

Permit #: 28.3306-01

Effective Date: July 3, 2006

Expiration Date: July 3, 2011

The seal of the State of South Dakota is a circular emblem with a serrated outer edge. It features a central landscape scene with a river, a windmill, and a plow. Above the scene is a banner with the motto "UNDER GOD THE PEOPLE RULE". The words "STATE OF SOUTH DAKOTA" are written in an arc across the top, and "GREAT SEAL" across the bottom. The year "1889" is at the very bottom.

**SOUTH DAKOTA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
TITLE V AIR QUALITY OPERATING PERMIT**

A handwritten signature in black ink, appearing to read "S. M. Pirner".

Steven M Pirner, Secretary
Department of Environment and Natural Resources

**Under the South Dakota Air Pollution
Control Regulations**

Pursuant to Chapter 34A-1-21 of the South Dakota Codified Laws and the Air Pollution Control Regulations of the State of South Dakota and in reliance on statements made by the owner designated below, a permit to operate is hereby issued by the Secretary of the Department of Environment and Natural Resources. This permit authorizes such owner to operate the unit(s) listed in Table 1-1 under the listed conditions.

A. Owner

1. Company Name and Mailing Address

Design Tanks, Inc.
612 W. Blackhawk Street
Sioux Falls, SD 57104

2. Actual Source Location if Different from Above

3. Permit Contact

Marcus Weeldreyer, Facility Engineer
(605) 965-1623

4. Facility Contact

Marcus Weeldreyer, Facility Engineer
(605) 965-1623

5. Responsible Official

Marcus Weeldreyer, Facility Engineer

B. Permit Revisions or Modifications

Not applicable

C. Type of Operation

Manufacture fiberglass storage tanks. The process includes spraying liquid resin and chopped glass onto a mold. In some situations, a gel coat layer is initially sprayed on the mold.

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1.0 STANDARD CONDITIONS

1.1 Operation of source. In accordance with Administrative Rules of South Dakota (ARSD) 74:36:05:16.01(8), the owner or operator shall operate the units, controls, and processes as described in Table 1-1 in accordance with the statements, representations, and supporting data contained in the complete permit application submitted and received February 19, 2003, and amended October 3, 2005, unless modified by the conditions of this permit. The application consists of the application forms, supporting data, and supplementary correspondence. If the owner or operator becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in an application, such information shall be promptly submitted.

Table 1-1 – Description of Permitted Units, Operations, and Processes

Unit	Description ¹	Control Device
#1	Molding room north exhaust fan for the small spincast, mold fab, and small, medium, and large heads	Not applicable
#2	Molding room south exhaust fan for the large spincast and winder	Not applicable
#3	Finishing room exhaust louver – west wall for finishing (hand lay-up) operations	Not applicable
#4	Finishing room exhaust louver – south wall, west unit for finishing (hand lay-up) operations	Not applicable
#5	Finishing room exhaust louver – south wall, east unit for finishing (hand lay-up) operations	Not applicable

¹ – Includes mixing, cleaning of equipment, hazardous air pollutant containing materials storage, and repair of manufactured parts operations associated with the permitted unit.

1.2 Duty to comply. In accordance with ARSD 74:36:05:16.01(12), the owner or operator shall comply with the conditions of this permit. An owner or operator who knowingly makes a false statement in any record or report or who falsifies, tampers with, or renders inaccurate, any monitoring device or method is in violation of this permit. A violation of any condition in this permit is grounds for enforcement, reopening this permit, permit termination, or denial of a permit renewal application. The owner or operator, in an enforcement action, cannot use the defense that it would have been necessary to cease or reduce the permitted activity to maintain compliance. The owner or operator shall provide any information requested by the Secretary to determine compliance or whether cause exists for reopening or terminating this permit.

1.3 Property rights or exclusive privileges. In accordance with ARSD 74:36:05:16.01(12), the State’s issuance of this permit, adoption of design criteria, and approval of plans and

specifications does not convey any property rights of any sort, any exclusive privileges, any authorization to damage, injure or use any private property, any authority to invade personal rights, any authority to violate federal, state or local laws or regulations, or any taking, condemnation or use of eminent domain against any property owned by third parties. The State does not warrant that the owner's or operator's compliance with this permit, design criteria, approved plans and specifications, and operation under this permit, will not cause damage, injury or use of private property, an invasion of personal rights, or violation of federal, state or local laws or regulations. The owner or operator is solely and severally liable for all damage, injury or use of private property, invasion of personal rights, infringement of federal, state or local laws and regulations, or taking or condemnation of property owned by third parties, which may result from actions taken under the permit.

1.4 Penalty for violating a permit condition. In accordance with South Dakota Codified Laws (SDCL) 34A-1, a violation of a permit condition may subject the owner or operator to civil or criminal prosecution, a state penalty of not more than \$10,000 per day per violation, injunctive action, administrative permit action, and other remedies as provided by law.

1.5 Inspection and entry. In accordance with SDCL 34A-1-41, the owner or operator shall allow the Secretary to:

1. Enter the premises where a regulated activity is located or where pertinent records are stored;
2. Have access to and copy any records that are required under this permit;
3. Inspect operations regulated under this permit; and/or
4. Sample or monitor any substances or parameters for the purpose of assuring compliance.

1.6 Severability. In accordance with ARSD 74:36:05:16.01(11), any portion of this permit that is void or challenged shall not affect the validity of the remaining permit requirements.

1.7 Permit termination, modification, or revocation. In accordance with ARSD 74:36:05:46, the Secretary may recommend that the Board of Minerals and Environment terminate, modify, or revoke this permit for violations of SDCL 34A-1 or the federal Clean Air Act or for nonpayment of any outstanding fee or enforcement penalty.

1.8 Credible evidence. In accordance with ARSD 74:36:13:07, credible evidence may be used for the purpose of establishing whether the owner or operator has violated or is violation of this permit. Credible evidence is as follows:

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at the source:
 - a. A monitoring method approved for the source pursuant to 40 CFR § 70.6(a)(3) and incorporated in this permit; or
 - b. Compliance methods specified in an applicable plan;

2. The following testing, monitoring, or information gathering methods are presumptively credible testing, monitoring, or information-gathering methods:
 - a. Any monitoring or testing methods approved in this permit, including those in 40 CFR Parts 51, 60, 61, and 75; or
 - b. Other testing, monitoring, or information-gathering methods that produce information comparable to that produced by any method in section (1) or (2)(a).

2.0 PERMIT FEES

2.1 Annual air fee required. In accordance with ARSD 74:36:05:06.01, the owner or operator shall submit an annual administrative fee and an annual fee. The fee is based on actual emissions in accordance with ARSD 74:37.

2.2 Annual operational report. In accordance with ARSD 74:37:01:06, the Secretary will supply the owner or operator with an annual operational report in January of each year. The owner or operator shall complete and submit the operational report to the Secretary by March 1 of each year. The responsible official shall sign the operational report in the presence of a notary public.

2.3 Annual air fee. In accordance with ARSD 74:37:01:08, the Secretary will notify the owner or operator of the required annual air emission fee and administrative fee by June 1 of each year. The fees shall accrue on July 1 and are payable to the Department of Revenue by July 31 of each year.

3.0 PERMIT AMENDMENT AND MODIFICATION CONDITIONS

3.1 Permit flexibility. In accordance with ARSD 74:36:05:30, the owner or operator shall have the flexibility to make changes to the source during the term of this permit. The owner or operator shall provide the Secretary written notice at least seven days in advance of the proposed change (NOTE: The Secretary will forward a copy of the written notice to EPA). The written notice shall include a brief description of the change, the date on which the change is to occur, any change in emissions, and the proposed changes to this permit.

The Secretary will notify the owner or operator whether the change is an administrative permit amendment, a minor permit amendment, or a permit modification. A proposed change that is considered an administrative permit amendment or a minor permit amendment can be completed immediately after the Secretary receives the written notification. The owner or operator must comply with both the applicable requirements governing the change and the proposed permit terms and conditions until the Secretary takes final action on the proposed change.

A proposed change that is considered a modification can not be constructed until the Secretary takes final action on the proposed change. Permit modifications are subject to the same procedural requirements, including public comment, as the original permit issuance except that the required review shall cover only the proposed changes.

3.2 Administrative permit amendment. In accordance with ARSD 74:36:05:33, the Secretary has 60 days from receipt of a written notice to verify that the proposed change is an administrative permit amendment. The Secretary considers a proposed change an administrative permit amendment if the proposed change accomplishes one of the following:

1. Corrects typographical errors;
2. Changes the name, address, or phone number of any person identified in this permit or provides a similar minor administrative change at the source;
3. Requires more frequent monitoring or reporting by the source;
4. The ownership or operational control of a source change and the Secretary determines that no other change in this permit is necessary. However, the new owner must submit a certification of applicant form and a written statement specifying the date for transfer of operating permit responsibility, coverage, and liability; or
5. Any other changes that the Secretary and the administrator of EPA determines to be similar to those requirements in this condition.

3.3 Minor permit amendment. In accordance with ARSD 74:36:05:38, the Secretary has 90 days from receipt of a written notice or 15 days after the end of EPA's 45-day review period, whichever is later, to take final action on a minor permit amendment. Final action consists of issuing or denying a minor permit amendment or determining that the proposed change is a permit modification. The Secretary considers a proposed change to be a minor permit amendment if the proposed change:

1. Does not violate any applicable requirements;
2. Does not involve significant changes to existing monitoring, reporting, or record keeping requirements;
3. Does not require or change a case-by-case determination of an emission limit or other standard, a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis; or
4. Does not seek to establish or change a permit term or condition for which the source has assumed to avoid an applicable requirement, a federally enforceable emission cap, or an alternative emission limit. An alternative emission limit is approved pursuant to regulations promulgated under section 112(i)(5) of the federal Clean Air Act.

3.4 Permit modification. In accordance with ARSD 74:36:05:39, an owner or operator may apply for a permit modification. A permit modification is any proposed change that meets the definition of a modification in ARSD 74:36:01:10 or is not an administrative amendment or a minor permit amendment. Modification is defined as a physical change or change in operation

that increases the amount of air pollutant emitted by the source or results in the emission of an air pollutant not previously emitted. Permit modifications are subject to the same procedural requirements, including public comment, as the original permit issuance except that the required review shall cover only the proposed changes.

3.5 Permit revision. In accordance with ARSD 74:36:05:40, the Secretary may reopen and revise this permit to meet requirements of SDCL 34A-1 or the federal Clean Air Act.

3.6 Testing new fuels or raw materials. In accordance with ARSD 74:36:11:04, an owner or operator may request permission to test a new fuel or raw material to determine if it is compatible with existing equipment before requesting a permit amendment or modification. A complete test proposal shall consist of the following:

1. A written proposal that describes the new fuel or raw material, operating parameters, and parameters that will be monitored and any testing associated with air pollutant emissions during the test;
2. An estimate of the type and amount of regulated air pollutant emissions that will result from the proposed change; and
3. The proposed schedule for conducting the test. In most cases the owner or operator will be allowed to test for a maximum of one week. A request for a test period longer than one week will need additional justification. A test period shall not exceed 180 days.

The Secretary shall approve, conditionally approve, or deny in writing the test proposal within 45 days after receiving a complete proposal. Approval conditions may include changing the test schedule or pollutant sampling and analysis methods. Pollutant sampling and analysis methods may include, but are not limited to performance testing, visible emission evaluation, fuel analysis, dispersion modeling, and monitoring of raw material or fuel rates.

If the Secretary determines that the proposed change will result in an increase in the emission of a regulated air pollutant or result in the emission of an additional regulated air pollutant, the Secretary shall give public notice of the proposed test for 30 days. The Secretary shall consider all comments received during the 30-day public comment period before making a final decision on the test.

The Secretary will not approve a test if the test would cause or contribute to a violation of a national ambient air quality standard.

4.0 PERMIT RENEWAL REQUIREMENTS

4.1 Permit effective. In accordance with ARSD 74:36:05:07, this permit shall expire five years from date of issuance unless reopened or terminated for cause.

4.2 Permit renewal. In accordance with ARSD 74:36:05:08, the owner or operator shall submit an application for a permit renewal at least 180 days before the date of permit expiration if the owner or operator wishes to continue an activity regulated by this permit. The current permit shall not expire and shall remain in effect until the Secretary takes final action on the timely permit renewal application.

4.3 Permit expiration. In accordance with ARSD 74:36:05:28, permit expiration terminates the owner's or operator's right to operate any unit covered by this permit.

5.0 RECORD KEEPING REQUIREMENTS

5.1 Record keeping. In accordance with ARSD 74:36:05:16.01(9) and ARSD 74:36:08:03, as referenced to 40 CFR § 63.10(b)(1) and 40 CFR § 63.5920, the owner or operator shall maintain all monitoring data, records, reports, notifications, and pertinent information specified by this permit for five years from the date of each occurrence, measurement, maintenance, corrective action, report, record, or application. The records shall be maintained on site for the first two years and may be maintained off site for the last three years. All records must be in a form suitable and readily available for expeditious inspection and review by the Secretary.

5.2 Record keeping for reinforced plastic composites production. In accordance with 40 CFR § 63.5895(c) and (d), and 40 CFR § 63.5915, the owner or operator must retain the following records:

1. A copy of each notification and report that is submitted to comply with this permit, including all documentation supporting the initial notification, or notification of compliance status submitted in accordance with permit condition 6.4;
2. All data, assumptions, and calculations used to determine organic hazardous air pollutant emissions factors or average organic hazardous air pollutant contents for operations listed in permit condition 8.2, 8.3 and 8.9;
3. A certified statement that the owner or operator is in compliance with the work practice requirements in Table 8-4 of this permit;
4. Resin and gel coat use, organic hazardous air pollutant content, and operation where the resin is used to comply with permit conditions 8.2 and 8.3 and permit condition 8.9, if averaging organic hazardous air pollutant content. Resin use records may be based on purchase records if the owner or operator can reasonably estimate how the resin is applied. The organic hazardous air pollutant content records may be based on Material Safety Data Sheets (MSDS) or on resin specifications supplied by the resin supplier;
5. Resin and gel coat use records are not required for the individual resins and gel coats that are demonstrated, as applied, to meet their applicable emission limit as defined in permit condition 8.9(1). However, the owner or operator must retain the records of resin and gel coat organic hazardous air pollutant content, a list of these resins and gel coats, and identify their application methods in the semiannual compliance reports required in permit condition

6.5. If after the owner or operator has initially demonstrated that a specific combination of an individual resin or gel coat, application method, and controls meets its applicable emission limit, and the resin or gel coat changes or the organic hazardous air pollutant content increases, or the owner or operator changes the application method or controls, then the owner or operator must demonstrate that the individual resin or gel coat meets its emission limit as specified in permit condition 8.9(1) again. If any of the previously mentioned changes results in a situation where an individual resin or gel coat now exceeds its applicable emission limit in permit condition 8.2 or 8.3, the owner or operator must begin collecting resin and gel coat use records and calculate compliance using one of the averaging options on a 12-month rolling average.

5.3 Monitoring log for emergency exceedances. In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall maintain a monitoring log for emergency exceedances. The following information shall be recorded in the monitoring log within two days of each emergency exceedance:

1. The date of the emergency exceedance and the date the emergency exceedance was reported to the Secretary;
2. The cause(s) of the emergency;
3. The reasonable steps taken to minimize the emissions during the emergency; and
4. A statement that the permitted equipment was at the time being properly operated.

5.4 Annual records. In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall calculate and record the following amounts from January 1 to December 31 of each year:

1. The amount of product used at the facility; and
2. The amount of each hazardous air pollutant and volatile organic compound emissions from the facility.

The amount of hazardous air pollutants and volatile organic compound emissions shall be based on production records, consumption records, purchase records, material safety data sheets, etc.

6.0 REPORTING REQUIREMENTS

6.1 Submittal of notifications, applications, and reports. In accordance with ARSD 74:36:05:16.01(9), all notifications, applications, and reports shall be submitted to the following address:

South Dakota Department of Environment and Natural Resources
PMB 2020, Air Quality Program
523 E. Capitol, Joe Foss Building
Pierre, SD 57501-3182

6.2 Signatory requirements. In accordance with ARSD 74:36:05:12, all applications submitted to the Secretary shall be signed and certified by a responsible official. A responsible official for a corporation is a responsible corporate officer and for a partnership or sole proprietorship is a general partner or the proprietor, respectively. All reports or other information submitted to the Secretary shall be signed and certified by a responsible official or a duly authorized representative. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Secretary; and
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

The responsible official shall notify the Secretary if an authorization is no longer accurate. The new duly authorized representative must be designated prior to or together with any reports or information to be signed by a duly authorized representative.

6.3 Certification statement. In accordance with ARSD 74:36:05:16.01(14)(a), all documents required by this permit, including application forms, reports, and compliance certification, must be certified by a responsible official or a duly authorized representative. The certification shall include the following statement:

“I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document and all attachments are true, accurate, and complete.”

6.4 Notification of compliance status. In accordance with ARSD 74:36:08:03, as referenced to 40 CFR § 63.9(h) and 40 CFR § 63.5905(a), the owner or operator must submit a notification of compliance status by May 21, 2007, if the owner or operator demonstrates compliance with the organic hazardous air pollutant emissions limit using averaging provisions. If the owner or operator is complying with the organic hazardous air pollutant content limits, application equipment requirements, or organic hazardous air pollutant emissions limit other than organic hazardous air pollutant emissions limit averaging the owner or operator must submit a notification of compliance status by May 21, 2006. The notification of compliance status shall contain the following:

1. Company name and address;
2. The methods used to determine compliance;
3. The methods used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;

4. The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times; and
5. A statement by the owner or operator that the owner and operator have complied with the relevant standard or other requirements.

In accordance with 40 CFR § 63.5905(b), if the owner or operator changes any information submitted in this notification, the owner or operator must submit the changes in writing to the Secretary within 15 calendar days after the change.

6.5 Semiannual compliance report. In accordance with 40 CFR §§ 63.5900(a)(2) and 63.5910, the owner or operator shall submit a semiannual compliance report to the Secretary. The semiannual report shall contain the following information:

1. Company name and address;
2. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
3. Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31;
4. If there were no deviations from the emission limitations in permit condition 8.2 and/or 8.3 and there were no deviations from the requirements for work practice standards in Table 8-4, a statement that there were no deviations from the emission limitations or work practice standards during the reporting period; and
5. For each deviation from the emission limitations in permit condition 8.2 and/or 8.3 or the requirements for work practice standards that occurs during the reporting period, the compliance report shall contain the following information:
 - a. The total operating time of each permitted unit in Table 1-1 during the reporting period; and
 - b. Information on the number, duration, and cause of deviations, including unknown causes, and the corrective action taken.

The first semiannual report shall cover the period beginning on April 21, 2006, and ending June 30, 2006. Subsequent semiannual reports must cover the period from July 1 through December 31, or the semiannual reporting period from January 1 through June 30. Each semiannual report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

6.6 Annual compliance certification. In accordance with ARSD 74:36:05:16.01(14), the owner or operator shall submit an annual compliance certification letter to the Secretary by March 1 of each year this permit is in effect (NOTE: The Secretary will forward a copy of the certification letter to EPA). The certification shall contain the following information:

1. Methods used to determine compliance, including: monitoring, record keeping, performance testing and reporting requirements;

2. The source is in compliance and will continue to demonstrate compliance with all applicable requirements;
3. In the event the source is in noncompliance, a compliance plan that indicates how the source has or will be brought into compliance; and
4. Certification statement required in permit condition 6.3.

6.7 Reporting permit violations. In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall report all permit violations. A permit violation should be reported as soon as possible, but no later than the first business day following the day the violation was discovered. The permit violation may be reported by telephone to the South Dakota Department of Environment and Natural Resources at (605) 773-3151 or by FAX at (605) 773-5286.

A written report shall be submitted within five days of discovering the permit violation. Upon prior approval from the Secretary, the submittal deadline for the written report may be extended up to 30 days. The written report shall contain:

1. Description of the permit violation and its cause(s);
2. Duration of the permit violation, including exact dates and times; and
3. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the permit violation.

7.0 REGULATED AIR POLLUTANTS

7.1 Visibility limit. In accordance with ARSD 74:36:12:01, the owner or operator may not discharge into the ambient air an air contaminant of a density equal to or greater than that designated as 20 percent opacity from any permitted unit, operation, or process listed in Table 1-1. This provision does not apply when the presence of uncombined water is the only reason for failure to meet the requirement.

7.2 Visibility exceedances. In accordance with ARSD 74:36:12:01, an exceedance of the operating limit in permit condition 7.1 is not considered a violation during brief periods of start-up, shutdown, or malfunctions. Malfunction means any sudden and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. A failure caused entirely or in part by poor maintenance, careless operation, preventable equipment breakdown, or any other cause within the control of the owner or operator of the source is not a malfunction and is considered a violation.

7.3 Air emission exceedances – emergency conditions. In accordance with ARSD 74:36:05:16.01(18), the Secretary will allow for an unavoidable emission exceedance of a technology-based emission limit in this permit if the exceedance is caused by an emergency condition and immediate action is taken by the owner or operator to restore the operations back to normal. An emergency condition is a situation arising from a sudden and reasonably unforeseeable event beyond the control of the source, including acts of God. An emergency shall

not include an emission exceedance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. The owner or operator shall notify the Secretary within two working days of the incident and take all steps possible to eliminate the excess emissions. The notification must provide a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. If the notification is submitted orally, a written report summarizing the information required by the notification shall be submitted and postmarked within 30 days of the oral notification.

7.4 Circumvention not allowed. In accordance with ARSD 74:36:05:47.01 and ARSD 74:36:08:03, as referenced to 40 CFR § 63.4(b), no owner or operator shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with this permit. Such concealment includes, but is not limited to the use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharge to the atmosphere or the use of gaseous diluents to achieve compliance with a relevant standard for visible emissions.

7.5 Minimizing emissions. In accordance with ARSD 74:36:08:03, as referenced to 40 CFR § 63.6(e)(1) and 40 CFR § 63.5835(c), the owner or operator shall at all times, including periods of startup, shutdown, and malfunction, operate and maintain all permitted units in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the permitted units to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, the owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Secretary which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

8.0 Reinforced Plastic Composites Production

8.1 Reinforced plastic composites production. In accordance with 40 CFR §§ 63.5785(a) and 63.5790(a), (b), and (c), this chapter applies to an affected source listed in Table 1-1. An

“affected source” means all parts of the facility engaged in the following operations: open molding; closed molding; centrifugal casting; mixing; cleaning of equipment used in reinforced plastic composites manufacture; hazardous air pollutant containing materials storage, and repair operations associated with the production of plastic composites. The application of mold sealing and release agents; mold stripping and cleaning; repair of parts that are not manufactured, including non-routine manufacturing parts; application of putties, polyputties, and adhesives; repair or production materials that do not contain resin or gel coat; and closed molding operations, except for compression and injection molding, are excluded from the requirements in this chapter.

8.2 HAP limit for centrifugal casting operations. In accordance with 40 CFR §§ 63.5800, 63.5805(a), and 63.5835(a), the owner or operator shall not release into the ambient air hazardous air pollutants that exceed the following on or after April 21, 2006, from centrifugal casting operations:

1. If the combination of all centrifugal casting operations emits 100 tons per year or more of hazardous air pollutants, the owner or operator must reduce the total organic hazardous air pollutant emissions from centrifugal casting operations by at least 95 percent by weight. As an alternative, centrifugal casting operations may meet the applicable organic hazardous air pollutant emissions limits in Table 8-1. For centrifugal casting, the percent reduction requirement does not apply to organic hazardous air pollutant emissions that occur during resin application onto an open centrifugal casting mold using open molding application techniques; or
2. If the combination of all centrifugal casting operations emits less than 100 tons per year of hazardous air pollutants, then centrifugal casting operations must meet the appropriate requirements in Table 8-2.

Table 8-1 – Alternative Limits for Centrifugal Casting Operations^{1, 2, and 3}

Corrosion Resistant and/or High Strength Product	and use...	Organic Hazardous Air Pollutant Emissions Limit
Yes	vent system that moves heated air through the mold	27 pounds per ton
No	vent system that moves heated air through the mold	21 pounds per ton
Yes	vent system that moves ambient air through the mold	2 pounds per ton
No	vent system that moves ambient air through the mold	1 pound per ton

¹ – Organic HAP emission limits for open molding and centrifugal casting expressed as lb/ton are calculated using the equations shown in Table 8-5. The owner or operator must be at or below these values based on a 12-month rolling average. The initial month in the 12-month rolling average shall be April 2006;

² – Centrifugal casting operations where the mold is not vented during spinning and cure are considered to be closed molding and are not subject to any emissions limit. Centrifugal casting operations where the mold is not vented during the spinning and cure, and the resin is applied to the open centrifugal casting mold using mechanical or manual open molding resin application techniques are considered to be open molding operations and the appropriate open molding emission limits apply; and

³ – Centrifugal casting operations where the mold is vented during spinning and the resin is applied to the open centrifugal casting mold using mechanical or manual open molding resin application techniques use the appropriate centrifugal casting emission limit to determine compliance. Calculate the emission factor using the appropriate centrifugal casting emission factor in Table 8-5, or a site specific emission factor as discussed in permit condition 8.6.

Table 8-2 – Limits for Centrifugal Casting Operations ¹

Corrosion Resistant and/or High Strength Product	and use...	Organic Hazardous Air Pollutant Emissions Limit ²
Yes	Resin application with the mold closed, and the mold is vented during spinning and cure	25 pounds per ton ³
	Resin application with the mold closed, and the mold is not vented during spinning and cure	Not applicable – this is considered to be a closed molding operation.
	Resin application with the mold open, and the mold is vented during spinning and cure	25 pounds per ton ³
	Resin application with the mold open, and the mold is not vented during spinning and cure	Use the appropriate open molding emission limit ⁴
No	Resin application with the mold closed, and the mold is vented during spinning and cure	20 pounds per ton ³
	Resin application with the mold closed, and the mold is not vented during spinning and cure	Not applicable – this is considered to be a closed molding operation.
	Resin application with the mold open, and the mold is vented during spinning and cure	20 pounds per ton ³

Corrosion Resistant and/or High Strength Product	and use...	Organic Hazardous Air Pollutant Emissions Limit ²
	Resin application with the mold open, and the mold is not vented during spinning and cure	Use the appropriate open molding emission limit ⁴

¹ – The hazardous air pollutant emissions limits in this table are subject to centrifugal casting operations where the combination of all centrifugal casting operations emits less than 100 tons per year of hazardous air pollutants;

² – Compliance with the organic hazardous air pollutant emissions limits is demonstrated if the organic hazardous air pollutant emissions are at or below the value in this table based on a 12-month rolling average. The initial month in the 12-month rolling average shall be April 2006;

³ – For compliance purposes, calculate the emission factor using only the appropriate centrifugal casting equation in Table 8-5, or a site specific emission factor for after the mold is closed as discussed in permit condition 8.6.

⁴ – Calculate the emission factor using the appropriate open molding covered cure emission factor in Table 8-5, or a site specific emission factor as discussed in permit condition 8.6.

8.3 HAP limit for other operations. In accordance with 40 CFR §§ 63.5800, 63.5805(b), and 63.5835(a), the owner or operator shall not release into the ambient air hazardous air pollutants that exceed the limits in Table 8-3 and must meet the work practice standards in Table 8.4, regardless of the quantity of hazardous air pollutants emitted, on or after April 21, 2006, for all operations not listed in permit condition 8.2.

Table 8-3 – Limits for Operations other than Centrifugal Casting Operations

Description	Type of Product	and use...	Organic Hazardous Air Pollutant Emissions Limit ¹
Open molding	Corrosion resistant and/or high strength product	Mechanical resin application	113 pounds per ton
		Manual resin application	123 pounds per ton
	Not applicable	Mechanical resin application	88 pounds per ton
		Manual resin application	87 pounds per ton
Open molding tooling	Not applicable	Mechanical resin application	254 pounds per ton
		Manual resin application	157 pounds per ton
Open molding	Low-flame spread and/or low-smoke	Mechanical resin application	497 pounds per ton

Description	Type of Product	and use...	Organic Hazardous Air Pollutant Emissions Limit¹
		Manual resin application	238 pounds per ton
Open molding	Gel coat ²	Tooling gel coating	440 pounds per ton
		White and/or off white pigmented gel coating	267 pounds per ton
		All other pigmented gel coating	377 pounds per ton
Open molding	Gel coat ²	Corrosion resistant and/or high strength gel coat	605 pounds per ton
		Clear production gel coat	522 pounds per ton

¹ – Compliance with the organic hazardous air pollutant emissions limits is demonstrated if the organic hazardous air pollutant emissions are at or below the value in this table based on a 12-month rolling average. The initial month in the 12-month rolling average shall be April 2006; and

² – If gel coat is only applied with manual application, for compliance purposes treat the gel coat as if it were applied using atomized spray guns to determine both emission limits and emission factors found in Table 8-6. If multiple application methods and any portion of a specific gel coat is applied using non-atomized spray, the non-atomized spray gel coat equation in Table 8-6 may be used to calculate an emission factor for the manually applied portion of that gel coat. Otherwise, the atomized spray gel coat application equation in Table 8-6 must be used to calculate emission factors.

Table 8-4 – Work Practice Standards

For...	The Owner or Operator Must...
cleaning operations	not use cleaning solvents that contain hazardous air pollutants, except that styrene may be used as a cleaner in closed systems, and organic hazardous air pollutant containing cleaners may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resins.
hazardous air pollutant containing materials storage operation	keep containers that store hazardous air pollutant containing materials closed or covered except during the addition or removal of materials. Bulk hazardous air pollutant containing materials storage tanks may be vented as necessary for safety.
all mixing operations ¹	use mixer covers with no visible gaps present in the mixer covers, except that gaps of up to one inch are permissible around mixer shafts and any required instrumentation; close any mixer vents when actual mixing is occurring, except that

For...	The Owner or Operator Must...
	venting is allowed during addition of materials, or as necessary prior to adding materials or opening the cover for safety; and keep the mixer covers closed while actual mixing is occurring except when adding materials or changing covers to the mixing vessels.

¹ – Containers of five gallons or less may be open when active mixing is taking place or during periods when the containers are in process (i.e., the containers are actively being used to apply resin).

8.4 HAP emissions meet or exceed 100 tons per year. In accordance with 40 CFR § 63.5805(e) and (f), if the owner or operator is subject to the requirements for centrifugal casting operations in permit condition 8.2(2) on the initial compliance date of April 21, 2006, and subsequently meets or exceeds the 100 tons per year threshold in any calendar year, the owner or operator must notify the Secretary in the semiannual compliance report required in permit condition 6.5. The owner or operator may at the same time request a one-time exemption from the requirements of permit condition 8.2(1) in the compliance report if the owner or operator can demonstrate all of the following:

1. The exceedance of the threshold was due to circumstances that will not be repeated;
2. The average annual organic hazardous air pollutant emissions from the potentially affected operations for the last three years were below 100 tons per year; and
3. Projected organic hazardous air pollutant emissions for the next calendar year are below 100 tons per year, based on projected resin and gel coat use and the hazardous air pollutant emission factors calculated according to the procedures in permit condition 8.5.

If the owner or operator applies for this exemption and subsequently exceeds the hazardous air pollutant emission thresholds specified in permit condition 8.2(2) over the next 12-month period, the owner or operator must notify the Secretary in the semiannual report required in permit condition 6.5, the exemption is removed, and the owner or operator must comply with permit condition 8.2(1) within three years from the time the owner's or operator's organic hazardous air pollutant emissions first exceeded the threshold.

8.5 Calculating plant wide organic HAP emissions. In accordance with 40 CFR § 63.5799, the owner or operator shall calculate the organic hazardous air pollutant emissions in tons per year for the purpose of determining which hazardous air pollutant emission limit in permit condition 8.2 apply. The owner or operator shall calculate a weighted average organic hazardous air pollutant emission factor on a pounds per ton of resin and gel coat basis. Base the weighted average on the prior 12 months of operation. Multiply the weighted average organic hazardous air pollutant emissions factor by resin and gel coat use over the same period. The owner or operator may calculate this organic hazardous air pollutant emissions factor based on the equations in Table 8.5 or use any organic hazardous air pollutant emissions factor approved by the Secretary. Do not include any organic hazardous air pollutant emissions from centrifugal

casting operations where resin or gel coat is applied to an open centrifugal mold using open molding application techniques.

The owner or operator must calculate the plant wide organic hazardous air pollutant emissions based on the resin and gel coat use in the 12 months prior to April 2006, and submit this information with the initial compliance report required in permit condition 6.4. The owner or operator must calculate the plant wide organic hazardous air pollutant emissions again over the 12-month period ending June 30, 2006. Subsequent calculations should cover the period in the semiannual compliance report required in permit condition 6.5.

Table 8-5 – Equations for Calculating Organic Hazardous Air Pollutant (HAP) Emission Factors ¹

Description	And use...	with...	Use appropriate organic HAP emission factor “EF” equation	
			for materials with less than 33% organic HAP (19% organic HAP for non-atomized gel coat) ^{2, 3, and 4}	for materials with 33% or more organic HAP (19% for non-atomized gel coat) ^{2, 3, and 4}
Open molding operations	Manual resin application	Non-vapor suppressed resins	$0.126 \times \% \text{HAP} \times 2000$	$((0.286 \times \% \text{HAP}) - 0.0529) \times 2000$
		Vapor suppressed resins	$0.126 \times \% \text{HAP} \times 2000 \times (1 - (0.5 \times \text{VSE factor}))$	$((0.286 \times \% \text{HAP} \times 0.0529) \times 2000 \times (1 - (0.5 \times \text{VSE factor})))$
		Vacuum bagging and closed mold curing with rollout	$0.126 \times \% \text{HAP} \times 2000 \times 0.8$	$((0.286 \times \% \text{HAP}) - 0.0529) \times 2000 \times 0.8$
		Vacuum bagging and closed mold curing without rollout	$0.126 \times \% \text{HAP} \times 2000 \times 0.5$	$((0.286 \times \% \text{HAP}) - 0.0529) \times 2000 \times 0.5$
	Atomized mechanical resin application	Non-vapor suppressed resins	$0.169 \times \% \text{HAP} \times 2000$	$((0.714 \times \% \text{HAP}) - 0.18) \times 2000$
		Vapor suppressed resins	$0.169 \times \% \text{HAP} \times 2000 \times (1 - (0.45 \times \text{VSE factor}))$	$((0.714 \times \% \text{HAP} \times 0.18) \times 2000 \times (1 - (0.45 \times \text{VSE factor})))$
		Vacuum bagging and closed mold curing with rollout	$0.169 \times \% \text{HAP} \times 2000 \times 0.85$	$((0.714 \times \% \text{HAP}) - 0.18) \times 2000 \times 0.85$
		Vacuum bagging and closed mold curing without rollout	$0.169 \times \% \text{HAP} \times 2000 \times 0.55$	$((0.714 \times \% \text{HAP}) - 0.18) \times 2000 \times 0.55$
Open molding operations	Non-atomized mechanical resin	Non-vapor suppressed resins	$0.107 \times \% \text{HAP} \times 2000$	$((0.157 \times \% \text{HAP}) - 0.0165) \times 2000$

Description	And use...	with...	Use appropriate organic HAP emission factor “EF” equation	
			for materials with less than 33% organic HAP (19% organic HAP for non-atomized gel coat) ^{2, 3, and 4}	for materials with 33% or more organic HAP (19% for non-atomized gel coat) ^{2, 3, and 4}
	application			
		Vapor suppressed resins	$0.107 \times \%HAP \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$	$((0.157 \times \%HAP \times 0.0165) \times 2000 \times (1 - (0.45 \times VSE \text{ factor})))$
		Closed mold curing with rollout	$0.107 \times \%HAP \times 2000 \times 0.85$	$((0.157 \times \%HAP) - 0.0165) \times 2000 \times 0.85$
		Vacuum bagging and closed mold curing without rollout	$0.107 \times \%HAP \times 2000 \times 0.55$	$((0.157 \times \%HAP) - 0.0165) \times 2000 \times 0.55$
	Atomized mechanical resin application with robotic or automated spray control ⁵	Non-vapor suppressed resins	$0.169 \times \%HAP \times 2000 \times 0.77$	$0.77 \times ((0.714 \times \%HAP) - 0.18) \times 2000$
	Atomized spray gel coat application	Non-vapor suppressed gel coat	$0.445 \times \%HAP \times 2000$	$((1.03646 \times \%HAP) - 0.195) \times 2000$
	Non-atomized spray gel coat application	Non-vapor suppressed gel coat	$0.185 \times \%HAP \times 2000$	$((0.4506 \times \%HAP) - 0.0505) \times 2000$
Open molding operations	Atomized spray gel coat	Non-vapor suppressed gel coat	$0.445 \times \%HAP \times 2000 \times 0.73$	$((1.03646 \times \%HAP) - 0.195) \times 2000 \times 0.73$

Description	And use...	with...	Use appropriate organic HAP emission factor “EF” equation	
			for materials with less than 33% organic HAP (19% organic HAP for non-atomized gel coat) ^{2, 3, and 4}	for materials with 33% or more organic HAP (19% for non-atomized gel coat) ^{2, 3, and 4}
	application using robotic or automated spray			
Centrifugal casting operations ^{6 and 7}	Heated air blown through molds	Non-vapor suppressed gel coat	$0.558 \times \% \text{HAP} \times 2000$	$0.558 \times \% \text{HAP} \times 2000$
	Vented molds, but air vented through the molds is not heated	Non-vapor suppressed gel coat	$0.026 \times \% \text{HAP} \times 2000$	$0.026 \times \% \text{HAP} \times 2000$

¹ – The equations are intended for use in calculating emission factors to demonstrate compliance with the emission limits in permit condition 8.2 and 8.3. These equations may not be the most appropriate method to calculate emission estimates for other purposes. However, this does not preclude the owner or operator from using the equations in this table to calculate emission factors for purposes other than compliance if these equations are the most accurate available;

² – The organic hazardous air pollutant emissions factors have units of pounds of organic hazardous air pollutant per ton of resin or gel coat applied;

³ – Percent hazardous air pollutant means total weight percent of organic hazardous air pollutant (styrene, methyl methacrylate, and any other organic hazardous air pollutant) in the resin or gel coat prior to the addition of fillers, catalyst, and promoters. Input the percent hazardous air pollutant as a decimal, i.e., 33 percent hazardous air pollutant should be input as 0.33, not 33;

⁴ – The VSE factor means the percent reduction in organic hazardous air pollutant emissions expressed as a decimal measured by the VSE test method of 40 CFR, Part 63, Appendix A;

⁵ – This equation is based on an organic hazardous air pollutant emission factor equation developed for mechanical atomized controlled spray. It may only be used for automated or robotic spray systems with atomized spray. All spray operations using hand held spray guns must use the

appropriate mechanical atomized or mechanical nonatomized organic hazardous air pollutant emissions factor equation. Automated or robotic spray systems using nonatomized spray should use the appropriate nonatomized mechanical resin application equation;

⁶ – These equations are for centrifugal casting operations where the mold is vented during spinning. Centrifugal casting operations where the mold is completely sealed after resin injection are considered to be closed molding operations; and

⁷ – If a centrifugal casting operation uses mechanical or manual resin application techniques to apply resin to an open centrifugal casting mold, use the appropriate open molding equation with covered cure and no rollout to determine an emission factor for operations prior to the closing of the centrifugal casting mold. If the closed centrifugal casting mold is vented during spinning, use the appropriate centrifugal casting equation to calculate an emission factor for the portion of the process where spinning and cure occur. If a centrifugal casting operation uses mechanical or manual resin application techniques to apply resin to an open centrifugal casting mold, and the mold is then closed and is not vented, treat the entire operation as open molding with covered cure and no rollout to determine emission factors.

8.6 Calculating organic HAP emission factors. In accordance with 40 CFR §§ 63.5796, the owner or operator may use one of the following methods in calculating organic hazardous air pollutant emissions factors to determine compliance with the organic hazardous air pollutant emission limits in this chapter:

1. The equations in Table 8-5; or
2. Site specific organic hazardous air pollutant emissions factors provided the site specific organic hazardous air pollutant emissions factors are incorporated in this permit and are based on actual organic hazardous air pollutant emissions test data.

8.7 Determining organic HAP content of resins and gel coats. In accordance with 40 CFR § 63.5797, the owner or operator shall determine the organic hazardous air pollutant content of resins and gel coats from the information provided by the material manufacturer such as manufacturer's formulation data and material safety data sheets (MSDS), using the applicable procedure specified below, as applicable:

1. Include in the organic hazardous air pollutant total each organic hazardous air pollutant that is present at 0.1 percent by mass or more for Occupational Safety and Health Administration defined carcinogens, as specified in 29 CFR § 1910.1200(d)(4) and at 1.0 percent by mass or more for other organic hazardous air pollutant compounds;
2. If the organic hazardous air pollutant content is provided by the material supplier or manufacturer as a range, the owner or operator must use the upper limit of the range for determining compliance. If a separate measurement of the total organic hazardous air pollutant content, such as an analysis of the material using Method 311 in 40 CFR , Part 63, Appendix A, exceeds the upper limit of the range of the total organic hazardous air pollutant content provided by the material supplier or manufacturer, then the owner or operator must use the measured organic hazardous air pollutant content to determine compliance; or
3. If the organic hazardous air pollutant content is provided as a single value, the owner or operator may use that value to determine compliance. If a separate measurement of the total organic hazardous air pollutant content is made and is less than two percentage points higher than the value for total organic hazardous air pollutant content provided by the material supplier or manufacturer, then the owner or operator still may use the provided value to demonstrate compliance. If the measured total organic hazardous air pollutant content exceeds the provided value by two percentage points or more, then the owner or operator must use the measured organic hazardous air pollutant content to determine compliance.

8.8 Calculating organic HAP emission factors not represented in Table 8-5. In accordance with 40 CFR § 63.5798, if the owner or operator uses a resin or gel coat application technology whose emission characteristics are not represented by the equations in Table 8-5, the owner or operator may submit a petition to the Secretary and EPA to establish an organic hazardous air pollutant emission factor to determine compliance with the emission limits in permit conditions 8.2 and 8.3, and to calculate facility organic hazardous air pollutant emissions. The petition must contain a description of the resin or gel coat application technology and

supporting organic hazardous air pollutant emissions test data obtained using EPA test methods or their equivalent. The emission test data should be obtained using a range of resin or gel coat hazardous air pollutant contents to demonstrate the effectiveness of the technology under the different conditions, and to demonstrate that the technology will be effective at different sites.

8.9 Options for meeting limits for open molding and centrifugal casting operations. In accordance with 40 CFR §§ 63.5810 and 63.5835(a), the owner or operator must use one of the following methods in paragraph (1) through (4) of this permit condition to meet the limits for open molding and centrifugal casting operations in permit conditions 8.2 and 8.3. The owner or operator may use any control method that reduces organic hazardous air pollutant emissions, including reducing resin and gel coat organic hazardous air pollutant content, changing to nonatomized mechanical application, using covered curing techniques, and routing part or all of the emissions to an add-on control device?. The owner or operator may use different compliance options for the different operations listed in permit conditions 8.2 and 8.3. The necessary calculations must be completed within 30 days after the end of each month. The owner or operator may switch between the compliance options in paragraphs (1) through (4) of this permit condition. When changing to an option based on a 12-month rolling average, the owner or operator must base the average on the previous 12 months of data calculated using the compliance option the owner or operator is changing to, unless the owner or operator was previously using an option that did not require the owner or operator to maintain records of resin and gel coat use. In this case, the owner or operator must immediately begin collecting resin and gel coat use data and demonstrate compliance 12 months after changing options. The following are the four methods the owner or operator may use to meet the limits for open molding and centrifugal casting operations:

1. Demonstrate that an individual resin or gel coat, as applied, meets the applicable emission limit by calculating an actual organic hazardous air pollutant emissions factor for each different process stream within each operation type. A process stream is defined as each individual combination of resin or gel coat, application technique, and control technique. Process streams within operations types are considered different from each other if any of the following characteristics vary:
 - a. the neat resin plus or neat gel coat plus organic hazardous air pollutant content;
 - b. the gel coat type;
 - c. the application technique; or
 - d. the control technique.

The owner or operator must calculate organic hazardous air pollutant emissions factors for each different process stream by using the appropriate equations in Table 8-5 for open molding and for centrifugal casting, or site-specific organic hazardous air pollutant emissions factors discussed in permit condition 8.6. The emission factor calculation should include any and all emission reduction techniques used including any add-on controls. If the calculated emission factor is less than or equal to the appropriate emission limit, the owner or operator has demonstrated that this process stream complies with the emission limit in permit

conditions 8.2 and 8.3. It is not necessary that all process streams, considered individually, demonstrate compliance to use this option for some process streams. However, for any individual resin or gel coat used, if any of the process streams that include that resin or gel coat are to be used in any averaging calculations described in paragraphs (2) through (4) of this permit condition, then all process streams using that individual resin or gel coat must be included in the averaging calculations;

2. Demonstrate that on average the owner or operator meets the individual organic hazardous air pollutant emissions limits for each unique combination of operation type and resin application method or gel coat type shown in permit conditions 8.2 and 8.3 that applies. Group the process streams described in paragraph (1) of this permit condition by operation type and resin application method or gel coat type listed in permit conditions 8.2 and 8.3 and then calculate a weighted average emission factor based on the amounts of each individual resin or gel coat used for the last 12 months. To do this, sum the product of each individual organic hazardous air pollutant emissions factor calculated in paragraph (1) of this permit condition and the amount of neat resin plus and neat gel coat plus usage that corresponds to the individual factors and divide the numerator by the total amount of neat resin plus and neat gel coat plus used in that operation type as shown in Equation 8-1.

Equation 8-1 – Average Organic HAP Emission Factor

$$\text{Average organic HAP emission factor} = \frac{\sum_{i=1}^n (\text{Actual process stream } EF_i \times \text{Material}_i)}{\sum_{i=1}^n \text{Material}_i}$$

Where:

- Actual Process Stream EF_i = actual organic hazardous air pollutant emissions factor for process stream i , in pounds per ton;
- Material_i = neat resin plus or neat gel coat plus used during the last 12 calendar months for process stream i , in tons; and
- n = number of process streams where the owner or operator calculated an organic hazardous air pollutant emissions factor.

The owner or operator may, but is not required to, include process streams where compliance has been demonstrated as described in paragraph (1) of this permit condition and the owner or operator is not required to and should not include process streams for which compliance has been demonstrated using the procedures in paragraph (4) of this permit condition. If the emissions factors calculated in this paragraph are equal to or less than the corresponding limits in permit conditions 8.2 and 8.3, the owner or operator has demonstrated compliance.

3. Demonstrate compliance each month with each weighted average of the organic hazardous air pollutant emissions limits in permit conditions 8.2 and 8.3 that are applicable to the

operations. The owner or operator must demonstrate compliance with the weighted average organic hazardous air pollutant emission limit for all open molding operations, and then separately demonstrate compliance with the weighted average organic hazardous air pollutant emission limit for all centrifugal casting operations. Open molding operations and centrifugal casting operations may not be averaged with each other.

Each month, the owner or operator shall calculate the weighted average organic hazardous air pollutant emissions limit for all open molding and the weighted average organic hazardous air pollutant emissions limit for all centrifugal casting operations for the last 12-month period to determine the organic hazardous air pollutant emissions limit the owner or operator must meet. To do this, multiply the individual organic hazardous emissions limits from permit condition 8.2 or 8.3 for each open molding (centrifugal casting) operation type by the amount of net resin plus or neat gel coat plus used in the last 12 months for each open molding (centrifugal casting) operation type, sum these result, and then divide this sum by the total amount of net resin plus and neat gel coat plus used in open molding (centrifugal casting) over the last 12 months using Equation 8-2.

Equation 8-2 – Weighted Average Emission Limit

$$\text{Weighted average emission limit} = \frac{\sum_{i=1}^n (EL_i \times \text{Material}_i)}{\sum_{i=1}^n \text{Material}_i}$$

Where:

- EL_i = organic hazardous air pollutant emissions limit for operation type i, in pounds per ton from permit condition 8.2 or 8.3;
- Material_i = neat resin plus or neat gel coat plus used during the last 12-month period for operation type i, in tons; and
- n = number of operations.

Each month the owner or operator shall calculate the weighted average organic hazardous air pollutant emissions factor for open molding and centrifugal casting. To do this, multiply the actual open molding (centrifugal casting) operation organic hazardous air pollutant emissions factors calculated using Equation 8-1 and the amount of neat resin plus and neat gel coat plus used in each open molding (centrifugal casting) operation type, sum the results, and divide tis sum by the total amount of neat resin plus and neat gel coat plus used in open molding (centrifugal casting) operations using Equation 8-3.

Equation 8-3 – Actual Weighted Average Organic HAP Emission Factor

$$\text{Actual weighted average organic HAP emission factor} = \frac{\sum_{i=1}^n (\text{Actual Operations } EF_i \times \text{Material}_i)}{\sum_{i=1}^n \text{Material}_i}$$

Where:

- Actual Operations EF_i = Actual organic hazardous air pollutant emissions factor for operation type i , in pounds per ton;
- Material_i = neat resin plus or neat gel coat plus used during the last 12 calendar months for operation type i , in tons; and
- n = number of operations.

Compare the values calculated using Equations 8-2 and 8-3. If each 12-month rolling average organic hazardous air pollutant emissions factor is less than or equal to the corresponding 12-month rolling average organic hazardous air pollutant emissions limit, then the owner or operator has demonstrated compliance; or

4. Meet the organic hazardous air pollutant emissions limit for one application method and use the same resin(s) for all application methods of that resin type using one of the following:
 - a. For any combination of manual resin application, mechanical resin application, filament application, or centrifugal casting, the owner or operator may elect to meet the organic hazardous air pollutant emissions limit for any one of these application methods and use the same resin in all of the resin application methods listed in this paragraph. Table 8-6 presents the possible combinations based on a facility selecting the application process that results in the highest allowable organic hazardous air pollutant content resin. If the resin organic hazardous air pollutant content is below the applicable value shown in Table 8-6, the resin is in compliance;
 - b. The owner or operator may also use a weighted average organic hazardous air pollutant content for each application method described in paragraph (4)(a) of this permit condition. Calculate the weighted average organic hazardous air pollutant content monthly. Use Equation 8-1 except substitute organic hazardous air pollutant content for organic hazardous air pollutant emissions factor. The owner or operator is in compliance if the weighted average organic hazardous air pollutant content based on the last 12 months of resin use is less than or equal to the applicable organic hazardous air pollutant contents in Table 8-6;
 - c. The owner or operator may simultaneously use the averaging provisions in paragraph (2) or (3) of this permit condition to demonstrate compliance for any operations and/or resins the owner or operator does not include in the compliance demonstrations in paragraphs (4)(a) and (b) of this permit condition. However, any resins for which the owner or operator claims compliance under the option in paragraphs (4)(a) and (b) of this permit

condition may not be included in any of the averaging calculations described in paragraph (2) or (3) of this permit condition.

The owner or operator does not have to keep records of resin use for any of the individual resins where compliance is demonstrated under the option in paragraph (4)(a) of this permit condition unless the owner or operator elects to include that resin in the averaging calculations described in paragraph (4)(b) of this permit condition.

This option is limited to resins of the same type. The resin types for which this option may be used are noncorrosion-resistant, corrosion-resistant and/or high strength, and tooling.

Table 8-6 - Options Allowing Use of the Same Resin Across Different Operations That Use the Same Resin Type

If the following resin type and application methods are used...	For...	The highest resin weight is...percent organic hazardous air pollutant content; or ...weighted average weight percent organic hazardous air pollutant content
Corrosion resistant and/or high strength resin, centrifugal casting ^{1 and 2}	Corrosion resistant and/or high strength mechanical	48.0 ³
	Corrosion resistant and/or high strength manual	48.0
Corrosion resistant and/or high strength resin, nonatomized mechanical	Corrosion resistant and/or high strength manual	46.4
Non-corrosion resistant and/or high strength resins, nonatomized mechanical	Non-corrosion resistant and/or high strength manual	38.5
	Non-corrosion resistant and/or high strength centrifugal casting ^{1 and 2}	38.5
Non-corrosion resistant and/or high strength resins, centrifugal casting ^{1 and 2}	Non-corrosion resistant and/or high strength manual	37.5
Tooling resins, nonatomized mechanical	Tooling manual	91.4
Tooling resins, manual	Tooling atomized mechanical	45.9

¹ – If the centrifugal casting operation blows heated air through the molds, then 95 percent capture and control must be used if the owner or operator wishes to use this compliance option;

² – If the centrifugal casting molds are not vented, the owner or operator may treat the centrifugal casting operations as if it were vented if the owner or operator wishes to use this compliance option; and

³ – Nonatomized mechanical application must be use.

8.10 Demonstrating initial compliance with organic HAP emission limits. In accordance with 40 CFR § 63.5860(a), for open molding and centrifugal casting operations that must meet an organic hazardous air pollutant emission limit in permit condition 8.2 and 8.3, the owner or operator must demonstrate initial compliance by the following:

1. The owner or operator must meet the appropriate organic hazardous air pollutant emission limits for these operations as calculated using the procedures in permit condition 8.9 on a 12-month rolling average one year after April 2006; and/or
2. The owner or operator must demonstrate that any individual resins or gel coats not included in paragraph (1) of this permit condition, as applied, meets their applicable emission limits; or
3. The owner or operator demonstrates using the appropriate values in Table 8-6 that the weighted average of all resins and gel coats for each resin type and application method meet the appropriate organic hazardous air pollutant contents.

8.11 Demonstrating initial compliance with work practice standards. In accordance with 40 CFR §§ 63.5860(a), the owner or operator must demonstrate initial compliance with the work practice standards in Table 8-4 by submitting a certified statement with the notification of compliance status required in permit condition 6.4 that certifies the following:

1. The owner or operator shall certify that only one charge is uncovered, unwrapped, or exposed per mold cycle per compression/injection molding machine, or prior to the loader, hoppers are closed except when adding materials, and materials are recovered after slitting for closed or molding operations using compression/injection molding;
2. The owner or operator shall certify that all cleaning materials, except styrene contained in closed systems, or materials used to clean cured resin from application equipment contain no hazardous air pollutants for cleaning operations; and
3. The owner or operator shall certify that all hazardous air pollutant containing storage containers are kept closed or covered except when adding or removing materials, and that any bulk storage tanks are vented only as necessary for safety for material hazardous air pollutant containing materials storage operations.

8.12 Demonstrating continuous compliance. In accordance with 40 CFR § 63.5900(a) and (b), the owner or operator must demonstrate continuous compliance with permit conditions 8.2, 8.3, and 8.9, if averaging organic hazardous air pollutant content, by the following methods:

1. Compliance with organic hazardous air pollutant limits is demonstrated by maintaining an

organic hazardous air pollutant emissions factor value less than or equal to the appropriate organic hazardous air pollutant emissions limit in permit conditions 8.2 and 8.3 on a 12-month rolling average and/or by including a statement in each compliance report required by permit condition 6.5 that individual resins and gel coats, as applied, meet the appropriate organic hazardous air pollutant limits;

2. Compliance with organic hazardous air pollutant content limits in permit condition 8.9 is demonstrated by maintaining an average organic hazardous air pollutant content value less than or equal to the appropriate organic hazardous air pollutant content listed in Table 8-6 on a 12-month rolling average, and/or by including in each compliance report required in permit condition 6.5 a statement that resins and gel coats individually meet the appropriate organic hazardous air pollutant content limit in Table 8-6; and
3. Compliance with the work practice standards in Table 8-4 is demonstrated by performing the work practice required for each applicable operation.

9.0 PERFORMANCE TESTS

9.1 Performance test may be required. In accordance with ARSD 74:36:11:02, the Secretary may request a performance test. A performance test shall be conducted while operating the unit at or greater than 90 percent of its maximum design capacity, unless otherwise specified by the Secretary. A performance test that is conducted while operating less than 90 percent of its maximum design capacity will result in the operation being limited to the percent achieved during the performance test. The Secretary has the discretion to extend the deadline for completion of a performance test required by the Secretary if circumstances reasonably warrant but will not extend the deadline past a federally required performance test deadline.

9.2 Test methods and procedures. The owner or operator shall conduct the performance test in accordance with 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, and 40 CFR Part 51, Appendix M. The Secretary may approve an alternative method if a performance test specified in 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, and 40 CFR Part 51, Appendix M is not federally applicable or federally required.

9.3 Representative performance test. In accordance with ARSD 74:36:07:01, as referenced to 40 CFR § 60.8(c), performance tests shall be conducted under such conditions as the Secretary shall specify to the owner or operator based on the representative performance of the unit being tested. The owner or operator shall make available to the Secretary such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in this permit.

9.4 Submittal of test plan. In accordance with ARSD 74:36:11:01, the owner or operator shall submit the proposed testing procedures to the Secretary at least 30 days prior to any performance test. The Secretary will notify the owner or operator if the proposed test procedures are approved or denied. If the proposed test procedures are denied, the Secretary will provide written notification that outlines what needs to be completed for approval.

9.5 Notification of test. In accordance with ARSD 74:36:11:03, the owner or operator shall notify the Secretary at least 10 days prior to the start of a performance test to arrange for an agreeable test date when the Secretary may observe the test. The Secretary may extend the deadline for the performance test in order to accommodate schedules in arranging an agreeable test date.

9.6 Performance test report. In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall submit a performance test report to the Secretary within 60 days after completing the performance test or by a date designated by the Secretary. The performance test report shall contain the following information:

1. A brief description of the process and the air pollution control system being tested;
2. Sampling location description(s);
3. A description of sampling and analytical procedures and any modifications to standard procedures;
4. Test results;
5. Quality assurance procedures and results;
6. Records of operating conditions during the test, preparation of standards, and calibration procedures;
7. Raw data sheets for field sampling and field and laboratory analyses;
8. Documentation of calculations;
9. All data recorded and used to establish parameters for compliance monitoring; and
10. Any other information required by the test method.