TECHNICAL REVIEW DOCUMENT

for

OPERATING PERMIT 02OPPR251

to be issued to:

C.F. Maier Composites, Inc.

Prowers County

Source ID 0990036

June 4, 2003, modified April 13, 2004

I. PURPOSE

This document establishes the basis for decisions made regarding the Applicable Requirements, Emission Factors, Monitoring Plan and Compliance Status of Emission Units covered within the Operating Permit proposed for this site. It is designed for reference during review of the proposed permit by the EPA and during Public Comment. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Conclusions in this document are based on information provided in the original application submittal of November 26, 2002, and supplemental Title V technical information.

Any revisions made to the underlying construction permits associated with this facility in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, Part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised Construction Permit.

II. SOURCE DESCRIPTION

This facility manufactures fiberglass reinforced mine ventilation products. The facility is located at 500 East Crystal Street, Lamar, Colorado. Kansas is an affected state within 50 miles of the facility. There is no Federal Class I designated area within 100 kilometers of the plant.

Facility wide emissions are as follows:

Pollutant	Potential Tons Per Year
Volatile Organic Compounds (VOC)	60
Total HAPs	60
Individual HAPs:	
Styrene	50
Methyl Methacrylate	10

This facility is subject to Title V operating permit requirements because potential hazardous air pollutants emissions are greater than major source limits of 10 tons per year for any individual hazardous air pollutant and/or 25 tons per year for total hazardous air pollutants.

The area in which the plant operates is designated as non-attainment for particulate emissions smaller than ten microns (10µm) as of this date. Based on the information provided by the applicant, the plant is not categorized as a major stationary source (the Potential to Emit for nitrogen oxides, sulfur dioxides, volatile organic compounds, or carbon monoxide is not greater than 250 tons per year and the Potential to Emit for particulate matter small than ten microns is not greater than 100 tons per year) as of the issue date of this permit. The plant, therefore, is not subject to the Prevention of Significant Deterioration (PSD) review requirements of 40 CFR 52.21 (Colorado Regulation No. 3, Part B, Section IV.D.3).

Future modifications at the plant which are major by themselves will result in the application of the PSD review requirements. In addition, future modifications at the plant may result in the plant being classified as a major stationary source. Once that threshold is exceeded, future modifications at the plant resulting in a significant net emissions increase (See Colorado Regulation No. 3, Part A, Section I.B.37 and 58) for any pollutant as listed in Colorado Regulation No. 3, Part A, Section I.B.58, or a modification which is major by itself may result in the application of the PSD review requirements.

There are no other Operating Permits associated with this plant for the purposes of determining the applicability of the PSD regulations.

III. EMISSION SOURCES

The facility manufactures custom molded parts from fiberglass reinforced-polyester. The process includes spraying gelcoat in open molds, then laying up fiberglass reinforcement impregnated with polyester resin. Lay up is accomplished manually and by non-atomized application. All emissions are fugitive emissions. It is noted that there is a potential to use 5 tons per year of acetone for cleanup. A distillation process is used to recycle the acetone. Acetone is not classified as a volatile organic compound or a hazardous air pollutant.

Initial Approval Construction Permit 02PR0542 was issued for this facility. C. F. Maier requested a modification of the Construction Permit to increase the permit limits to allow for potential increases in production. The modification of the Construction Permit is being made directly in this Operating Permit. The due date of the first semi-annual monitoring and deviation report required by this Operating Permit will be more than 180 days after the initial approval of the modification of Construction Permit 02PR0542 was issued and/or the equipment commenced operation. Therefore, under the provisions of Colorado Regulation No. 3, Section V.A.2., the Division is allowing the initial approval of the modification of Construction Permit 02PR0542 to continue in full force and effect and will consider the Responsible Official certification submitted with that report to serve as the demonstration required pursuant to Colorado Regulation No. 3, Part B, Section IV.H and no final approval construction permit will be issued. The appropriate provisions of the initial approval of the modification of the Construction Permit have been directly incorporated into this Operating Permit. Applicable requirements are as follows.

Construction Permit 02PR0542

- Limits volatile organic compounds and total hazardous air pollutants emissions on a rolling twelve month basis.
- Limits opacity (Colorado Regulation No. 1, II.A.1 & 4) (Note: The nature of the process does not result in opacity emissions, therefore this opacity limit is not included in the operating permit).
- Requires records of consumption rate on a monthly basis and criteria and hazardous air pollutants emission rates.
- State-only – Subject to odor control requirements of Colorado Regulation No. 2.

Emission Factors – VOC and HAP emissions are estimated using a mass balance of material consumption and Unified Emission Factors for Open Molding Composites, published by the Composite Fabricators.

Monitoring – Actual monthly material consumption is used to estimate the monthly and the rolling twelve month total emissions, for comparison to emission limits.

IV. MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT)

At the time the first draft of the permit and this technical review were prepared EPA had not promulgated the MACT standards for 40 CFR Part 63 Subpart WWWW "Reinforced Plastics Composites Production". Therefore the provisions of Section 112(j), "the MACT hammer" were discussed in this technical review. While the first drafts were on Public Notice EPA promulgated the provisions of Subpart WWWW. The draft documents have been modified to incorporate the Subpart WWWW provisions and being submitted to Public Notice again. The facility must demonstrate compliance with the Subpart WWWW provisions starting April 21, 2006.

The construction permit sets annual limits in tons per year. Compliance with the annual limits must be demonstrated each calendar month for a 12 calendar month period. Emission factors for calculating the emissions are provided by the "Unified Emission Factors for Open Molding Composites", published by the Composite Fabricators.

The MACT provisions set limits based on emission factors expressed as the pounds of hazardous air pollutants emitted per ton of hazardous air pollutant containing material (resins or gel coat) processed. The provisions include equations for calculating the emission factors. The MACT equations are the same equations used as the basis for the "Unified Emission Factors for Open Molding Composites" table, but the MACT requires the equations, not the table to be used. Compliance with the emission factor limits is to be monitored as a 12 month rolling average. In other words, the emission factor is calculated for each month, and the average for the 12 month period is calculated. It is easy to get confused between a 12 month rolling total and a 12 month rolling average. To repeat, compliance with the annual permit limits is monitored by the total of the emissions for a moving 12 month period. Compliance with the MACT emission factor limits is monitored by the average emission factor for a moving 12 month period.

V. ACCIDENTAL RELEASE –112(r)

Section 112(r) of the Clean Air Act mandates a new federal focus on the prevention of chemical accidents. Sources subject to these provisions must develop and implement risk management programs that include hazard assessment, a prevention program, and an emergency response

program. They must prepare and implement a Risk Management Plan (RMP) as specified in the Rule.

Based on the information provided by the applicant, this facility is not subject to the provisions of the Accidental Release Prevention Program (Section 112(r) of the Federal Clean Air Act).

VI. COMPLIANCE ASSURANCE MONITORING (CAM)

The following emission points at this facility use a control device to achieve compliance with an emission limitation or standard to which they are subject and have pre-control emissions that exceed or are equivalent to the major source threshold. They are therefore subject to the provisions of the CAM program as set forth in 40 CFR Part 64 as adopted by reference into Colorado Regulation No. 3, Part C, Section XIV: None

VII. EMISSION FACTORS

From time to time published emission factors are changed based on new or improved data. A logical concern is what happens if the use of the new emission factor in a calculation results in a source being out of compliance with a permit limit. For this operating permit, the emission factors or emission factor equations included in the permit are considered to be fixed until changed by the permit. Obviously, factors dependent on the fuel sulfur content or heat content can not be fixed and will vary with the test results. The formula for determining the emission factors is, however, fixed. It is the responsibility of the permittee to be aware of changes in the factors, and to notify the Division in writing of impacts on the permit requirements when there is a change in factors. Upon notification, the Division will work with the permittee to address the situation.

VIII. Permit Shield

The intent of the permit shield is to provide limited protection to the facility in the event of an error in the evaluation of whether a regulation, or portion of a regulation applies. The facility identifies the issue and presents its position. The Division reviews the position. If the Division and the facility mutually agree on the position, the issue is recorded in the permit. If, at a later date, it is determined that an error was made in the mutual decision, the facility is protected from enforcement action until the permit can be reopened and the correct requirements and a compliance schedule inserted.

No specific regulations were cited by C.F. Maier as non-applicable to this source.