spray technology used. (see Note 1)	Minn. R. 7007.0800. subp. 4 and subp. 5
Monthly Calculation, continued M = methyl methacrylate (MMA) emissions in tons per month C# = Amount of MMA-containing gelcoat material purchased, in tons D# = Emission factor for MMA, based on weight percent MMA and the spray technology used. (see Note 1) V = Non-styrene and non-MMA VOC emissions in tons per month E# = Amount of material containing VOC other than styrene or MMA purchased, in tons F# = weight percent non-styrene and non-MMA VOC in each material purchased, determined as required in the Material Content requirement of this permit. NOTE 1: The emission factor shall be the appropriate factor from Appendix 1, until such time as EPA finalizes a new AP-42 emission factor. When finalized, the new AP-42 factor shall be used. The Permittee may propose to use a site-specific emission factor derived from MPCA approved performance tests. If approved by MPCA, this site-specific factor shall be used.	Minn. R. 7007.0800, subp. 4 and subp. 5
Recordkeeping of Equipment and Formulation Changes: The Permittee shall keep records of any equipment that is replaced or added. This record shall be updated at the time the equipment is replaced or added. The record shall include the date the equipment was replaced or added (including dates of shutdown of old equipment and/or startup of new equipment), the corresponding emission unit number (EU001 - EU008, EU011), the manufacturer and model numbers of the new equipment, the spray technology and manufacturer specified transfer efficiency, and the spray capacity in pounds per hour. The Permittee shall keep a log of all resin/gelcoat and coating formulations, as applied, as determined by the Material Content requirement of this permit.	Title I Condition: Limit to avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Brand FX Body Co dba Glasstite

Permit Number: 09100028 - 003

Subject Item: **GP 002 Panel Filters**

Associated Items: CE 001 Mat or Panel Filter

CE 002 Mat or Panel Filter

CE 003 Mat or Panel Filter

CE 004 Mat or Panel Filter

CE 005 Mat or Panel Filter

CE 006 Mat or Panel Filter

CE 007 Mat or Panel Filter

CE 008 Mat or Panel Filter

CE 009 Mat or Panel Filter

CE 010 Mat or Panel Filter

CE 011 Mat or Panel Filter

CE 012 Mat or Panel Filter

CE 013 Mat or Panel Filter

CE 014 Mat or Panel Filter

What to do	Why to do it
EMISSION AND OPERATING LIMITS	hdr
The Permittee shall operate and maintain control equipment such that it achieves an overal control efficiency for Particulate Matter < 10 micron: greater than or equal to 73.6 percent control efficiency	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Equipment used under Minn. R. 7019.3020(F)
The Permittee shall operate and maintain control equipment such that it achieves an overal control efficiency for Total Particulate Matter: greater than or equal to 73.6 percent control efficiency	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Equipment used under Minn. R. 7019.3020(F)
The Permittee shall operate and maintain each particulate filter any time the corresponding process equipment is in operation.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Equipment used under Minn. R. 7019.3020(F)
Operation and Maintenance of Filters: The Permittee shall operate and maintain each filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and review by MCPA staff.	Minn. R. 7007.0800, subp. 14
MONITORING AND RECORDKEEPING	hdr
Daily Inspections: Once each operating day, the Permittee shall visually inspect the condition of each panel filter with respect to alignment, saturation, tears, holes, and any other matter that may affect the filter's performance. The Permittee shall maintain a daily written record of filter inspections.	Minn. R. 7007.0800, subp. 2, subp. 5, and subp. 14
Periodic Inspections: The Permittee shall inspect the control equipement components as required by the manufacturer's specifications. The frequency of the inspections shall be specified in the O & M Plan. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 2, subp. 5, and subp. 14
Corrective Actions: If the filters or any of their components are found to need repair, the Permittee shall follow the O & M Plan for the panel filter and take corrective action as soon as possible. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subp. 2, subp. 5, and subp. 14
Hood Certification: Each booth/panel filter system must conform to the requirements listed in Minn. R. 7011.0070, subp. 1, and the Permittee shall certify this for each hood (spray booth) as specified in Minn. R. 7011.0070, subp. 3. The Permittee shall maintain a copy of each certification on site, as well as an annual record of fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow indication method.	Minn. R. 7007.0800, subp. 2 and subp. 14

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Brand FX Body Co dba Glasstite

Permit Number: 09100028 - 003

Subject Item: **GP 003 Open and Closed Molding Resin Application**

Associated Items: EU 003 Skin Booth (1 gun)

EU 004 HAF Booth #1 (2 guns)

EU 005 HAF Booth #2 (2 guns)

What to do	Why to do it
EMISSION LIMITS	hdr
HAPs - Total: less than or equal to 88 lbs/ton for mechanical resin application.	40 CFR Section 63.5805
HAPs - Total: less than or equal to 87 lbs/ton for manual resin application.	40 CFR Section 63.5805
COMPLIANCE DEMONSTRATION	hdr
Demonstrate that, on average, you meet the individual organic HAP emissions limits for each combination of operation type and resin appication method or gel coat type. Group the process streams by operatio type and resin applicatio method or gel coat type listed in Table 3 to Subp. WWWW and then calcualte a weighted average emissions factor and compare to the limit. To do this, sum the product of each individual organic HAP emission factor and the amount of neat resin plus and neat gel coat plus usage that corresponds to the individual factors and divide the numberator by the total amount of neat resin plus and neat gel coat plus used in the operation as shown in Equation 2 of 40 CFR Section 63.5810.	40 CFR Section 63.5810

Facility Name: Brand FX Body Co dba Glasstite

Permit Number: 09100028 - 003

Subject Item: **EU 001 Mold Development & Repair Booth/Area (1 gun)**

Associated Items: CE 001 Mat or Panel Filter

GP 001 VOC Emitting Operations

SV 001 Mold Development & Repairs

What to do	Why to do it
EMISSION LIMITS	hdr
HAPs - Total: less than or equal to 254 lbs/ton for mechanical resin application in open molding tooling.	40 CFR Section 63.5805
HAPs - Total: less than or equal to 157 lbs/ton for manual resin application in open molding tooling.	40 CFR Section 63.5805
HAPs - Total: less than or equal to 440 lbs/ton for tooling gel coating.	40 CFR Section 63.5805
COMPLIANCE DEMONSTRATION	hdr
Demonstrate that, on average, you meet the individual organic HAP emissions limits for each combination of operation type and resin appication method or gel coat type. Group the process streams by operatio type and resin applicatio method or gel coat type listed in Table 3 to Subp. WWWW and then calcualte a weighted average emissions factor and compare to the limit. To do this, sum the product of each individual organic HAP emission factor and the amount of neat resin plus and neat gel coat plus usage that corresponds to the individual factors and divide the numberator by the total amount of neat resin plus and neat gel coat plus used in the operation as shown in Equation 2 of 40 CFR Section 63.5810.	40 CFR Section 63.5810

Facility Name: Brand FX Body Co dba Glasstite

Permit Number: 09100028 - 003

Subject Item: **EU 002 Gelcoat Booth (2 guns)**

Associated Items: CE 002 Mat or Panel Filter

CE 003 Mat or Panel Filter

GP 001 VOC Emitting Operations

SV 002 Gelcoat Stack #1

SV 003 Gelcoat Stack #2

What to do	Why to do it
EMISSION LIMITS	hdr
HAPs - Total: less than or equal to 267 lbs/ton for white/off white pigmented gel coating.	40 CFR Section 63.5805
HAPs - Total: less than or equal to 377 lbs/ton for all other pigmented gel coating.	40 CFR Section 63.5805
COMPLIANCE DEMONSTRATION	hdr
Demonstrate that, on average, you meet the individual organic HAP emissions limits for each combination of operation type and resin appication method or gel coat type. Group the process streams by operatio type and resin applicatio method or gel coat type listed in Table 3 to Subp. WWWW and then calcualte a weighted average emissions factor and compare to the limit. To do this, sum the product of each individual organic HAP emission factor and the amount of neat resin plus and neat gel coat plus usage that corresponds to the individual factors and divide the numberator by the total amount of neat resin plus and neat gel coat plus used in the operation as shown in Equation 2 of 40 CFR Section 63.5810.	40 CFR Section 63.5810

Facility Name: Brand FX Body Co dba Glasstite

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Subject Item: **EU 009 Oven #1**

Associated Items: SV 015 Oven #1

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. (Due to equipment design, the PTE of this unit is 0.002 gr/dscf.)	Minn. R. 7011.0610, subp. 1(A)(1)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
Fuel Type: Natural gas only, by equipment design	Minn. R. 7005.0100, subp. 35a

Facility Name: Brand FX Body Co dba Glasstite

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Subject Item: **EU 010 Oven #2**

Associated Items: SV 016 Oven #2

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. (Due to equipment design, the PTE of this unit is 0.0017 gr/dscf.)	Minn. R. 7011.0610, subp. 1(A)(1)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
Fuel Type: Natural gas only, by equipment design	Minn. R. 7005.0100, subp. 35a

TABLE B: SUBMITTALS

Facility Name: Brand FX Body Co dba Glasstite

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Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:
- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Send any application for a permit or permit amendment to:

AQ Permit Technical Advisor
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue NW (6204N)
Washington, D.C. 20460

Unless another person is identified in the applicable Table, send all other submittals to:

AQ Compliance Tracking Coordinator
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

TABLE B: RECURRENT SUBMITTALS

Facility Name: Brand FX Body Co dba Glasstite

Permit Number: 09100028 - 003

What to send	When to send	Portion of Facility Affected
Compliance Status Report	due 30 days after end of each calendar half-year starting 04/21/2006 that contains the information specified in 40 CFR Section 63.5910.	Total Facility
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 08/31/2000 . The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31.	Total Facility
Compliance Certification	due 30 days after end of each calendar year starting 08/31/2000 (for the previous calendar year). To be submitted on a form approved by the Commissioner, both to the Commissioner, and to the U.S. EPA regional office in Chicago. This report covers all deviations experienced during the calendar year. The EPA copy shall be sent to: Mr. George Czerniak, Chief, Air Enforcement and Compliance Assurance Branch, Air and Radiation Division, EPA Region V, 77 West Jackson Boulevard, Chicago, Illinois 60604	Total Facility

APPENDIX MATERIAL
Facility Name:Brand FX Body Co dba Glasstite
Permit Number: 09100028-003

Emission Factors for Open Molding of Composites
Emission Rate in Pounds of Styrene Emitted per Ton of Resin or Gelcoat Processed

	Styrene content in resin/gelcoat, %[1]																			
Application Process	**<33[2]**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**>50[2]**
Manual	0.126 x %styrene x 2000	83	89	94	100	106	112	117	123	129	134	140	146	152	157	163	169	174	180	((0.286 x %styrene) - 0.0529) x 2000
Manual w/ Vapor Suppressed Resin VSR[3]	**Manual emission factor** [listed above] x (1 - (0.50 x specific VSR reduction factor for each resin/suppressant formulation))																			
Mechanical Atomized	0.169 x %styrene x 2000	111	126	140	154	168	183	197	211	225	240	254	268	283	297	311	325	340	354	((0.714 x %styrene) - 0.18) x 2000
Mechanical Atomized with VSR[3]	**Mechanical Atomized emission factor** [listed above] x (1 - (0.45 x specific VSR reduction factor for each resin/suppressant formulation))																			
Mechanical Non-Atomized	0.107 x %styrene x 2000	71	74	77	80	83	86	89	93	96	99	102	105	108	111	115	118	121	124	((0.157 x %styrene) - 0.0165) x 2000
Mechanical Non-Atomized with VSR[3]	**Mechanical Non-Atomized emission factor** [listed above] x (1 - (0.45 x specific VSR reduction factor for each resin/suppressant formulation))																			
Filament application	0.184 x %styrene x 2000	122	127	133	138	144	149	155	160	166	171	177	182	188	193	199	204	210	215	((0.2746 x %styrene) - 0.0298) x 2000
Filament application with VSR[4]	0.120 x %styrene x 2000	79	83	86	90	93	97	100	104	108	111	115	118	122	125	129	133	136	140	0.65 x ((0.2746 x %styrene) - 0.0298) x 2000
Gelcoat Application	0.445 x %styrene x 2000	294	315	336	356	377	298	418	439	460	481	501	522	543	564	584	605	626	646	((1.03646 x %styrene) - 0.195) x 2000
Covered-Cure after Roll-Out	**Non-VSR process emission factor** [listed above] x (0.80 for Manual <or> 0.85 for Mechanical)																			
Covered-Cure without Roll-Out	**Non-VSR process emission factor** [listed above] x (0.50 for Manual <or> 0.55 for Mechanical)																			

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 09100028-003

This technical support document is intended for all parties interested in the permit and to meet the requirements that have been set forth by the federal and state regulations (40 CFR § 70.7(a)(5) and Minn. R. 7007.0850, subp.1). The purpose of this document is to provide the legal and factual justification for each applicable requirement or policy decision considered in the preliminary determination to issue the permit.

1. General Information

1.1. Applicant and Stationary Source Location:

Applicant/Address	Stationary Source/Address(SIC Code: **3792**)
Brand FX Body Company P.O. Box 77027 Fort Worth, TX 76177	Glasstite 600 N Highway 4 Dunnell, MN (Martin County)
Contact: **Nina Harbaugh** **Safety Manager** Phone: **515-272-4372**	

1.2. Description of the Permit Action

Brand FX Body Co. dba Glastite manufactures fiberglass pick-up truck toppers. The process consists of spraying alternating layers of resin and gelcoat on a mold, removing the product form from the mold, miscellaneous clean up, repair, grinding, gluing painting and oven curing of the paint. Primary emissions are volatile organic compounds from the spraying operations. These VOCs are primarily styrene and methyl methacrylate from the resin and gelcoat operations. The Permittee utilizes a mechanical non-atomized resin application process, which results in lower styrene emissions and minimizes particulate matter emissions. Each spray booth is equipped with panel filters to further reduce the amount of particulate matter emitted to the atmosphere. The grinding operations are exhausted to a fabric filter and emitted inside the building 100 percent of the time. The primary cleaning material used is acetone, which is not categorized as a VOC and therefore does not contribute to overall emissions. The facility also has three natural gas space heaters that also qualify as insignificant activities under Minnesota Rules.

The Permittee proposes to limit VOC emissions to 220 tons per year, based on purchase records. By limiting the quantity of VOC purchased, the quantity of hazardous air pollutants (HAPs) and particulate matter are inherently limited as well. After considering the VOC purchase limit, the facility is a major source under the Part 70 permitting program (VOC and HAPs) and a non-major source under New Source Review.

ACTION 001: Issuance of Total Facility Part 70 permit. This permit expired on August 31, 2005. The facility submitted its reissuance application in a timely manner. As such, the facility may continue to operate under Minn. R. 7007.0450, subp. 3.

ACTION 002: Administrative Amendment. The amendment was for a change in ownership.

1.3 Description of the Activities Allowed by this Permit Action

ACTION 003: Minor Amendment: This amendment is for the installation of a new paint primer booth. The installation of new booths is allowed and adherence is required with the total VOC cap for the group by the existing permit language. Therefore, this installation can be performed via a minor amendment. The company used the uncontrolled change in hourly emissions to determine that a moderate amendment was required, however, Minnesota Rules allows for the controlled emissions to be considered when determining the amendment type. The existing air emission permit specifies that all spray booths, including new additions, meet the requirements for control equipment included in GP002. The permit requires that all panel filters are operated to achieve 73.6 % control of particulate matter.

The controlled hourly emission increases are 1.26 lb/hour for PM10 and 3.61 lb/hour for VOC. The minor amendment thresholds are 3.42 lb/hour and 9.13 lb/hour respectively.

With this amendment, the MPCA is also incorporating the requirements of 40 CFR Part 63, Subp. WWWW, National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production because the compliance date has passed, and the requirements of the regulation are now in effect.

1.4 Facility Emissions:

[4]Total Facility Potential to Emit Summary:

	PM tpy	PM_{10} tpy	SO_2 tpy	NO_X tpy	CO tpy	VOC tpy	Total HAPs[2] tpy
Total Facility Limited Potential Emissions	32.8	32.8	0.003	0.5	0.4	220	220
Total Facility Actual Emissions[1]	10.08	10.08	0.01	1.33	0.0	44.41	NR[3]

1. As reported in the 2005 Emission Inventory.
2. Total HAPS will consist of any combination of one or more of the following: styrene, methyl methacrylate, dimethyl phthalate, ethylbenzene, methyl ethyl ketone, methyl isobutyl ketone, toluene, and/or xylene. Some coatings or solvents may also contain trace amounts of cumene or methylene chloride.
3. NR = Actual emissions not reported (not required to be reported)
4. No change in potential emissions is allowed by this amendment.

Facility Classification

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD		VOC, PM, PM10	SO2, NOx, CO
Part 70 Permit Program	VOC	PM10	SO2, NOx CO
Part 63 NESHAP	HAPs		

2. Regulatory and/or Statutory Basis

New Source Review

The facility is a synthetic minor one under federal new source review. The permit contains language that allows for the installation of new paint booths that automatically requires that they are subject to the total VOC limit. The addition of this paint booth, therefore, does not change the synthetic minor status of this facility.

Part 70 Permit Program

The facility is an existing major source under the Part 70 permit program.

New Source Performance Standards (NSPS)

There are no New Source Performance Standards applicable to the operations at this facility.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The facility is subject to 40 CFR Part 63, Subp. WWWW. Those requirements have been incorporated into the permit. The compliance date was in April of 2006.

Minnesota State Rules

The new spray paint booth is subject to Minn. R. 7011.0715, Industrial Process Equipment.

Regulatory Overview of Units Affected by the Modification/Permit Amendment

EU, GP, or SV	Applicable Regulations	Comments:
EU012	Title I Condition : to avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000	Limit set on VOC emissions from painting operations to avoid major source classification under 40 CFR § 52.21
EU012	Minn. R. 7011.0715, Minnesota Performance Standard for Industrial Process Equipment	

3. Technical Information

3.1 Emissions Increase Analysis

No change in potential annual emissions is allowed by this permit issuance, due to the cap on total facility emissions to which EU012 is subject. There is a change in potential hourly emissions, however, and that is the reason this authorization is being done through a minor amendment. Hourly PM and PM10 controlled emissions from the new primer booth are 1.66 lb/hour and VOC hourly emissions are 3.6 lb/hour. The thresholds for a minor amendment are 3.42 lb/hour for PM10 and 9.13 lb/hour for VOC. Therefore, the increase in PM10 emissions qualifies this amendment as minor. Calculations are attached.

3.2 Periodic Monitoring

In accordance with the Clean Air Act, it is the responsibility of the owner or operator of a facility to have sufficient knowledge of the facility to certify that the facility is in compliance with all applicable requirements.

In evaluating the monitoring included in the permit, the MPCA considers the following:

- The likelihood of violating the applicable requirements;

- Whether add-on controls are necessary to meet the emission limits;
- The variability of emissions over time;
- The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;
- The technical and economic feasibility of possible periodic monitoring methods; and
- The kind of monitoring found on similar units elsewhere.

Table 4 summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or inadequate.

Periodic Monitoring

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
EU012	VOC = 220 tons per year, on a 12 month rolling basis (limit to avoid NSR)	Recordkeeping: Monthly records of coating usage; On-going MSDS records of coating contents; Monthly calculations of emissions.	
EU012	PM: $\leq$ 0.3 gr/dscf, or less Opacity: $\leq$ 20 % (Minn. R. 7011.0715)	Operation, monitoring, inspection and maintenance of panel filters	

3.3 Insignificant Activities

No insignificant activities are added with this permit amendment.

3.4 Comments Received

EPA 45-day Review Period: 08/21/07 – 10/12/07

4. Conclusion

Based on the information provided by Brand FX, the MPCA has reasonable assurance that the operation of the emission facility, as described in the Air Emission Permit No. 09100028-003 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Jenny Reinertsen (permit writer/engineer)
Sarah Kilgriff (enforcement)
Marshall Cole (peer reviewer)

AQ File No. 3686; DQ 1274

Attachments: 1. Calculation Spreadsheets

Attachment 1:

Potential Calculation Worksheet Paint Primer Boot EU012

Control Efficiency	73.6%
Transfer Efficienty	75%
Max Capacity (0.43 gal/min)	2.58 gal/hr
Weight per Gallon	11.18 lbs
VOC Content	1.4 lb/gallon
Solid Content	9.78 lb/gallon
Number of Spray Guns	1
Flow Rate	11105 scfm
Exhaust Temperature	Ambient
Hours of Operation	40 per week

PM/PM10

Uncontrolled	
Lbs/hour = solid content (lbs/gallon) * max capacity (gal/hr)* (1-transfer efficiency) TPY = lbs/hr *8760 hours/year/2000 lbs/ton 9.78*2.58*(1-0.75)= 6.31*8760/2000 =	 6.31 lbs/hr 27.64 tpy
Controlled	
Lbs/hr = Lbs/hr uncontrolled *(1-control efficiency) TPY = Lbs/hr*8760 hours/year/2000 lbs/ton 6.31*(1-0.736) = 1.66*8760/2000	 1.66 lbs/hr 7.30 tpy

VOC

Lbs/hour = VOC content (lb/gal)*max capacity (gal/hr) TPY = lbs/hr*8760 hours/yr/200 lbs/ton 1.4*2.58 = 3.612*8760/2000 =	 3.612 lbs/hr 15.82 tpy