



**United States Environmental Protection Agency
Region 10
Air & Radiation Division
1200 Sixth Avenue, Suite 155, 15-H13
Seattle, Washington 98101**

**TITLE V PERMIT TO OPERATE
Renewal Permit No. 2, Modification No. 1**

Permit Number: **R10T5030201**

Expiration Date: **February 16, 2028**

Issue Date: **March 20, 2023**

Effective Date: **March 20, 2023**

In accordance with the provisions of title V of the Clean Air Act, (42 U.S.C. 7401 et seq.), 40 CFR part 71, and other applicable rules and regulations,

McClarín Plastics, LLC D/B/A McCLARIN Composites

is authorized to operate air emission units and to conduct other air pollutant emitting activities in accordance with the permit conditions listed in this permit.

This source is authorized to operate in the following location:

**Yakama Reservation
180 East Jones Road
Wapato Industrial Park
Wapato, WA 98951**

Terms and conditions not otherwise defined in this permit have the meaning assigned to them in the referenced regulations. All terms and conditions of the permit are enforceable by the U.S. Environmental Protection Agency and citizens under the Clean Air Act. Once effective, this permit supersedes any other permit issued to the source or operations within the source pursuant to title V of the Clean Air Act and 40 CFR part 71.

March 20, 2023

Karl Pepple, Manager
Air Permits and Toxics Branch
Air and Radiation Division
U.S. EPA, Region 10

Date

Table of Contents

Abbreviations and Acronyms	3
1. Part 71 Permit Issuance History	4
2. Permit Authority.....	5
3. Source Information and Emission Units.....	5
4. General Requirements	6
5. Facility-Wide Requirements	17
6. Emission Unit WWWW – Fiberglass Operations	26
7. Emission Unit PPPP – Fiberglass Coating Operations	35
8. Emission Unit MMMM – Metal Coating Operations	41
9. Emission Unit BLDG – Building	41
10. Emission Unit BOOTH – Spray Booth	41
11. Emission Unit COMB – Combustion Devices	43
Appendix A – Table 3 from 40 CFR Part 63, Subpart WWWW	
Appendix B – Table 4 from 40 CFR Part 63, Subpart WWWW	
Appendix C – Text from 40 CFR 63.4541(a) & (b)	
Appendix D – Text from 40 CFR 63.4551(a)-(g)	

Abbreviations and Acronyms

BMC	bulk molding compound
Btu	British thermal units
CAA	Clean Air Act [42 U.S.C. section 7401 et seq.]
CBI	Confidential Business Information
CDX	Central Data Exchange
CEDRI	Compliance and Emission Data Reporting Interface
CFR	Code of Federal Regulations
CO	Carbon monoxide
EPA	United States Environmental Protection Agency (also U.S. EPA)
EU	Emission Unit
FARR	Federal Air Rules for Reservations
HAP	Hazardous air pollutant
hr	Hour
kg	Kilogram
lb	Pound
MMBtu	One million Btu
MSDS	Material safety data sheet (see SDS acronym)
MVAC	Motor vehicle air conditioner
NO _x	Nitrogen oxides
OSHA	Occupational Safety and Health Administration
PAL	Plantwide Applicability Limitation
PM	Particulate matter
PM _{2.5}	Particulate matter less than or equal to 2.5 micrometers in aerodynamic diameter
PM ₁₀	Particulate matter less than or equal to 10 micrometers in aerodynamic diameter
SDS	Safety Data Sheet (formerly called a Material Safety Data Sheet or MSDS)
SMC	Sheet molding compound
SG	Specific gravity
SO ₂	Sulfur dioxide
SO _x	Oxides of sulfur
tpy	Tons per year
TSDf	Treatment, storage and disposal facility
VOC	Volatile organic compound

Part 71 Permit Issuance History

Date of Issuance	Permit Number	Description of Permit Action
November 1, 2001		Amtech applied for NESHAP preconstruction authorization
May 13, 2002		Amtech commenced operations
December 31, 2002	R10T5030000	EPA received Amtech's initial title V application
June 3, 2005	R10T5030000	EPA sent a letter requiring title V application update for Federal Air Regulations for Reservations (FARR)
August 22, 2005	R10T5030000	EPA received Amtech's updated title V application
October 3, 2005	R10NT500100	EPA received application for a non-title V operating permit.
April 12, 2006	R10NT500100	EPA issued a non-title V operating permit establishing a VOC emission limit
November 30, 2009		Amtech submitted an application for a minor modification to remove condition 5.10, which required submittal of an application for a modified permit before engaging in certain fiberglass manufacturing activities, from its title V permit and simultaneously submitted notice of an off-permit change to conduct filament application open molding (this change is discussed in more detail in the Statement of Basis for McClarin's 2016 title V permit renewal)
August 29, 2011		Amtech again submitted a notice of an off-permit change to expand open molding filament application and associated open molding operations into an adjacent building
December 22, 2011	R10T5030000	EPA receives Amtech's title V permit renewal application
July 10, 2013		EPA inspected Amtech Wapato
March 1, 2016	R10T5030000	EPA receives an application for an administrative amendment to change the source name to McClarin Plastics, LLC D/B/A McCLARIN Composites
September 28, 2016	R10T5030001 & R10NT500100	EPA issued a renewed title V and a modified non-title V operating permit
April 28, 2021	R10T5030001	EPA received McClarin's title V permit renewal application
February 16, 2023	R10T5030201	EPA issued a renewed title V permit
March 03, 2023	R10T5030201	EPA receives an application for an administrative amendment to change the source

		responsible official to Michael Gromocki, Chief Executive Officer, McCLARIN Composites
March 09, 2023	R10T5030201	EPA makes the administrative amendment to change the responsible official and issues a revised Title V permit

Permit Authority

The Administrator will administer and enforce an operating permits program in Indian country, as defined in 40 CFR 71.2, when an operating permits program which meets the requirements of 40 CFR part 70 has not been explicitly granted full or interim approval by the Administrator for Indian country.

Source Information and Emission Units

Parent Company: Blackford Capital, LLC
190 Monroe, Suite 600
Grand Rapids, MI 49503

Facility: McClarin Plastics, LLC D/B/A McCLARIN Composites
180 East Jones Road
Wapato Industrial Park
Wapato, WA 98951
Latitude: 46E 16' N Longitude: 120E 15' W

Responsible Official: Mr. Michael Gromacki
Chief Executive Officer
McCLARIN Composites
15 Industrial Drive
Hanover, PA 17331
Phone: 717-688-1173
Email: mgromacki@mcclarincomposites.com

Company Contact: Mr. Shawn Mathews
Interim General Manager
McClarin Plastics, LLC D/B/A McCLARIN Composites
180 East Jones Road
Wapato, WA 98951
Phone: 509-877-2228
E-mail: smathews@mcclarincomposites.com

Facility description: McClarin Plastics, LLC D/B/A McCLARIN Composites is a manufacturer of custom fiberglass products.

Table 1: Emission Units (EU) & Control Devices

EU ID #	Emission Unit Description	Control Device
WWWW	Fiberglass Operations: activities subject to 40 CFR part 63, subpart WWWW. This includes open molding (including spray application of resins and gel coats and filament winding), closed molding (compression/injection molding only), resin mixing, cleaning of equipment used in fiberglass operations, HAP-containing material storage (except in unit TNK), and repair operations on parts manufactured on site.	None
PPPP	Fiberglass Coating Operations: activities subject to 40 CFR part 63, subpart PPPP. This includes the application of coatings to plastic parts and the equipment used to store mix and convey coatings, thinners, additives, and waste materials.	None
MMMM	Metal Coating Operations: activities that <i>would</i> be subject to 40 CFR part 63, subpart MMMM, if a minimum volume threshold of organic HAP-containing coatings was applied to metal parts. This includes the application of coatings to miscellaneous metal parts and the equipment used to store mix and convey coatings, thinners, additives, and waste materials.	None
BLDG	Building: this emission unit is a catch-all that refers to all air pollutant-emitting activities that are located inside the building and emit through the building vents other than combustion emissions and activities that occur inside the spray booths.	Inside building
BOOTH	Spray Booth: this emission unit includes all air pollutant-emitting activities conducted inside either of the two spray booths. Combustion devices are not included in this emission unit.	Particulate filter
COMB	<p>Combustion Devices: combusting only natural gas, as listed below:</p> <ol style="list-style-type: none"> 1. Heater, for one paint booth, 1.5 MMBtu/hr; 2. Heater, second paint booth, 1.2 MMBtu/hr; 3. Make-up air unit, lamination area, 2.527 MMBtu/hr; 4. Make-up air unit, lamination area, 1.775 MMBtu/hr. 5. Make-up air unit, lamination area, 1.5552 MMBtu/hr; 6. Make-up air unit, gelcoat area, 1.5552 MMBtu/hr; 7. 5 space heaters, general plant, 230,000 Btu/hr each; 8. 3 space heaters, general plant, 300,000 Btu/hr each; 9. 2 space heaters, lunch room, 140,000 Btu/hr each; 10. 2 space heaters, offices, 100,000 Btu/hr each; 11. 12 space heaters in second building, 200,000 Btu/hr each; 12. Makeup air unit in second building, 1.3 MMBtu/hr; and 13. Quality Control Oven, 1.2 MMBtu/hr. 	None
TNK	Resin storage tanks	None
PT	Plant traffic	None

1 General Requirements

Definitions [40 CFR 71.2]

- 1.1 Terms not otherwise defined in this permit have the meaning assigned to them in the referenced regulations. The language of the cited regulation takes precedence over paraphrasing except the text of

terms specified pursuant to any of the following sections is directly enforceable: section 304(f)(4) of the Federal Clean Air Act (CAA), 40 CFR 71.6(a)(3)(i)(B) and (C), 71.6(a)(3)(ii), 71.6(b), and 71.6(c)(1) or any other term specifically identified as directly enforceable.

Enforceability [40 CFR 71.6(b)]

- 1.2 All terms and conditions in this permit, including any provisions designated to limit a source's potential to emit, are enforceable by the EPA and citizens in accordance with the CAA.

Compliance Statement [40 CFR 71.6(a)(6)]

- 1.3 The Permittee must comply with all conditions of this part 71 permit. Any noncompliance with this permit constitutes a violation of the CAA and is grounds for:
 - 1.3.1 Enforcement action;
 - 1.3.2 Permit termination, revocation and reissuance, or modification; or
 - 1.3.3 Denial of a permit renewal application.
- 1.4 Need to halt or reduce activity is not a defense. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Schedule of Compliance [40 CFR 71.5(c)(8)(iii); 71.6(c)(3)]

- 1.5 For applicable requirements with which the source is in compliance, the source will continue to comply with such requirements.
- 1.6 For applicable requirements that will become effective during the permit term, the source shall comply as required by the terms of the applicable requirement.

Permit Shield [40 CFR 71.6(f)]

- 1.7 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
 - 1.7.1 Such applicable requirements are included and are specifically identified in the permit; or
 - 1.7.2 The EPA, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary of the determination.
- 1.8 Nothing in the permit shield or in this permit shall alter or affect the following:
 - 1.8.1 The provisions of Section 303 of the CAA (emergency orders), including the authority of the Administrator under that section.
 - 1.8.2 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - 1.8.3 The applicable requirements of the acid rain program, consistent with section 408(a) of the Act; or
 - 1.8.4 The ability of the EPA to obtain information under Section 114 of the CAA.

Credible Evidence [Section 113(a) and 113(e)(1) of the CAA; 40 CFR 49.123(d); 51.212; 52.12; 52.33; 60.11(g); 61.12; 71.6(c)(1)]

- 1.9 For the purpose of submitting compliance certifications in accordance with Condition 1.12 or establishing whether or not a person has violated or is in violation of any requirement of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether

a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

(1) Submissions [40 CFR 71.5(d); 71.6; 71.9]

- 1.10 A responsible official of the Permittee shall certify as to the truth, accuracy, and completeness of any document required to be submitted by this permit. Such certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- 1.11 Except as otherwise specified in this permit, the Permittee shall submit all documents required to be submitted by this permit electronically via the EPA's Compliance and Emission Reporting Data Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) at <https://cdx.epa.gov/>. First-time users will need to register with CDX. If no specific reporting option is available in CEDRI, select "Other Reports." If the system is unavailable, contact the EPA Region 10's Enforcement and Compliance Assurance Division at (206) 553-1200.

Confidential Business Information (CBI) may not be submitted through CDX and must be submitted either by (1) hardcopy to the EPA at one of the two addresses below as follows or (2) other electronic means designated by the EPA or the Permittee. For applications to revise this permit, submit the materials to the EPA at the following address:

Tribal NSR Air Quality Permits
U.S. EPA – Region 10, 15-H13
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

For any other documents that contain CBI, submit the materials to the EPA at the following address:

Clean Air Act Compliance Manager
U.S. EPA – Region 10, 20-C04
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

A copy of each document submitted to the EPA that does not contain CBI shall be sent to the Tribal address below:

Air Quality Manager
Yakama Nation Environmental Management Program
Yakama Nation
P.O. Box 151
Toppenish, WA 98948

Compliance Certifications [40 CFR 71.6(c)(5)]

- 1.12 The Permittee shall submit annually to the EPA a certification of compliance with all permit terms and conditions, including emission limitations, standards or work practices, for the reporting period from January 1 to December 31, except the first reporting period shall begin on the effective date of this permit and end on December 31. The annual certification report shall be submitted to EPA and shall be postmarked no later than February 28th. The compliance certification shall be certified as to the truth, accuracy, and completeness by a responsible official. The certification shall include the following:
- 1.12.1 Identification of each permit term or condition that is the basis of the certification;
- 1.12.2 Identification of the method(s) or other means used for determining the compliance status of each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. If necessary, the Permittee also shall identify any other material

information that must be included in the certification to comply with Section 113(c)(2) of the CAA, which prohibits making a false certification or omitting material information; and

1.12.3 The source's compliance status with each term and condition of the permit, including whether monitoring data is continuous and whether the data or any other credible evidence shows the compliance is continuous. The certification shall identify each deviation and take it into account in the compliance certification.

Annual Fee Payment [40 CFR 71.6(a)(7); 71.9]

- 1.13 The Permittee shall pay an annual permit fee in accordance with the procedures outlined below in Condition 1.15.
- 1.14 The Permittee shall submit an annual report of its actual emissions for the preceding calendar year, a fee calculation work sheet (based on the report), and full payment of the annual fee each year. The Permittee shall submit the annual report and submit payment of the annual fee each year on or before December 1st.
- 1.15 The fee payment shall be in United States currency and shall be paid by money order, bank draft, certified check, corporate check, or electronic funds transfer payable to the order of the U.S. Environmental Protection Agency.
- 1.16 The Permittee shall send fee payment and a completed fee filing form (FORM FF) to:
Address for Regular Mail through U.S. Postal Service
U.S. EPA
OCFO/OC/ACAD/FCB
Attn: Collections Team
1300 Pennsylvania Ave NW
Mail Code 2733R
Washington, DC 20004
- 1.17 The Permittee shall send an updated fee calculation worksheet form and a photocopy of each fee payment check (or other confirmation of actual fee paid) submitted annually by the same deadline as required for fee payment. The Permittee may use the fee calculation worksheet that incorporates an annual emissions report, which is required at the same time as the fee calculation worksheet by Condition 1.14 and 40 CFR 71.9(h).
- 1.18 Basis for calculating annual fee:
 - 1.18.1 The annual emissions fee shall be calculated by multiplying the total tons of actual emissions of all regulated pollutants (for fee calculation) emitted from the source, including fugitive emissions by the presumptive emissions fee (in dollars/ton) in effect at the time of calculation.
 - 1.18.2 "Actual emissions" means the actual rate of emissions in tons per year of any "regulated pollutant (for fee calculation)" emitted from a part 71 source over the preceding calendar year. Actual emissions shall be calculated using each emissions unit's actual operating hours, production rates, in-place control equipment, and types of materials processed, stored, or combusted during the preceding calendar year.
 - 1.18.3 Actual emissions shall be computed using methods required by the permit for determining compliance, such as monitoring or source testing data.
 - 1.18.4 The term "regulated air pollutant (for fee calculation)" is defined in 40 CFR 71.2.
 - 1.18.5 The emission fee in effect at the time of calculation will be determined in accordance with 40 CFR 71.9(n)(1) and published in the Federal Register.
 - 1.18.6 The Permittee shall exclude the following emissions from the calculation of fees:

1.18.7 The amount of actual emissions of each regulated pollutant (for fee calculation) that the source emits in excess of 4,000 tons per year.

1.18.8 Actual emissions of any regulated pollutant (for fee calculation) already included in the fee calculation; and

1.18.9 The quantity of actual emissions (for fee calculation) of insignificant activities as defined in 40 CFR 71.5(c)(11)(i) or of insignificant emission levels from emissions units identified in the Permittee's application pursuant to 40 CFR 71.5(c)(11)(ii).

- 1.19 The Permittee must certify the fee calculation worksheet as to truth, accuracy, and completeness by a responsible official.
- 1.20 The Permittee shall retain fee calculation worksheets and other emissions-related data used to determine fee payment for 5 years following submittal of fee payment. Emission-related data include, for example, emissions-related forms provided by the EPA and used by the Permittee for fee calculation purposes, emissions-related spreadsheets, and emissions-related data, such as records of emissions monitoring data and related support information required to be kept in accordance with 40 CFR 71.6(a)(3)(ii).
- 1.21 Failure of the Permittee to pay fees in a timely manner shall subject the Permittee to assessment of penalties and interest in accordance with 40 CFR 71.9(l).
- 1.22 When notified by the EPA of underpayment of fees, the Permittee shall remit full payment within 30 days of receipt of notification.
- 1.23 If the Permittee believes that the EPA-assessed fee is in error and wishes to challenge such fee, the Permittee shall provide a written explanation of the alleged error to EPA along with full payment of the EPA assessed fee.

Annual Registration (FARR Reporting) [40 CFR 49.138(d), (e)(3)(xii), (e)(4) and (f), 71.6(c)(1)]

- 1.24 The permittee shall submit an annual registration report that consists of estimates of the total actual emissions from the air pollution source for the following air pollutants: PM, PM10, PM2.5, SO_x, NO_x, CO, VOC, lead and lead compounds, ammonia, fluorides (gaseous and particulate), sulfuric acid mist, hydrogen sulfide, total reduced sulfur, and reduced sulfur compounds, including all calculations for the estimates. Emissions shall be calculated using the actual operating hours, production rates, in-place control equipment, and types of materials processed, stored, or combusted during the preceding calendar year.
- 1.24.1 The emission estimates required by Condition 1.24 shall be based upon actual test data or, in the absence of such data, upon procedures acceptable to the Regional Administrator. Any emission estimates submitted to the Regional Administrator shall be verifiable using currently accepted engineering criteria. The following procedures are generally acceptable for estimating emissions from air pollution sources:
- 1.24.1.1 Source-specific emission tests;
 - 1.24.1.2 Mass balance calculations;
 - 1.24.1.3 Published, verifiable emission factors that are applicable to the source;
 - 1.24.1.4 Other engineering calculations; or
 - 1.24.1.5 Other procedures to estimate emissions specifically approved by the Regional Administrator.
- 1.24.2 The annual registration report in Condition 1.24 shall be submitted with the annual emission report and fee calculation worksheet required by Conditions 1.14 and 1.17. The annual registration report shall be submitted to the EPA electronically through EPA's FARR Online Reporting System

(FORS). FORS can be accessed through EPA’s CDX at <https://cdx.epa.gov/>. First-time users will need to register with CDX. If no specific reporting option is available in CEDRI, select “Other Reports”. If the system is unavailable, contact EPA Region 10’s Enforcement and Compliance Assurance Division at (206) 553-1200.

Confidential Business Information (CBI) may not be submitted through CDX and must be submitted either by (1) hardcopy to the EPA at one of the two addresses below as follows or (2) other electronic means designated by the EPA or the Permittee. For applications to revise this permit, submit the materials to the EPA at the following address:

FARR Registration Coordinator
U.S. EPA – Region 10,
15-H13 1200 Sixth Avenue, Suite 155
Seattle, WA 98101

For any other documents that contain CBI, submit the materials to the EPA at the following address:

Clean Air Act Compliance Manager
U.S. EPA – Region 10, 20-C04
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

A copy of each document submitted to EPA that does not contain CBI shall be sent to the tribal address below:

Air Quality Manager
Yakama Nation Environmental Management Program
Yakama Nation
P.O. Box 151
Toppenish, WA 98948

Duty to Provide and Supplement Information [40 CFR 71.6(a)(6)(v); 71.5(b)]

- 1.25 The Permittee shall furnish to the EPA, within a reasonable time, any information that the EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the Permittee shall also furnish to EPA copies of records that are required to be kept pursuant to the terms of this permit, including information claimed to be confidential. Information claimed to be confidential should be accompanied by a claim of confidentiality according to the provisions of 40 CFR part 2, subpart B.
- 1.26 The Permittee, upon becoming aware that it omitted from its application any relevant facts or submitted incorrect information in the permit application, shall promptly submit such supplementary facts or corrected information. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after this permit is issued.

Property Rights [40 CFR 71.6(a)(6)(iv)]

- 1.27 This permit does not convey any property rights of any sort, or any exclusive privilege.

Inspection and Entry [40 CFR 71.6(c)(2)]

- 1.28 Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the EPA or an authorized representative to perform the following:
 - 1.28.1 Enter upon the Permittee’s premises where a part 71 source is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;

1.28.2 Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

1.28.3 Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

1.28.4 As authorized by the CAA, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

Permit Expiration and Renewal [40 CFR 71.5(a)(1)(iii); 71.6(a)(11); 71.7(b); 71.7(c)(1)(i) and (ii); 71.8(d)]

1.29 This permit shall expire on the expiration date on page 1 of this permit or on an earlier date if the source is issued a part 70 or part 71 permit by a permitting authority under an EPA approved or delegated permit program.

1.29.1 Expiration of this permit terminates the Permittee's right to operate unless the Permittee has submitted a timely and complete permit renewal application at least 6 calendar months, but not more than 18 calendar months, prior to the date of expiration of this permit.

1.29.2 If the Permittee submits a timely and complete permit application for renewal, consistent with 40 CFR 71.5(a)(2), but the EPA has failed to issue or deny the renewal permit, then the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted pursuant to 40 CFR 71.6(f) may be extended beyond the original permit term until renewal.

1.29.3 If the Permittee has submitted a timely and complete application for renewal, the Permittee's failure to have a part 71 permit is not a violation of part 71 until the EPA takes final action on the permit renewal application. This protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit any additional information identified as being needed to process the application by the deadline specified in writing by the EPA.

1.30 Renewal of this permit is subject to the same procedural requirements that apply to initial permit issuance, including those for public participation and affected state and tribal review.

1.30.1 The application for renewal shall include the current permit number, description of permit revisions and off-permit changes that occurred during the permit term, any applicable requirements that were promulgated and not incorporated into the permit during the permit term, and other information required by the application form.

Severability [40 CFR 71.6(a)(5)]

1.31 The provisions of this permit are severable, and in the event of any challenge to any portion of this permit, or if any portion is held invalid, the remaining permit conditions shall remain valid in force.

Permit Actions [40 CFR 71.6(a)(6)(iii)]

1.32 This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

1.33 The Permittee may request the use of administrative permit amendment, minor permit modification or significant modification procedures for a permit revision in accordance with 40 CFR 71.7(d).

Reopening for Cause [40 CFR 71.7(f)]

1.34 The EPA shall reopen and revise the permit prior to expiration under any of the circumstances described in 40 CFR 71.7(f).

Off Permit Changes [40 CFR 71.6(a)(12)]

- 1.35 The Permittee is allowed to make certain changes without a permit revision, provided that the following requirements are met:
- 1.35.1 The change is not addressed or prohibited by this permit;
 - 1.35.2 The change must comply with all applicable requirements and may not violate any existing permit term or condition;
 - 1.35.3 The change cannot be subject to any requirement of 40 CFR parts 72 through 78 or modifications under any provision of title I of the CAA;
 - 1.35.4 And the permit shield does not apply to any change made under this provision.
 - 1.35.5 The Permittee must provide contemporaneous written notice to the EPA of the change, except if the change qualifies as insignificant activity under 40 CFR 71.5(c)(11). The written notice must describe the change, the date of the change, any change in emissions, pollutants emitted, and any applicable requirements that would apply as a result of the change.

Operational Flexibility [40 CFR 71.6(a)(13) and (a)(8)]

- 1.36 The Permittee may make changes within a permitted facility without a permit revision, provided the following conditions are met:
- 1.36.1 The changes are not modifications under any provision of title I of the CAA;
 - 1.36.2 The changes do not result in emissions that exceed the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions); and
 - 1.36.3 The Permittee notifies the EPA at least 7 days in advance of the proposed changes. The written notification shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- 1.37 No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. The permit shield described in 40 CFR 71.6(f) shall not apply to any change made pursuant 40 CFR 71.6(a)(13)(i).

General Testing Requirements [40 CFR 71.6(a)(3); 71.6(c)(1)]

- 1.38 In addition to the specific testing requirements contained in the emission unit sections of this permit, the Permittee shall comply with the generally applicable testing requirements in Conditions 1.37.1 through 1.37.8 whenever conducting a performance test required by this permit unless specifically stated otherwise in this permit.
- 1.38.1 Test Notification. The Permittee shall provide EPA at least 30 days prior notice of any performance test, except as otherwise specified in this permit, to afford EPA the opportunity to have an observer present. If after 30 days' notice for an initially scheduled performance test, there is a delay in conducting the scheduled performance test, the Permittee shall notify EPA as soon as possible of any delay in the original test date, either by providing at least seven days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the EPA by mutual agreement.
 - 1.38.2 Test Plan. Except as otherwise specified in this permit, the Permittee shall submit to the EPA a source test plan 30 days prior to any required testing. The source test plan shall include and address the following elements:
 - 1.38.2.1 Purpose and scope of testing.

1.38.2.2 Source description, including a description of the operating scenarios and mode of operation during testing and including fuel sampling and analysis procedures.

1.38.2.3 Schedule/dates of testing.

1.38.2.4 Process data to be collected during the test and reported with the results, including source specific data identified in the emission unit sections of this permit.

1.38.2.5 Sampling and analysis procedures, specifically requesting approval for any proposed alternatives to the reference test methods, and addressing minimum test length (e.g., 1 hour, 8 hours, 24 hours, etc.) and minimum sample volume.

1.38.2.6 Sampling location description and compliance with the reference test methods.

1.38.2.7 Analysis procedures and laboratory identification.

1.38.2.8 Quality assurance plan.

1.38.2.9 Calibration procedures and frequency.

1.38.2.10 Sample recovery and field documentation.

1.38.2.11 Chain of custody procedures.

1.38.2.12 Quality assurance/quality control project flow chart.

1.38.2.13 Data processing and reporting.

1.38.2.14 Description of data handling and quality control procedures; and

1.38.2.15 Report content and timing.

1.38.3 Facilities for performing and observing the emission testing shall be provided that meet the requirements of 40 CFR 60.8(e) and Reference Method 1 (40 CFR part 60, Appendix A).

1.38.4 Unless the EPA determines in writing that other operating conditions are representative of normal operations or unless specified in the emission unit sections of this permit, the source shall be operated at a rate of at least 90% but no more than 100% of maximum capacity during all tests.

1.38.5 Only regular operating staff may adjust the processes or emission control devices during or within 2 hours prior to the start of a source test. Any operating adjustments made during a source test, that are a result of consultation during the tests with source testing personnel, equipment vendors, or consultants, may render the source test invalid.

1.38.6 Each source test shall follow the reference test methods specified by this permit and consist of at least 3 valid test runs.

1.38.6.1 If the reference test method yields measured pollutant concentration values at an oxygen concentration other than specified in the emission standard, the Permittee shall correct the measured pollutant concentration to the oxygen concentration specified in the emission standard by using the following equation:

$$PC_X = PC_M \times (20.9 - X) / (20.9 - Y)$$

Where: PC_X = Pollutant concentration at X percent.

PC_M = Pollutant concentration as measured.

X = The oxygen concentration specified in the standard.

and

Y = The measured average volumetric oxygen concentration.

1.38.6.2 Source test emission data shall be reported as the arithmetic average of all valid test runs and in the terms of any applicable emission limit, unless otherwise specified in the emission unit sections of this permit.

1.38.7 Test Records. For the duration of each test run (unless otherwise specified), the Permittee shall record the following information:

1.38.7.1 All data which is required to be monitored during the test in the emission unit sections of this permit; and

1.38.7.2 All continuous monitoring system data which is required to be routinely monitored in the emission unit sections of this permit for the emission unit being tested.

1.38.8 Test Reports. Emission test reports shall be submitted to the EPA within 60 days of completing any emission test required by this permit along with items required to be recorded in Condition 1.37.7 above.

General Recordkeeping Requirements

1.39 Records required by this permit shall contain the following information, where applicable: [40 CFR 71.6(a)(3)(ii)(A)]

1.39.1 The date, place as defined in this permit, and time of sampling or measurements;

1.39.2 The date(s) analyses were performed;

1.39.3 The company or entity that performed the analyses;

1.39.4 The analytical techniques or methods used;

1.39.5 The results of such analyses; and

1.39.6 The operating conditions existing at the time of sampling or measurement.

1.40 The permittee shall keep a record describing all off-permit changes allowed to be made under Condition 1.35 that result in emissions of any regulated air pollutant subject to any applicable requirement not otherwise regulated under this permit, and the emissions resulting from those changes. [40 CFR 71.6(a)(12)(iv)]

1.41 The Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. [40 CFR 71.6(a)(3)(ii)(B)]

General Reporting Requirements [40 CFR 71.6(a)(3)(iii)]

1.42 The Permittee shall submit to the EPA a semiannual report of all required monitoring during each six-month reporting period from January 1 to June 30 and from July 1 to December 31. All reports shall be submitted to the EPA and shall be postmarked by the 30th day following the end of the reporting period. All instances of deviations from permit requirements must clearly be identified in the report. All required reports must be certified by a responsible official consistent with 40 CFR 71.5(d).

1.43 A monitoring report required in Condition 1.41 shall include the following:

1.43.1 The company name and address;

1.43.2 The beginning and ending dates of the reporting period;

1.43.3 The emissions unit or activity being monitored;

1.43.4 The emissions limitation or standard, including operational requirements and limitations (such as parameter ranges), specified in the permit for which compliance is being monitored;

1.43.5 All instances of deviations from permit requirements whether demonstrated by reference test method, monitoring, or through any other credible evidence, including those attributable to upset conditions as defined in this permit, the date on which each deviation occurred, and either the total duration of deviations indicated by such monitoring or the actual records of deviations;

1.43.6 The total time when monitoring required by this permit was not performed during the reporting period;

1.43.7 All other monitoring results, data, or analyses required to be reported by the applicable requirement; and

1.43.8 The name, title, and signature of the responsible official who is certifying to the truth, accuracy, and completeness of the report.

1.44 The Permittee shall promptly report to the EPA deviations from permit requirements, including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventive measures taken.

1.44.1 Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern.

1.44.2 Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations shall be submitted to the EPA based on the following schedule:

1.44.3 For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.

1.44.4 For emissions of any regulated air pollutant, excluding those listed 40 CFR 71.6(a)(3)(iii)(B)(1), that continue for more than 2 hours in excess of permit requirements, the report must be made within 48 hours.

1.44.5 For all other deviations from permit requirements, the report shall be contained in the report submitted in the semiannual monitoring report.

1.44.6 The Permittee shall notify the EPA by telephone or facsimile based on the deviation reporting timeframe. A written notice, certified consistent with 40 CFR 71.5(d), must be submitted within 10 working days of the occurrence. All reported deviations must also be identified in the semiannual monitoring report.

1.45 “Deviation” means any situation in which an emissions unit fails to meet a permit term or condition. A deviation is not always a violation. A deviation can be determined by observation or through review of data obtained from any testing, monitoring, or recordkeeping established in accordance with 40 CFR 71.6(a)(3)(i) and (ii). For a situation lasting more than 24 hours which constitutes a deviation, each 24-hour period is considered a separate deviation. “Deviations” includes, but is not limited to, any of the following:

1.45.1 A situation where emissions exceed an emission limitation or standard;

1.45.2 A situation where process or emissions control device parameter values indicate that an emission limitation or standard has not been met;

1.45.3 A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by this permit; or

1.45.4 A situation in which an exceedance or an excursion, as defined in 40 CFR part 64, occurs.

Protection of Stratospheric Ozone [40 CFR part 82]

- 1.46 The Permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR part 82, subpart F, except as provided for motor vehicle air conditioners at 40 CFR part 82, subpart B.

Chemical Accident Prevention Provisions [40 CFR 68.10; 68.215(a)(1)]

- 1.47 The Permittee shall comply with the requirements of the Chemical Accident Prevention Provisions at 40 CFR part 68 no later than the latest of the following dates:

1.47.1 Three years after the date on which a regulated substance, present above the threshold quantity in a process at the facility, is first listed under 40 CFR 68.130; or

1.47.2 The date on which a regulated substance is first present above a threshold quantity in a process at the facility.

Asbestos Removal and Disposal [40 CFR part 61, subpart M]

- 1.48 The Permittee shall comply with 40 CFR part 61, subpart M for asbestos removal and disposal when conducting any renovation or demolition at the facility.

2 Facility-Wide Requirements

Fees and Emission Reports Due Date [40 CFR 71.9(a) and (h)]

- 2.1 Unless otherwise specified, fees and emission reports required by this permit must be submitted annually on or before December 1st.

Fuel Sulfur Limits

- 2.2 The Permittee shall not sell, distribute, use, or make available for use any gaseous fuel that contains more than 1.1 grams of sulfur per dry standard cubic meter of gaseous fuel. [40 CFR 49.130(d)(8); 49.11106(f)]

2.2.1 Compliance with the sulfur limit is determined using ASTM methods D1072-90 (Reapproved 1999), D3246-96, D4084-94 (Reapproved 1999), D5504-01, D4468-85 (Reapproved 2000), D2622-03, and D6228-98 (Reapproved 2003) [40 CFR 49.130(e)(4); 49.11106(f)]

2.2.2 The Permittee shall either obtain, record, and keep records of the sulfur content from the vendor, or continuously monitor the sulfur content of the fuel gas line using a method that meets the requirements of Performance Specification 5, 7, 9, or 15 (as applicable for the sulfur compounds in the gaseous fuel) of appendix B and appendix F of 40 CFR part 60. If only purchased natural gas is used, then keep records showing that the gaseous fuel meets the definition of natural gas in 40 CFR 72.2. [40 CFR 49.130(f)(1)(ii); 49.11106(f)]

Open Burning Restrictions

- 2.3 Except as exempted in 40 CFR 49.131(c), the Permittee shall not openly burn, or allow the open burning of, the following materials: [40 CFR 49.131(c) and (d)(1); 49.11106(g)]

2.3.1 Garbage.

2.3.2 Dead animals or parts of dead animals.

2.3.3 Junked motor vehicles or any materials resulting from a salvage operation.

2.3.4 Tires or rubber materials or products.

2.3.5 Plastics, plastic products, or Styrofoam.

2.3.6 Asphalt or composition roofing, or any other asphaltic material or product.

- 2.3.7 Tar, tarpaper, petroleum products, or paints.
 - 2.3.8 Paper, paper products, or cardboard other than what is necessary to start a fire or that is generated at single-family residences or residential buildings with four or fewer dwelling units and is burned at the residential site.
 - 2.3.9 Lumber or timbers treated with preservatives.
 - 2.3.10 Construction debris or demolition waste.
 - 2.3.11 Pesticides, herbicides, fertilizers, or other chemicals.
 - 2.3.12 Insulated wire.
 - 2.3.13 Batteries.
 - 2.3.14 Light bulbs.
 - 2.3.15 Materials containing mercury (e.g., thermometers).
 - 2.3.16 Asbestos or asbestos-containing materials.
 - 2.3.17 Pathogenic wastes.
 - 2.3.18 Hazardous wastes; or
 - 2.3.19 Any material other than natural vegetation that normally emits dense smoke or noxious fumes when burned.
 - 2.3.20 All materials to be openly burned shall be kept as dry as possible through the use of a cover or dry storage.
- 2.4 Open burning shall be conducted as follows: [40 CFR 49.131(e)(1); 49.11106(g)]
- 2.4.1 All materials to be openly burned shall be kept as dry as possible through the use of a cover or dry storage.
 - 2.4.2 Before igniting a burn, noncombustible shall be separated from the materials to be openly burned to the greatest extent practicable.
 - 2.4.3 Natural or artificially induced draft shall be present, including the use of blowers or air curtain incinerators where practicable.
 - 2.4.4 To the greatest extent practicable, materials to be openly burned shall be separated from the grass or peat layer; and
 - 2.4.5 A fire shall not be allowed to smolder.
- 2.5 Except for exempted fires set for cultural or traditional purposes, a person shall not initiate any open burning when: [40 CFR 49.131(d)(2), (d)(3), and (e)(2); 49.137(c)(4)(i); 49.11106(g) and (i)]
- 2.5.1 The Regional Administrator has declared a burn ban; or
 - 2.5.2 An air stagnation advisory has been issued or an air pollution alert, warning or emergency has been declared by the Regional Administrator.
- 2.6 Except for exempted fires set for cultural or traditional purposes, any person conducting open burning when such an advisory is issued or declaration is made shall either immediately extinguish the fire, or immediately withhold additional material such that the fire burns down. [40 CFR 49.131(e)(3); 49.137(c)(4)(ii); 49.11106(g) and (i)]

- 2.7 Nothing in this section exempts or excuses any person from complying with applicable laws and ordinances of local fire departments and other governmental jurisdictions. [40 CFR 49.131(d)(4); 49.11106(g)]
- 2.8 For any open burning allowed under Conditions 2.4 through 2.6, the permittee shall document the following: [40 CFR 71.6(a)(3)(i)(B); 71.6(c)(1)]
- 2.8.1 The date that burning was initiated;
 - 2.8.2 The duration of the burn;
 - 2.8.3 The measures taken to comply with each provision of Condition 2.4; and
 - 2.8.4 The measures taken to ensure that materials prohibited in Condition 2.3 were not burned.

Visible Emissions Limits

- 2.9 Except as provided for in Conditions 2.10 and 2.11 the visible emissions from any air pollution source that emits, or could emit, particulate matter or other visible air pollutants shall not exceed 20% opacity, averaged over any consecutive six-minute period. Compliance with this emission limit is determined as follows: [40 CFR 49.124(d)(1) and (e); 49.11106(b)]
- 2.9.1 The reference method for determining compliance with the opacity limit is EPA Reference Method 9 found in Appendix A of 40 CFR part 60. A single observer is allowed to determine the opacity of emissions for up to 3 emission points within the same 15-second interval if the following conditions are satisfied:
 - 2.9.1.1 All emission points are within a 70-degree viewing angle in front of the observer such that the proper sun position can be maintained for all points; and
 - 2.9.1.2 All opacity readings for all emission points within all 15-second intervals are less than 15% for the duration of the six-minute observation period.
 - 2.9.2 Alternatively, using a continuous opacity monitoring system that complies with Performance Specification 1 found in Appendix B of 40 CFR part 60.
- 2.10 The requirements of Condition 2.9 do not apply to open burning, agricultural activities, forestry and silvicultural activities, non-commercial smoke houses, sweat houses or lodges, smudge pots, furnaces and boilers used exclusively to heat residential buildings with four or fewer dwelling units, or emissions from fuel combustion in mobile sources. [40 CFR 49.124(c); 49.11106(b)]
- 2.11 Exceptions to the visible emission limit in Condition 2.9 include: [40 CFR 49.124(d)(2) and (3); 49.11106(b)]
- 2.11.1 The visible emissions from an air pollution source may exceed the 20% opacity limit if the owner or operator of the air pollution source demonstrates to the Regional Administrator's satisfaction that the presence of uncombined water, such as steam, is the only reason for the failure of an air pollution source to meet the 20% opacity limit.
 - 2.11.2 The visible emissions from an oil-fired boiler or solid fuel-fired boiler that continuously measures opacity with a continuous opacity monitoring system (COMS) may exceed the 20% opacity limit during start-up, soot blowing, and grate cleaning for a single period of up to 15 consecutive minutes in any eight consecutive hours but must not exceed 60% opacity at any time.

Fugitive Particulate Matter Requirements and Recordkeeping [40 CFR 49.126(d)(1) and (2); 49.11106(d)]

- 2.12 Except as provided for in Condition 2.11, the Permittee shall take all reasonable precautions to prevent fugitive particulate matter emissions and shall maintain and operate all pollutant-emitting activities to minimize fugitive particulate matter emissions. Reasonable precautions include, but are not limited to the following:

- 2.12.1 Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, grading of roads, or clearing of land;
 - 2.12.2 Application of asphalt, oil (but not used oil), water, or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces that can create airborne dust;
 - 2.12.3 Full or partial enclosure of materials stockpiles in cases where application of oil, water, or chemicals is not sufficient or appropriate to prevent particulate matter from becoming airborne;
 - 2.12.4 Implementation of good housekeeping practices to avoid or minimize the accumulation of dusty materials that have the potential to become airborne, and the prompt cleanup of spilled or accumulated materials;
 - 2.12.5 Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
 - 2.12.6 Adequate containment during sandblasting or other similar operations;
 - 2.12.7 Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne; and
 - 2.12.8 The prompt removal from paved streets of earth or other material that does or may become airborne.
- 2.13 Once each calendar year, during typical operating conditions and meteorological conditions conducive to producing fugitive dust, the permittee shall survey the facility to determine the sources of fugitive particulate matter emissions. For new sources or new operations, a survey shall be conducted within 30 days after commencing operation.
- 2.13.1 The permittee shall record the results of the survey, including the date and time of the survey and identification of any sources of fugitive particulate matter emissions found; and
 - 2.13.2 If sources of fugitive particulate matter emissions are present, the permittee shall determine the reasonable precautions that will be taken to prevent fugitive particulate matter emissions. [40 CFR 49.126(e)(1)(i) and (ii)]
- 2.14 The permittee shall prepare, and update as necessary following each survey, a written plan that specifies the reasonable precautions that will be taken and the procedures to be followed to prevent fugitive particulate matter emissions, including appropriate monitoring and recordkeeping. For construction or demolition activities, a written plan shall be prepared prior to commencing construction or demolition. [40 CFR 49.126(e)(1)(iii)].
- 2.15 The permittee shall implement the written plan, and maintain and operate all sources to minimize fugitive particulate matter emissions. [40 CFR 49.126(e)(1)(iv)]
- 2.16 Efforts to comply with this section cannot be used as a reason for not complying with other applicable laws and ordinances. [40 CFR 49.126(e)(3)]
- 2.17 The requirements of Conditions 2.12 – 2.16 do not apply to open burning, agricultural activities, forestry and silvicultural activities, sweat houses or lodges, non-commercial smoke houses, or activities associated with single-family residences or residential buildings with four or fewer dwelling units. [40 CFR 49.126(c)]

Visible and Fugitive Emission Monitoring and Recordkeeping [40 CFR 71.6(a)(3)(i)(B)]

- 2.18 Once each quarter, the Permittee shall visually survey each emission unit and any other air pollutant emitting activity for the presence of visible emissions or fugitive emissions of particulate matter.

- 2.18.1 The observer conducting the visual survey must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting and wind, and the presence of uncombined water on the visibility of emissions (see 40 CFR part 60, Appendix A, Method 22).
- 2.18.2 For the surveys, the observer shall select a position that enables a clear view of the emission point to be surveyed that is at least 15 feet from the emission point and where the sunlight is not shining directly in the observer's eyes.
- 2.18.3 The observer shall observe emissions from each potential emission point for at least 15 seconds.
- 2.18.4 Any visible emissions or fugitive emissions of particulate matter other than uncombined water shall be recorded as a positive reading associated with the emission unit or pollutant emitting activity.
- 2.18.5 Surveys shall be conducted while the facility is operating, and during daylight hours.
- 2.19 If the observation conducted under Condition 2.18.1 through 2.18.5 identifies any visible emissions or fugitive emissions of particulate matter, the Permittee shall:
- 2.19.1 Immediately upon conclusion of the visual observation in Condition 2.18.1 through 2.18.5, investigate the source and reason for the presence of visible emissions or fugitive emissions; and
- 2.19.2 As soon as practicable, take appropriate corrective action.
- 2.20 If the corrective actions undertaken pursuant to Condition 2.19.2 do not eliminate the visible or fugitive emissions, the Permittee shall within 24 hours of the initial survey conduct a visible emissions observation of the emission point in question, for 30 minutes, using the procedures specified in Condition 2.9.1.
- 2.21 If any of the Method 9 visible emissions observations required in Condition 2.20 or 2.22 indicate visible emissions greater than 20% opacity, the Permittee shall conduct daily Method 9 visible emissions observations, for thirty minutes, of the emission point in question until 2 consecutive daily observations indicate visible emissions of 20% opacity or less.
- 2.22 If the Method 9 visible emissions observation required in Condition 2.20, or if 2 consecutive daily Method 9 visible emissions observations required by Condition 2.21 indicate visible emissions of 20% opacity or less, the Permittee shall conduct weekly Method 9 visible emissions observations of the emission point for 3 additional weeks.
- 2.23 The Permittee shall maintain records of the following:
- 2.23.1 Details of each visual survey or Method 9 visible emissions observation, including date, time, observer and results for each emission unit and any other pollutant emitting activity.
- 2.23.2 Date, time and type of any investigation conducted pursuant to Condition 2.19.1.
- 2.23.3 Findings of the investigation, including the reasons for the presence of visible emissions or fugitive emissions of particulate matter.
- 2.23.4 Date, time and type of corrective actions taken pursuant to Condition 2.19.2.
- 2.23.5 Results of any Method 9 visible emissions observations conducted on the source of visible or fugitive emissions, and pursuant to Conditions 2.19.2 through 2.21.
- 2.24 Any observation of visible emissions in excess of Condition 2.9 is a deviation and subject to the provisions of Conditions 1.41 and 1.43.

Facility-Wide VOC Emission Limit

- 2.25 At such time as this source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in the conditions of this permit, then the requirements of 40 CFR 52.21(j)

through (s) shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Non-Title V Operating Permit R10NT500101]

2.26 Emissions of volatile organic compounds (VOC) from the facility shall not exceed 249 tons per year, determined monthly on a rolling, 12-month basis, which shall be determined by calculating the emissions (tons) for each month and adding the emissions (tons) for the previous eleven months. Monthly VOC emissions (tons) shall be determined using the methods required in Conditions 2.26.1 through 2.26.9. The permittee may use any of the alternative calculation methods in Condition 2.26.10.

2.26.1 VOC emissions from open molding, centrifugal casting, and manual resin application shall be calculated using the following equation:

$$Ems = \left(\sum_{i,j=1,1}^{m,n} EF_{i,j} * M_j \right) * \frac{1}{2000} \quad (\text{Equation 2-1})$$

Where

Ems is emissions of organic monomer species in tons;

EF_{i,j} is the emission factor for total organic monomers emitted during process *i* as a result of using material *j*, in pounds of emissions per ton of material applied (from 40 CFR part 63, subpart WWWW, Table 1, unless another emission factor has been approved, e.g. resins that meet military specifications)¹;

M_j is the mass of material *j* used, in tons; and

1/2000 is a factor to convert from pounds of emissions to tons

2.26.2 VOC emissions from closed molding shall be calculated using the following equation:

$$Ems = 0.01 * \left(\sum_{i=1}^n S_i * M_i \right) * \frac{1}{2000} \quad (\text{Equation 2-2})$$

Where

Ems is emissions of VOC in tons;

0.01 is a factor that estimates the quantity of styrene that escapes the closed mold;

S_i is the mass fraction of styrene in material *i*;

M_i is the mass of material *i* used, in pounds; and

1/2000 is a factor to convert from pounds of emissions to tons.

2.26.3 VOC emissions from painting operations shall be calculated using the following equation:

$$Ems = \left(\sum_{i=1}^n F_i * SG_i * 8.34 * Q_i \right) \frac{1}{2000} \quad (\text{Equation 2-3})$$

Where

Ems is emissions of VOC in tons;

¹ The emission factors in Table 1 of 40 CFR part 63, subpart WWWW were developed to determine emissions of organic hazardous air pollutants (HAP). To determine VOC emissions, the permittee shall include all organic monomer species included on the Safety Data Sheet for the liquid resin, regardless of whether or not they are HAPs.

F_i is the mass fraction of VOC of coating i ;
 SG_i is the specific gravity of coating i ;
 8.34 is the density of water in pounds per U.S. gallon;
 Q_i is the quantity of coating i applied, in U.S. gallons; and
 $1/2000$ is a factor to convert from pounds of emissions to tons.

2.26.4 VOC emissions from the use of VOC-containing cleaners, thinners, solvents, and additives shall be calculated using the following equation:

$$Ems = \left(\sum_{i=1}^n F_i * SG_i * 8.34 * Q_i \right) \frac{1}{2000} \quad \text{(Equation 2-4)}$$

Where

Ems is emissions of VOC in tons;
 F_i is the mass fraction of VOC in cleaner, thinner, or solvent i ;
 SG_i is the specific gravity of cleaner, thinner, or solvent i ;
 8.34 is the density of water in pounds per U.S. gallon;
 Q_i is the quantity of coating i applied, in U.S. gallons; and
 $1/2000$ is a factor to convert from pounds of emissions to tons

2.26.5 VOC emissions from application of polyurethane adhesives shall be calculated by either

2.26.5.1 Using the most recent version of the *MDI/PMDI Calculator* published by the American Chemistry Council and adding to the Calculator's output estimate of MDI emissions, in tons, the sum of any inert VOC ingredients (e.g. propellants and thinners) calculated using the mass balance equation in Condition 2.26.4 (equation 2-4). Or

2.26.5.2 If a polyurethane adhesive system's Safety Data Sheet (SDS) includes information about the material's VOC content as applied, the permittee may calculate VOC emissions from application of that adhesive using the following equation:

$$Ems = 5.5 * Q * \frac{1}{2000} \quad \text{(Equation 2-5)}$$

Where

Ems is emissions of VOC in tons;
 VOC is the material's VOC content in pounds per U.S. gallon;
 Q is the quantity of material applied in U.S. gallons; and
 $1/2000$ is a factor to convert from pounds of emissions to tons.

2.26.6 VOC emissions from application of reactive adhesives, as defined in 40 CFR 63.4581, shall be calculated using the following equation:

$$Ems = \left(0.3 * \sum_{i=1}^n F_i * SG_i * 8.34 * Q_i \right) \frac{1}{2000} \quad \text{(Equation 2-6)}$$

Where

Ems is emissions of VOC in tons;
 F_i is the mass fraction of VOC in reactive adhesive i ;
 SG_i is the specific gravity of reactive adhesive i ;
 8.34 is the density of water in pounds per U.S. gallon;
 Q_i is the quantity of reactive adhesive i applied, in U.S. gallons; and
 $1/2000$ is a factor to convert from pounds of emissions to tons.

2.26.7 VOC emissions from polystyrene foam hardening processes shall be calculated using the following equation:

$$Ems = 10^{-6} * \left(\sum_{i=1}^n S_i * M_i \right) * \frac{1}{2000} \quad \text{(Equation 2-7)}$$

Where

Ems is emissions of VOC in tons;
 10^{-6} is a factor that estimates the quantity of styrene that escapes during foam hardening;
 S_i is the mass fraction of styrene in material i ;
 M_i is the mass of material i used, in pounds; and
 $1/2000$ is a factor to convert from pounds of emissions to tons

2.26.8 VOC emissions from storage tanks shall be calculated using the most recent version of the EPA's Tanks model, in tons.

2.26.9 VOC emissions from natural gas combustion shall be calculated using the following equation:

$$Ems = 5.5 * Q * \frac{1}{2000} \quad \text{(Equation 2-8)}$$

Where

Ems is emissions of VOC in tons;
 5.5 is an emission factor for VOC combustion from natural gas in lb/MMscf;
 Q is the volume of natural gas combusted in MMscf; and
 $1/2000$ is a factor to convert from pounds of emissions to tons.

2.26.10 The permittee may use any of the following alternative calculation methodologies below:

- 2.26.10.1 The permittee may substitute a material's density (in pounds-per-gallon) for the product of specific gravity and 8.34 in the mass balance equations in Conditions 2.26.3, 2.26.4, and 2.26.6 (Equations 2-3, 2-4, and 2-6).
- 2.26.10.2 The permittee may substitute a material's VOC content (in pounds-per-gallon) for the product of mass fraction of VOC, specific gravity and 8.34 in the mass balance equations in Conditions 2.26.3, 2.26.4, and 2.26.6 (Equations 2-3, 2-4, and 2-6).

[Non-Title V Operating Permit R10NT500101]

2.27 Each month, the permittee shall calculate and record facility-wide monthly and rolling 12-month total VOC emissions (tons) for all emission units and emission generating activities that emit VOC using the methods required by Condition 2.26 Records of emissions shall include supporting calculations.
[Non-Title V Operating Permit R10NT500101]

2.28 The permittee shall track and record the operations and production for each emission unit that emits VOC at the facility, such that facility-wide VOC emissions can be calculated on a monthly and 12-month basis. Records shall include, but not be limited to:

- 2.28.1 Material purchase records;
- 2.28.2 Monthly gelcoat usage;
- 2.28.3 Monthly resin usage in open molding operations;
- 2.28.4 Monthly quantity of resin or gelcoat mixed;
- 2.28.5 Number of batches mixed each month;
- 2.28.6 Monthly VOC-containing solvent usage to clean equipment used in open molding and mixing operations;
- 2.28.7 Quantity of VOC-containing material stored in open or partially-open containers each month;
- 2.28.8 Monthly resin usage in repair operations;
- 2.28.9 Monthly resin usage in closed mold operations;
- 2.28.10 Monthly usage of polyurethane adhesives;
- 2.28.11 Monthly usage of reactive adhesives;
- 2.28.12 Monthly usage of polystyrene foam;
- 2.28.13 Monthly usage of each VOC-containing coating or solvent used in the spray booth;
- 2.28.14 Monthly usage of each VOC-containing material used in support activities;
- 2.28.15 Monthly natural gas usage;
- 2.28.16 Safety Data Sheets (SDS);
- 2.28.17 Emission factors used;
- 2.28.18 Vapor pressure of materials stored in the tanks;
- 2.28.19 Parameters used to determine emission factors; and
- 2.28.20 Any other information used to determine monthly facility emissions of VOC.

[Non-Title V Operating Permit R10NT500101]

2.29 Once each year, the permittee shall, along with the annual registration required by 40 CFR 49.138(e)(2), submit to the EPA a report containing the twelve monthly rolling 12-month emissions calculations for the previous calendar year.

[Non-Title V Operating Permit R10NT500101]

2.30 The report required under Condition 2.29 shall contain a description of all emissions estimating methods used, including emission factors and their sources, a summary of materials usage and VOC content, assumptions made and production data.

[Non-Title V Operating Permit R10NT500101]

2.31 The permittee shall notify the EPA promptly upon discovering any activities or equipment at the facility that contribute significantly to annual VOC emissions and that are not included in the calculations in Condition 2.26. For the purposes of this condition:

2.31.1 *Significantly* means having the potential to emit two tons or more of VOC in a 12-continuous-month period, and

2.31.2 *Promptly* means within 30 days of discovery.

Notifications to the EPA pursuant to this condition shall be sent to:

Tribal Air Permits Coordinator, OAW-150
U.S. EPA, Region 10, OAW-150

Copies to: Environmental Management Program
Yakama Nation

3. Emission Unit WWWW – Fiberglass Operations

WWWW Emission Limits and Work Practice Requirements

3.1. Conditions 3.2 through 3.33 apply to all parts of the facility engaged in the following operations:

- 3.1.1. Open molding operations, including:
 - 3.1.1.1. Manual resin application,
 - 3.1.1.2. Atomized and nonatomized mechanical resin application (except with robotic or automated control),
 - 3.1.1.3. Atomized and nonatomized spray gel coat application (except with robotic or automated control), and
 - 3.1.1.4. Filament winding;
- 3.1.2. Closed molding;
- 3.1.3. Cleaning of equipment used in reinforced plastic composites manufacture;
- 3.1.4. Mixing;
- 3.1.5. HAP-containing materials storage; and
- 3.1.6. Repair operations associated with the production of plastic composites.

[40 CFR 63.5785(a) and 63.5790(b)]

3.2. The following operations are specifically excluded from any requirements in this section of the permit:

- 3.2.1. Application of mold sealing and release agents;
- 3.2.2. Mold stripping and cleaning;
- 3.2.3. Repair of parts manufactured off-site, including non-routine manufacturing of parts;
- 3.2.4. Personal activities that are not part of the manufacturing operations;
- 3.2.5. Prepreg materials as defined in 40 CFR 63.5935;
- 3.2.6. Non-gel coat surface coatings;
- 3.2.7. Application of putties, polyputties and adhesives;
- 3.2.8. Repair or production materials that do not contain resin or gel coat;
- 3.2.9. Research and development operations as defined in section 112(c)(7) of the CAA;
- 3.2.10. Polymer casting; and
- 3.2.11. Closed molding operations (except for compression/injection molding).

[40 CFR 63.5790(c)]

3.3. Production resins that must meet military specifications are allowed to meet the organic HAP limit contained in that specification if the permittee supplies to the EPA the specifications certified as accurate by the military procurement officer, and those specifications must state a requirement for a specific resin HAP content. Production resins for which this exemption is used must be applied with nonatomizing resin application equipment unless the permittee can demonstrate this is infeasible.

[40 CFR 63.5790(d)]

3.4. Emissions factors are used to determine compliance with the HAP emissions limits in Condition 3.8. The permittee may use the organic HAP emissions factors calculated using the equations in Table 1 to subpart WWWW of part 63, combined with resin and gel coat use data to calculate organic HAP emissions.

[40 CFR 63.5796]

3.5. In lieu of the of the equations in Table 1 to subpart WWWW of part 63, the permittee may elect to use site-specific organic HAP emissions factors to demonstrate compliance provided the site-specific

organic HAP emissions factors are incorporated in the facility's air emissions permit and are based on actual facility HAP emissions test data.

[40 CFR 63.5796]

- 3.6. In order to determine the organic HAP content of resins and gel coats, the permittee may rely on information provided by the material manufacturer, such as manufacturer's formulation data and material safety data sheets (MSDS), using the procedures below, as applicable:
- 3.6.1. Include in the organic HAP total each organic HAP 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 HAP compounds;
 - 3.6.2. If the organic HAP content is provided by the material supplier or manufacturer as a range, the permittee shall use the upper limit of the range for determining compliance. If a separate measurement of the total organic HAP content, such as an analysis of the material by EPA Method 311 of appendix A to 40 CFR part 63, exceeds the upper limit of the range of the total organic HAP content provided by the material supplier or manufacturer, then the permittee shall use the measured organic HAP content to determine compliance;
 - 3.6.3. If the organic HAP content is provided as a single value, the permittee may use that value to determine compliance. If a separate measurement of the total organic HAP content is made and is less than 2 percentage points higher than the value for total organic HAP content provided by the material supplier or manufacturer, then the permittee may still use the provided value to determine compliance. If the measured total organic HAP content exceeds the provided value by 2 percentage points or more, then the permittee shall use the measured organic HAP content to determine compliance.

[40 CFR 63.5797]

- 3.7. In order to calculate the facility organic HAP emissions on a tons-per-year basis, the permittee may use the procedures in either of Condition 3.7.1 or 3.7.2, below:
- 3.7.1. The permittee shall calculate a weighted average organic HAP emissions factor on a lbs/ton of resin and gel coat basis, based on the prior 12 months of operation. The permittee shall multiply the weighted average organic HAP emissions factor by resin and gel coat use over the same period. The permittee may calculate this organic HAP emissions factor based on the equations in Table 1 to 40 CFR part 63, subpart WWWW, or may use any organic HAP emissions factor approved by the EPA, such as factors from AP-42, or site-specific organic HAP emissions factors if they are supported by HAP emissions test data;
 - 3.7.2. The permittee shall conduct performance testing using the test procedures in 40 CFR 63.5850 to determine a site-specific organic HAP emissions factor in units of lbs/ton of resin and gel coat used. The test must be conducted under conditions expected to result in the highest possible organic HAP emissions. The permittee shall multiply this factor by annual resin and gel coat use to determine annual organic HAP emissions; and
 - 3.7.3. The permittee shall perform these calculations to cover the periods in the semiannual compliance reports.

[40 CFR 63.5799(b)]

- 3.8. The permittee shall meet all of the organic HAP emission limits in Appendix A to this permit that apply to operations performed at the facility.

[40 CFR 63.5805(c) and (g) and Table 3]

- 3.9. If the permittee determines, using the procedures in Condition 3.7, that the facility meets or exceeds the 100 tpy threshold of organic HAP during any calendar year, the permittee shall notify EPA in its semiannual compliance report. The permittee may request a one-time exemption from the requirements of 40 CFR 63.5805(d) if the following conditions are met:

- 3.9.1. The exceedance of the 100 tpy threshold was due to circumstances that will not be repeated;
- 3.9.2. The average annual organic HAP emissions from the potentially affected operations for the last 3 years were below 100 tpy; and
- 3.9.3. Projected organic HAP emissions for the next calendar year are below 100 tpy, based on projected resin and gel coat use and the HAP emissions factors calculated according to the procedures in Condition 3.7.

[40 CFR 63.5805(e)]

- 3.10. If the permittee applies for the exemption in Condition 3.9 and subsequently exceeds the 100 tpy organic HAP emissions threshold over the next 12-month period, the permittee shall notify EPA in the semiannual report, the exemption is removed and the permittee shall comply with 40 CFR 63.5805(d) within 3 years from the time facility organic HAP emissions first exceeded the threshold.

[40 CFR 63.5805(f)]

- 3.11. The permittee shall comply with all work practice standards in Appendix B to this permit as applicable.
[40 CFR 63.5805(c) and (g) and Table 4]

3.12. The permittee shall use one of the following methods in Conditions 3.12.1 through 3.12.4 to meet the standards for open molding or centrifugal casting in Condition 3.8. The permittee may use any control method that reduces organic HAP emissions, and may use different compliance options for the different operations listed in Condition 3.8. The necessary calculations must be completed within 30 days after the end of each month. The permittee may switch between the compliance options below. When changing to an option based on a 12-month rolling average, the average must be based on the previous 12 months of data calculated using the compliance option the permittee is changing to, unless the permittee was previously using an option that did not require maintaining records of resin and gel coat use. In this case, the permittee shall immediately begin collecting resin and gel coat use data and demonstrate compliance 12 months after changing options.

3.12.1. The permittee shall:

3.12.1.1. Calculate an actual organic HAP 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 four characteristics vary: the neat resin plus or neat gel coat plus organic HAP content, the gel coat type, the application technique, the control technique. The permittee shall calculate organic HAP emissions factors for each different process stream by using the appropriate equations in Table 1 to 40 CFR, part 63, subpart WWWW, or site-specific organic emission factors discussed in 40 CFR 63.5850. The emission factor calculation should include any and all emission reduction techniques used. If vapor suppressants are being used to reduce HAP emissions, the permittee shall determine the vapor suppressant effectiveness by conducting testing according to the procedures specified in appendix A to 40 CFR, part 63, subpart WWWW.

3.12.1.2. Have demonstrated that this process stream complies with the emission limit in Condition 5.8 if the calculated emission factor is less than or equal to the appropriate emission limit. 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 Conditions 3.12.2 through 3.12.4, then all process streams using that individual resin or gel coat must be included in the averaging calculations.

3.12.2. The permittee shall demonstrate that, on average, the individual organic HAP emissions limits for each unique combination of operation type and resin application method or gel coat type in Condition 3.8 that apply to the permittee's operations have been met by conducting the following:

3.12.2.1. The permittee shall group the process streams described in Condition 3.12.1 by operation type and resin application method or gel coat type listed in Condition 3.8 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 HAP emissions factor calculated in Condition 3.12.1.1 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 3-1:

$$EF_{avg} = \frac{\sum_{i=1}^n (EF_i * M_i)}{\sum_{i=1}^n M_i} \quad \text{(Equation 3-1)}$$

Where

EF_{avg} is the weighted average emission factor (lbs/ton),
 EF_i is the actual organic HAP emission factor for process stream i (lbs/ton),
 M_i is the neat resin plus or neat gel coat plus used during the last 12 calendar months for process stream i (tons), and
 n is the number of process streams where the permittee is calculating an organic HAP emissions factor.

- 3.12.2.2. The permittee may, but is not required to, include process streams where compliance has been demonstrated as described in Condition 3.12.1, subject to the limitations described in Condition 3.12.1.2.
- 3.12.2.3. The permittee shall compare each organic HAP emissions factor calculated in Conditions 3.12.2.1 and 3.12.2.2 with its corresponding organic HAP emissions limit in Condition 3.8. If all emissions factors are equal to or less than their corresponding emission limits, then the permittee is in compliance.

3.12.3. The permittee shall:

- 3.12.3.1. Each month calculate the weighted average organic HAP emissions limit for all open molding operations and the weighted HAP organic HAP emissions limit for all centrifugal casting operations for the facility for the last 12-month period to determine the organic HAP emissions limits. (Open molding operations and centrifugal casting operations may not be averaged with each other.) To do this, the permittee shall multiply the individual organic HAP emissions limits in Condition 3.8 for each operation type by the amount of neat resin plus or neat gel coat plus used in the last 12 months for each operation type, sum these results, and then divide this sum by the total amount of neat resin plus and neat gel coat plus used in open molding operations over the last 12 months as shown in Equation 3-2:

$$EL_{avg} = \frac{\sum_{i=1}^n (EL_i * M_i)}{\sum_{i=1}^n M_i} \quad \text{(Equation 3-2)}$$

Where

EL_{avg} is the weighted average emission limit (lbs/ton),
 EL_i is the organic HAP emission limit for operation i (lbs/ton) from Condition 3.8,
 M_i is the neat resin plus or neat gel coat plus used during the last 12 calendar months for operation i (tons), and
 n is the number of operations.

- 3.12.3.2. Each month calculate the weighted average organic HAP emissions factor for open molding and centrifugal casting. To do this, the permittee shall multiply actual open molding (centrifugal casting) operation organic HAP emissions factors calculated in Condition 3.12.2.1 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 this sum by the total amount of neat resin plus and neat gel coat plus used in open molding (centrifugal casting) operations as

shown in Equation 3-3:

$$EF_{avg} = \frac{\sum_{i=1}^n (EF_i * M_i)}{\sum_{i=1}^n M_i} \quad (\text{Equation 3-3})$$

Where

EF_{avg} is the actual weighted average organic HAP emission factor (lbs/ton),
 EF_i is the actual organic HAP emission factor for operation type i (lbs/ton),
 M_i is the neat resin plus or neat gel coat plus used during the last 12 calendar months for operation type i (tons), and
 n is the number of operations.

- 3.12.3.3. Compare the values calculated in Conditions 3.12.3.1 and 3.12.3.2. If each 12-month rolling average organic HAP emissions factor is less than or equal to the corresponding 12-month rolling average organic HAP emissions limit, then the permittee is in compliance.
- 3.12.4. The permittee may meet the organic HAP emissions limit for one application method and use the same resin(s) for all application method(s). 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.
- 3.12.4.1. For any combination of manual or mechanical resin application, filament application, or centrifugal casting, the permittee may elect to meet the organic HAP emissions limit for any one of these application methods and use the same resin in all of the resin application methods listed in this Condition. Table 7 to 40 CFR part 63, subpart WWWW presents the possible combinations based on a facility selecting the application process that results in the highest allowable organic HAP content resin. If the resin organic HAP content is below the applicable value shown in Table 7 to 40 CFR part 63, subpart WWWW, the resin is in compliance.
- 3.12.4.2. The permittee may also use a weighted average organic HAP content for each application method described in Condition 5.12.4.1. The permittee shall calculate the weighted average organic HAP content monthly. The permittee shall use Equation 5-1 in Condition 5.12.2.1 except substitute organic HAP content for organic HAP emissions factor. The permittee is in compliance if the weighted average organic HAP content based on the last 12 months of resin use is less than or equal to the applicable organic HAP contents in Table 7 to 40 CFR part 63, subpart WWWW.
- 3.12.4.3. The permittee may simultaneously use the averaging provisions in Conditions 3.12.2 or 3.12.3 to demonstrate compliance for any operations and/or resins not included in the compliance demonstrations in Conditions 3.12.4.1 and 3.12.4.2. However, any resins for which compliance is claimed under the option in Conditions 3.12.4.1 and 3.12.4.2 may not be included in any of the averaging calculations described in Conditions 3.12.2 or 3.12.3.
- 3.12.4.4. The permittee does not have to keep records of resin use for any of the individual resins where compliance is demonstrated under the option in Condition 3.12.4.1 unless the permittee elects to include that resin in the averaging calculations described in Condition 3.12.4.2.

[40 CFR 63.5810]

- 3.13. The permittee shall be in compliance at all times with the work practice standards in Condition 3.11, as well as the organic HAP emissions limits in Condition 3.8 or the organic HAP content limits in Table 7 to 40 CFR part 63, subpart WWWW, as applicable, that the permittee is meeting without the use of add-on controls.
[40 CFR 63.6(f)(1) and 63.5835(a)]
- 3.14. At all times, the permittee shall operate and maintain any equipment used in reinforced plastic composites production, including monitoring equipment, in a manner consistent with safety and good air pollution practices for minimizing emissions. These operations and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section of the permit.
[40 CFR 63.5835(c) and 63.6(e)(1)(i)]
- 3.15. The permittee shall demonstrate continuous compliance with each standard in Condition 5.8 according to the methods below:
- 3.15.1. Compliance with organic HAP emissions limits is demonstrated by maintaining an organic HAP emissions factor value less than or equal to the appropriate organic HAP emissions limit in Condition 3.8, on a 12-month rolling average, and/or by including in each compliance report a statement that individual resins and gel coats, as applied, meet the appropriate organic HAP emissions limits, as discussed in Condition 3.22.2.
- 3.15.2. Compliance with organic HAP content limits in Table 7 to 40 CFR part 63, subpart WWWW is demonstrated by maintaining an average organic HAP content value less than or equal to the appropriate organic HAP contents listed in Table 7 to 40 CFR part 63, subpart WWWW on a rolling 12-month basis, and/or by including in each compliance report a statement that resins and gel coats individually meet the appropriate organic HAP content limits in Table 7 to 40 CFR part 63, subpart WWWW, as discussed in Condition 3.22.2.
[40 CFR 63.5900(a)]
- 3.16. The permittee shall demonstrate compliance with the work practice standards in Condition 3.11 by performing the work practice required for the permittee's operation.
[40 CFR 63.5900(a)(4)]
- 3.17. During periods of startup, shutdown or malfunction, the permittee shall meet the organic HAP emissions limits and work practice standards that apply to the permittee.
[40 CFR 63.5900(c)]
- 3.18. The permittee shall obtain written approval in advance from EPA in accordance with the procedures in 40 CFR 63.5(d) and (e) before reconstructing any reinforced plastic composites production operations.
[40 CFR 63.5(b)(3)(ii)]
- 3.19. Equipment added (or a process change) to the existing reinforced plastic composites production operations that is within the scope specified in Condition 3.1 shall be considered part of the reinforced plastic composites production operations and are subject to the provisions of this section of the permit.
[40 CFR 63.5(b)(6)]
- 3.20. At all times, the permittee shall operate and maintain any equipment used in reinforced plastic composites production operations, including monitoring equipment, in a manner consistent with safety and good air pollution practices for minimizing emissions. These operations and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section of the permit.
[40 CFR 63.6(e)(1)(i)]

WWWW Monitoring and Recordkeeping Requirements

- 3.21. The permittee shall keep records of any resins for which it uses the exemption in Condition 3.3.
[40 CFR 63.5790(d)]
- 3.22. The permittee shall monitor and collect data as specified below:
- 3.22.1. Collect and keep records of resin and gel coat use, organic HAP content, and operation where the resin is used if the permittee is meeting any organic HAP emissions limits based on an organic HAP emissions limit in Condition 3.8, or Table 7 to 40 CFR part 63, subpart WWWW if the permittee is averaging organic HAP contents. Resin use records may be based on purchase records if the permittee can reasonably estimate how the resin is applied. The organic HAP content records may be based on resin specifications supplied by the resin supplier.
- 3.22.2. Resin and gel coat records are not required for the individual resins and gel coats that are demonstrated, as applied, to meet their applicable emission as defined in Condition 3.12.1. However, the permittee must retain the records of resin and gel coat organic HAP content, and must include the list of these resins and gel coats and identify their application methods in the semiannual compliance reports.
- 3.22.2.1. If, after an initial demonstration 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 HAP increases, or the application method or controls are changed, the permittee shall once again demonstrate that the individual resin or gel coat meets its emission limit as specified in Condition 3.12.1.
- 3.22.2.2. If any of the changes described in Condition 3.22.2.1 results in a situation where an individual resin or gel coat now exceeds its applicable emission limit in Condition 5.8, the permittee shall begin collecting resin and gel coat use records and calculate compliance using one of the averaging options on a 12-month rolling average.
[40 CFR 63.5895 (c) and (d)]
- 3.23. The permittee shall keep the following records:
- 3.23.1. A copy of each notification and report submitted by the permittee to comply with the requirements of Section 3 of this permit, including all documentation supporting any initial notification or notification of compliance;
- 3.23.2. All data, assumptions and calculations used to determine organic HAP emissions factors or average organic HAP contents for operations listed in Condition 3.8 or Table 7 to 40 CFR part 63, subpart WWWW;
- 3.23.3. A certified statement that the permittee is in compliance with the work practice requirements of Condition 3.11.
[40 CFR 63.10(b)(2)(xiv), 63.5915(a)(1), (c) and (d)]
- 3.24. The permittee shall maintain all applicable records and files of all information (including all reports and notifications) required by this section of the permit in a form suitable and readily available for expeditious inspection and review.
[40 CFR 63.10(b)(1) and 63.5920(a)]
- 3.25. The information specified in Conditions 3.21 through 3.24 and 3.26 through 3.33 shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained as hard copy or on a computer, or

computer readable form including, but not limited to paper, microfilm, computer floppy disks, magnetic tape disks, or microfiche.

[40 CFR 63.10(b)(1), 63.5920(b) and (c)]

- 3.26. The permittee shall maintain relevant records for all required maintenance performed on the monitoring equipment.

[40 CFR 63.10(b)(2)(iii)]

WWW Reporting Requirements

- 3.27. The permittee shall submit the following notifications, in writing, as specified below:

- 3.27.1. A notification of intent to reconstruct the reinforced plastic composites production operations; and
- 3.27.2. A notification of the actual date of startup of the reconstructed reinforced plastic composites production operations, delivered or postmarked within 15 calendar days after that date.
- 3.27.3. If the permittee changes any information submitted in any notification, the permittee shall submit the changes in writing to EPA within 15 days after the change.

[40 CFR 63.9(b)(4), 63.10(d)(1) and 63.5905]

- 3.28. The permittee shall submit to EPA semiannual compliance reports on the following schedule:

- 3.28.1. Each compliance report shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31; and
- 3.28.2. Each compliance report shall 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.

[40 CFR 63.9(h)(3), 63.10(d)(1), 63.5910(a), (b) and (h)]

- 3.29. The compliance report must contain the following information:

- 3.29.1. Company name and address;
- 3.29.2. 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;
- 3.29.3. Date of the report and beginning and ending dates of the reporting period;
- 3.29.4. If there are no deviations from any organic HAP emissions limitations (emissions limit and operating limit) and there are no deviations from the requirements for work practice standards in Condition 3.11, a statement that there were no deviations from the organic HAP emissions limitations or work practice standards during the reporting period;
- 3.29.5. For each deviation from an organic HAP emissions limitation (i.e. emissions limit and operating limit) and for each deviation from the requirements for work practice standards:
 - 3.29.5.1. The total operating time of each affected source during the reporting period; and
 - 3.29.5.2. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken;
- 3.29.6. If multiple compliance options are available, an indication that compliance options have changed since the last compliance report

[40 CFR 63.10(d)(1), 63.5900(b), 63.5910(a), (c), (d) (h) and (i)]

- 3.30. The permittee shall report if the 100 tpy organic HAP emissions threshold has been exceeded if that exceedance would make the facility subject to the requirements of 40 CFR 63.5805(d). The permittee shall include with this report any request for an exemption under Condition 3.9. If the permittee has received an exemption under Condition 3.9 and subsequently exceeds the 100 tpy organic HAP emissions threshold, the permittee shall report this exceedance as required in Condition 3.10.

[40 CFR 63.10(d)(1) and 63.5910(f)]

3.31. The permittee shall report all deviations as defined in 40 CFR part 63, subpart WWWW in the semiannual monitoring report required by Condition 3.47. If the permittee submits a compliance report pursuant to Conditions 3.28 and 3.29, along with, or as part of, the semiannual monitoring report required by Condition 1.41, and the compliance report includes all required information concerning deviations from any organic HAP emissions limitation (including any operating limit) or work practice requirement in this section of the permit, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to EPA.

[40 CFR 63.10(d)(1) and 63.5910(g)]

3.32. Any change in the information already provided under Conditions 3.27 and 3.28 shall be provided to the EPA in writing within 15 calendar days after the change.

[40 CFR 63.9(j)]

4. Emission Unit PPPP – Fiberglass Coating Operations

PPPP Emission Limits and Work Practice Requirements

4.1. Conditions 4.3 through 4.19 apply to all surface coating of plastic parts and products, including the following:

- 4.1.1. All coating operations as defined in 40 CFR 63.4581;
- 4.1.2. All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
- 4.1.3. All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
- 4.1.4. All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

[40 CFR 63.4482(b)]

4.2. The requirements of this section of the permit do not apply to the operations covered under Section 3 of this permit.

[40 CFR 63.4481(c)(6)]

4.3. The permittee shall at all times limit organic hazardous air pollutant (HAP) emissions to the atmosphere from the surface coating of plastic parts and products (as specified in Condition 4.1), to no more than 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period, as specified in Condition 4.12.

[40 CFR 63.6(f)(1), 63.4490(a)(1), and 63.4500(a)]

4.4. The permittee shall include all coatings (as defined in 40 CFR 63.4581), thinners, and/or other additives, and cleaning materials used when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in Condition 4.3.

[40 CFR 63.4491]

4.5. To determine whether the organic HAP emission rate is equal to or less than the emission limit in Condition 4.3, the permittee shall use at least one of the compliance options in Conditions 4.6 and 4.7. Either of the compliance options may be applied to an individual coating operation, or to multiple coating operations as a group, or to the entire surface coating of plastic parts operation. Different compliance options may be used for different coating operations, or at different times on the same coating operation. Different compliance options may be used when different coatings are applied to the

same part, or when the same coating is applied to different parts. However, different compliance options may not be used at the same time on the same coating operation.

[40 CFR 63.4491]

- 4.6. *Compliant material option.* In order to use the compliant material option, the permittee shall demonstrate that the organic HAP content of each coating used in the coating operation is less than or equal to the emission limit in Condition 4.3, and that each thinner and/or other additive, and cleaning material used contains no organic HAP. The permittee shall use the following equation to determine the organic HAP content of coatings:

$$H_c = \frac{W_c}{S_c} \quad \text{(Equation 4-1)}$$

Where

H_c is the organic HAP content of the coating, kg of organic HAP per kg coating solids used

W_c is the mass fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to paragraph (a) of Appendix C to this Permit.

S_c is the Mass fraction of coating solids, kg coating solids per kg coating, determined according to paragraph (b) of Appendix C to this Permit

- 4.6.1. *Demonstrate continuous compliance using the compliant material option.* For each compliance period, to demonstrate continuous compliance, the permittee shall use no coating for which the organic HAP content (determined using Equation 4-1) exceeds the emission limit in Condition 4.3, and use no thinner and/or other additive, or cleaning material that contains organic HAP, determined according to paragraph (a) of Appendix C to this Permit.

- 4.6.2. If the permittee chooses to comply with the emission limitation by using the compliant material option, the use of any coating, thinner and/or other additive, or cleaning material that does not meet the criteria specified in Condition 4.6.1 is a deviation from the emission limitations that must be reported as specified in Condition 4.19.5.7.

[40 CFR 63.4491(a) and 63.4542]

- 4.7. *Emission rate without add-on controls option.* In order to use the emission rate without add-on controls option, the permittee shall demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the emission limit in Condition 4.3, calculated as a rolling 12-month emission rate and determined on a monthly basis.

- 4.7.1. *Demonstrate continuous compliance using the emission rate without add-on controls.* To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to paragraphs (a) through (g) in Appendix D to this Permit, must be less than or equal to the emission limit in Condition 4.3. The calculations in paragraphs (a) through (g) in Appendix D to this Permit must be performed on a monthly basis using data from the previous 12 months of operation.

- 4.7.2. If the permittee chooses to comply with the emission limitation by using the emission rate without add-on controls option, and the organic HAP emission rate for any 12-month compliance period exceeded the emission limit in Condition 4.3, this is a deviation from the emission limitation for that compliance period and must be reported as specified in Condition 4.19.5.8.

[40 CFR 63.4491(b) and 63.4552]

- 4.8. At all times, the permittee shall operate and maintain any equipment used in surface coating of plastic parts and products, including monitoring equipment, in a manner consistent with safety and good air pollution practices for minimizing emissions. These operations and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section of the permit.
[40 CFR 63.4500(b) and 63.6(e)(1)(i)]
- 4.9. The permittee may not conduct surface coating of plastic parts and products in violation of the requirements of this section of the permit.
[40 CFR 63.4(a)(1)]
- 4.10. The permittee shall obtain written approval in advance from the EPA in accordance with the procedures in 40 CFR 63.5(d) and (e) before reconstructing any surface coating of plastic parts and products operations.
[40 CFR 63.5(b)(3)(ii)]
- 4.11. Equipment added (or a process change) to the existing surface coating of plastic parts and products operations that is within the scope specified in Condition 4.1 shall be considered part of the surface coating of plastic parts and products operations and are subject to the provisions of this section of the permit.
[40 CFR 63.5(b)(6)]
- 4.12. *Compliance period.* A compliance period consists of 12 months. Each month is the end of a compliance period consisting of that month and the preceding 11 months.
[40 CFR 63.4542(a) and 63.4552(a)]

PPPP Monitoring and Recordkeeping Requirements

- 4.13. The permittee shall maintain a log for the surface coating of plastic parts and products. In the log, the permittee shall, at a minimum, contemporaneously record the date, time, identification of part coated, identification of coating applied, quantity of coating applied, identification of other thinners and/or additives or cleaning materials used, quantity of other thinners and/or additives or cleaning materials used, and compliance option selected.
[40 CFR 63.4530(c)(1)-(3)]
- 4.14. The permittee shall collect and keep records of the data and information listed below:
- 4.14.1. A copy of each notification and report submitted by the permittee to comply with the requirements of Section 4 of this permit, and the documentation supporting each notification and report;
- 4.14.2. A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the mass fraction of coating solids for each coating. If the permittee conducted testing to determine mass fraction of organic HAP, density, or coating solids, the permittee shall keep a copy of the complete test report. If the permittee uses information provided by the manufacturer or supplier of the material that was based on testing, the permittee shall keep the summary sheet of results provided by the manufacturer or supplier.
- 4.14.3. For each compliance period, the records specified below:
- 4.14.3.1. A record of the coating operations on which each compliance option was used, and the time periods (beginning and ending dates and times) for each option used;
- 4.14.3.2. For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 4-1 in Condition 4.6;

- 4.14.3.3. For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 4-2 through 6-2C in Appendix D to this Permit and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to paragraph (e)(4) in Appendix D; the calculation of the total mass of coating solids used each month using Equation 4-3 in Appendix D; and the calculation of each 12-month organic HAP emission rate using Equation 4-4 in Appendix D;
- 4.14.4. A record of the name and mass of each coating, thinner, and/or other additive, and cleaning material used during each compliance period. If the compliant material option is being used for all coatings at the facility, the permittee may maintain purchase records for each material used rather than a record of the mass used;
- 4.14.5. A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period;
- 4.14.6. A record of the mass fraction of coating solids for each coating used during each compliance period;
- 4.14.7. If the permittee uses an allowance in Equation 4-2 in Appendix D for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage and disposal facility (TSDF) according to paragraph (e)(4) in Appendix D, the permittee shall keep records of the information specified below:
 - 4.14.7.1. The name and address of each TSDF to which the permittee sent materials for which an allowance in Equation 4-2 in Appendix D was used, a statement of which subparts under 40 CFR 262, 264, 265, and 266 apply to the facility, and the date of each shipment;
 - 4.14.7.2. Identification of the coating operations producing waste materials included in each shipment and the month or months in which the permittee used the allowance for these materials in Equation 4-2 in Appendix D; and
 - 4.14.7.3. The methodology used in accordance with paragraph (e)(4) in Appendix D to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This shall include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment.
- 4.14.8. Records of the date, time and duration of each deviation.

[40 CFR 63.4530, 63.4542(d), and 63.4552(d)]

4.15. Failure to collect and keep the records specified in Condition 4.14 is a deviation from the requirements of 40 CFR part 63, subpart PPPP.

[40 CFR 63.4530]

4.16. The permittee shall maintain files of all information (including all reports and notifications) required by this section of the permit in a form suitable and readily available for expeditious inspection and review. Where appropriate, the records may be maintained as electronic spreadsheets or as a database.

[40 CFR 63.10(b)(1) and 63.4531(a)]

4.17. The files specified in Conditions 4.13 and 4.14 shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche

[40 CFR 63.10(b)(1), 63.4531(b)]

4.18. The permittee shall maintain all documentation supporting initial notifications and notifications of compliance status. Any change in such information already provided shall be provided to EPA within 15 days.

[40 CFR 63.9(j) and 63.10(b)(2)(xiv)]

PPPP Reporting Requirements

4.19. *Semiannual compliance reports.* The permittee shall submit semiannual compliance reports for the surface coating of plastic parts according to the following requirements:

- 4.19.1. Each semiannual compliance report shall cover the period from January 1 through June 30 or the semiannual period from July 1 through December 31;
- 4.19.2. Each semiannual compliance report shall 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;
- 4.19.3. The information reported for each of the months in the reporting period shall be based on the last 12 months of data prior to the date of each monthly calculation;
- 4.19.4. The permittee shall report all deviations as defined in 40 CFR 63.4581 in the semiannual monitoring report required by Condition 1.41.² If the permittee submits a semiannual compliance report along with, or as part of, the semiannual monitoring report required by Condition 1.41, and the semiannual compliance report includes all required information concerning deviations from any limitation in Section 4 of this permit, its submission will be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However submission of a semiannual compliance report shall not otherwise affect any obligation the permittee may have to report deviations from the permit requirements to EPA;
- 4.19.5. The semiannual compliance report shall contain the following information:
 - 4.19.5.1. Company name and address;
 - 4.19.5.2. 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;
 - 4.19.5.3. Date of the 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;
 - 4.19.5.4. Identification of the compliance option or options that the permittee used on each coating operation during the reporting period. If the permittee switched between compliance options during the reporting period, the permittee shall report the beginning and ending dates for each option that was used;

² According to 40 CFR 63.4581 a deviation is defined as "any instance in which an affected source subject to this subpart, or an owner or operator of such a source (1) Fails to meet any requirement or obligation established by this subpart including but not limited to, any emission limit or operating limit or work practice standard; (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or (3) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart."

- 4.19.5.5. For the emission rate without add-on controls option, the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period;
 - 4.19.5.6. If there were no deviations from the emission limitation in Condition 4.3, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period:
 - 4.19.5.6.1. If the compliant material option was used, the permittee shall submit a statement that that the coating operation was in compliance with the emission limitation during the reporting period because no coatings for which the organic HAP content exceeded the emission limit in Condition 4.3 were used, and no thinner and/or additive, or cleaning material that contained organic HAP, determined according to the requirements in paragraph (a) of Appendix C of this Permit were used;
 - 4.19.5.6.2. If the emission rate without add-on controls was used, the permittee shall submit a statement that the coating operation was in compliance with the emission limitation during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the emission limit in Condition 4.3, determined according to the calculation methodology in Appendix D.
 - 4.19.5.7. If the compliant material option was used, and there was a deviation from the organic HAP content requirements in Condition 4.3, the semiannual compliance report shall contain the following information:
 - 4.19.5.7.1. Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and times periods each was used;
 - 4.19.5.7.2. The calculation of the organic HAP content, using Equation 4-1, for each coating identified in Condition 4.19.5.7.1;
 - 4.19.5.7.3. The determination of mass fraction of organic HAP for each thinner and/or additive, and cleaning material identified in Condition 4.19.5.7.1; and
 - 4.19.5.7.4. A statement of the cause of each deviation.
 - 4.19.5.8. If the emission rate without add-on controls option was used, and there was a deviation from the emission limit in Condition 4.3, the semiannual compliance report shall contain the following information:
 - 4.19.5.8.1. The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the emission limit in Condition 4.3;
 - 4.19.5.8.2. The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. The permittee shall submit the calculations for Equations 4-2, 4-2A through 4-2C, 4-3, and 4-4 in Appendix D, and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to paragraph (e)(4) of Appendix D; and
 - 4.19.5.8.3. A statement of the cause of each deviation.
- [40 CFR 63.9(h)(3), 63.10(d)(1), 63.4520, 63.4542(c) and 63.4552(c)]

5. Emission Unit MMMM – Metal Coating Operations

MMMM Monitoring and Recordkeeping Requirements

- 5.1. Each month, the permittee shall record the monthly and rolling 12-month total quantity (in liters or gallons) of coatings that contain organic HAPs used in the surface coating of miscellaneous metal parts. Surface coating is defined and miscellaneous metal parts are described in 40 CFR 63.3881(a).
[40 CFR 63.3881]

6. Emission Unit BLDG – Building

BLDG Emission Limits and Work Practice Requirements

- 6.1. Particulate matter emissions from each stack of this emission unit shall not exceed an average of 0.23 grams per dry standard cubic meter (0.1 grains per dry standard cubic foot) during any three-hour period.
- 6.1.1. Compliance with the particulate matter limit in Condition 6.1 is determined using EPA Reference Method 5 (see 40 CFR part 60, appendix A).
[40 CFR 49.125(d)(3) and (e)]

7. Emission Unit BOOTH – Spray Booth

BOOTH Emission Limits and Work Practice Requirements

- 7.1. Particulate matter emissions from each stack of this emission unit shall not exceed an average of 0.23 grams per dry standard cubic meter (0.1 grains per dry standard cubic foot) during any three-hour period.
- 7.1.1. Compliance with the particulate matter limit in Condition 7.1 is determined using EPA Reference Method 5 (see 40 CFR part 60, appendix A).
[40 CFR 49.125(d)(3) and (e)]
- 7.2. The spray booth shall not be operated unless all exhaust air passes through a dual-layer exhaust filter. The first filter layer shall have a control efficiency of at least 93%, per manufacturer's specifications. The second filter layer shall have a control efficiency of at least 98%, per manufacturer's specifications.
[40 CFR 49.124(d)(1), 49.125(d)(3), 71.6(a)(1) and 64.6(c)]
- 7.3. The pressure differential across the exhaust filters when the booth is operating shall not be less than 0 inches of water and shall not exceed 1.0 inches of water.
[40 CFR 49.124(d)(1), 49.125(d)(3), 71.6(a)(1) and 64.6(c)]
- 7.4. The exhaust filters shall be maintained in good operating condition, and such that the filters:
- 7.4.1. Are not over-loaded with accumulated material to the point of being blinded;
- 7.4.2. Shall be properly aligned and seated; and
- 7.4.3. Shall not have visible rips, tears or holes.
[40 CFR 49.124(d)(1), 49.125(d)(3), 71.6(a)(1) and 64.7(c)]

BOOTH Monitoring and Recordkeeping Requirements

- 7.5. The permittee shall install, calibrate, operate and maintain a gauge to indicate, in inches of water, the static pressure differential across the exhaust filters.
[40 CFR 71.6(a)(3)(i)(B) and (C), 71.6(c)(1), 64.7(b) and 64.7(c)]
- 7.6. The permittee shall monitor and record the static pressure differential across the exhaust filters at least once per operational shift. The records shall include the date and time that the static pressure differential reading was taken.
[40 CFR 71.6(a)(3)(i)(B), 71.6(a)(3)(ii), 71.6(c)(1), 64.6(c) and 64.7(a)]

- 7.7 The monitoring equipment required under Condition 7.5 shall be operated in accordance with manufacturers specifications.
- [40 CFR 71.6(a)(3)(ii), 71.6(c)(1) and 64.7(c)]
- 7.8 Upon detecting an excursion or exceedance, the Permittee shall restore operation of the spray booth (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- [40 CFR 64.7(d)(1)]
- 7.8.1 An excursion is defined as operation of the control equipment beyond the value defined in Condition 7.3.
- [40 CFR 64.1, 64.6(c)(2)]
- 7.8.2 An exceedance is defined as any measured emission of PM which exceeds an emission limit specified in Condition 7.1.
- [40 CFR 64.1, 64.6(c)(2)]
- 7.9 If the Permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance (as defined in Condition 7.8) while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the EPA and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
- [40 CFR 64.7(e)]
- 7.10 The Permittee shall develop and implement a quality improvement plan (QIP) in accordance with 40 CFR 64.8 if EPA Region 10 determines, pursuant to 40 CFR 64.7(d)(2), that the Permittee has not used acceptable procedures in response to an excursion or exceedance as defined in Condition 7.8.
- [40 CFR 64.7(d)(2) and 64.8(a)]
- 7.11 The reports required in Conditions 1.41 and 1.43 shall include the following:
- 7.11.1 Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions and exceedances, as applicable, and the corrective actions taken;
- 7.11.2 Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- 7.11.3 A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.
- [40 CFR 64.9(a)(2)]
- 7.12 Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Instead of paper records, the Permittee may maintain records on

alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b)]

8. Emission Unit COMB – Combustion Devices

COMB Emission Limits and Work Practice Requirements

- 8.1 Particulate matter emissions from each stack of this emission unit shall not exceed an average of 0.23 grams per dry standard cubic meter (0.1 grains per dry standard cubic foot), corrected to seven percent oxygen, during any three-hour period.
- 8.1.1 Compliance with the particulate matter limit in Condition 10.1 is determined using EPA Reference Method 5 (see 40 CFR part 60, appendix A) [40 CFR 49.125(d)(1) and (
- 8.2 Sulfur dioxide emissions from each stack of this emission unit shall not exceed an average of 500 parts per million by volume, on a dry basis and corrected to seven percent oxygen, during any three-hour period.
- 8.2.1 Compliance with the SO₂ limit in Condition 10.2 is determined using EPA Reference Methods 6, 6A, 6B, and 6C as specified in the applicability section of each method (see 40 CFR part 60, appendix A). [40 CFR 49.129(d)(1) and (e)(1)]

Appendix A

Table 3 from 40 CFR Part 63, Subpart WWWW

TABLE 3 TO SUBPART WWW OF PART 63—ORGANIC HAP EMISSIONS LIMITS FOR EXISTING OPEN MOLDING SOURCES, NEW OPEN MOLDING SOURCES EMITTING LESS THAN 100 TPY OF HAP, AND NEW AND EXISTING CENTRIFUGAL CASTING AND CONTINUOUS LAMINATION/CASTING SOURCES THAT EMIT LESS THAN 100 TPY OF HAP

As specified in 40 CFR 63.5805, you must meet the following organic HAP emissions limits that apply to you:

If your operation type is . . .	And you use . . .	Your organic HAP emissions limit is . . .
1. open molding—corrosion-resistant and/or high strength (CR/HS)	a. mechanical resin application b. filament application c. manual resin application	113 lb/ton. 171 lb/ton. 123 lb/ton.
2. open molding—non-CR/HS	a. mechanical resin application b. filament application c. manual resin application	88 lb/ton. 188 lb/ton. 87 lb/ton.
3. open molding—tooling	a. mechanical resin application b. manual resin application	254 lb/ton. 157 lb/ton.
4. open molding—low-flame spread/low-smoke products	a. mechanical resin application b. filament application c. manual resin application	497 lb/ton. 270 lb/ton. 238 lb/ton.
5. open molding—shrinkage controlled resins ²	a. mechanical resin application b. filament application c. manual resin application	354 lb/ton. 215 lb/ton. 180 lb/ton.
6. open molding—gel coat ³	a. tooling gel coating b. white/off white pigmented gel coating c. all other pigmented gel coating d. CR/HS or high performance gel coat e. fire retardant gel coat f. clear production gel coat	440 lb/ton. 267 lb/ton. 377 lb/ton. 605 lb/ton. 854 lb/ton. 522 lb/ton.
7. centrifugal casting—CR/HS	a. resin application with the mold closed, and the mold is vented during spinning and cure b. resin application with the mold closed, and the mold is not vented during spinning and cure c. resin application with the mold open, and the mold is vented during spinning and cure d. resin application with the mold open, and the mold is not vented during spinning and cure	25 lb/ton. ⁴ NA—this is considered to be a closed molding operation. 25 lb/ton. ⁴ Use the appropriate open molding emission limit. ⁵
8. centrifugal casting—non-CR/HS	a. resin application with the mold closed, and the mold is vented during spinning and cure b. resin application with the mold closed, and mold is not vented during the spinning and cure c. resin application with the mold open, and the mold is vented during spinning and cure d. resin application with the mold open, and the mold is not vented during spinning and cure	20 lb/ton. ⁴ NA—this is considered to be a closed molding operation. 20 lb/ton. ⁴ Use the appropriate open molding emission limit. ⁵

If your operation type is . . .	And you use . . .	¹ Your organic HAP emissions limit is . . .
9. pultrusion ⁶	N/A	reduce total organic HAP emissions by at least 60 weight percent.
10. continuous lamination/casting	N/A	reduce total organic HAP emissions by at least 58.5 weight percent or not exceed an organic HAP emissions limit of 15.7 lbs of organic HAP per ton of neat resin plus and neat gel coat plus.

¹Organic HAP emissions limits for open molding and centrifugal casting are expressed as lb/ton. You must be at or below these values based on a 12-month rolling average.

²This emission limit applies regardless of whether the shrinkage controlled resin is used as a production resin or a tooling resin.

³If you only apply gel coat 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. If you use multiple application methods and any portion of a specific gel coat is applied using nonatomized spray, you may use the nonatomized spray gel coat equation to calculate an emission factor for the manually applied portion of that gel coat. Otherwise, use the atomized spray gel coat application equation to calculate emission factors.

⁴For compliance purposes, calculate your emission factor using only the appropriate centrifugal casting equation in item 2 of Table 1 to this subpart, or a site specific emission factor for after the mold is closed as discussed in 40 CFR 63.5796.

⁵Calculate your emission factor using the appropriate open molding covered cure emission factor in item 1 of Table 1 to this subpart, or a site specific emission factor as discussed in 40 CFR 63.5796.

⁶Pultrusion machines that produce parts that meet the following criteria: 1,000 or more reinforcements or the glass equivalent of 1,000 ends of 113 yield roving or more; and have a cross sectional area of 60 square inches or more are not subject to this requirement. Their requirement is the work practice of air flow management which is described in Table 4 to this subpart.

[70 FR 50131, Aug. 25, 2005]

Appendix B

Table 4 from 40 CFR Part 63, Subpart WWWW

TABLE 4 TO SUBPART WWW OF PART 63—WORK PRACTICE STANDARDS

As specified in 40 CFR 63.5805, you must meet the work practice standards in the following table that apply to you:

For . . .	You must . . .
1. a new or existing closed molding operation using compression/injection molding	uncover, unwrap or expose only one charge per mold cycle per compression/injection molding machine. For machines with multiple molds, one charge means sufficient material to fill all molds for one cycle. For machines with robotic loaders, no more than one charge may be exposed prior to the loader. For machines fed by hoppers, sufficient material may be uncovered to fill the hopper. Hoppers must be closed when not adding materials. Materials may be uncovered to feed to slitting machines. Materials must be recovered after slitting.
2. a new or existing cleaning operation	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.
3. a new or existing materials HAP-containing materials storage operation	keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials. Bulk HAP-containing materials storage tanks may be vented as necessary for safety.
4. an existing or new SMC manufacturing operation	close or cover the resin delivery system to the doctor box on each SMC manufacturing machine. The doctor box itself may be open.
5. an existing or new SMC manufacturing operation	use a nylon containing film to enclose SMC.
6. all mixing or BMC manufacturing operations ¹	use mixer covers with no visible gaps present in the mixer covers, except that gaps of up to 1 inch are permissible around mixer shafts and any required instrumentation.
7. all mixing or BMC manufacturing operations ¹	close any mixer vents when actual mixing is occurring, except that venting is allowed during addition of materials, or as necessary prior to adding materials or opening the cover for safety. Vents routed to a 95 percent efficient control device are exempt from this requirement.
8. all mixing or BMC manufacturing operations ¹	keep the mixer covers closed while actual mixing is occurring except when adding materials or changing covers to the mixing vessels.
9. a new or existing pultrusion operation manufacturing parts that meet the following criteria: 1,000 or more reinforcements or the glass equivalent of 1,000 ends of 113 yield roving or more; and have a cross sectional area of 60 square inches or more that is not subject to the 95 percent organic HAP emission reduction requirement	<ul style="list-style-type: none"> i. not allow vents from the building ventilation system, or local or portable fans to blow directly on or across the wet-out area(s), ii. not permit point suction of ambient air in the wet-out area(s) unless that air is directed to a control device, iii. use devices such as deflectors, baffles, and curtains when practical to reduce air flow velocity across the wet-out area(s), iv. direct any compressed air exhausts away from resin and wet-out area(s), v. convey resin collected from drip-off pans or other devices to reservoirs, tanks, or sumps via covered troughs, pipes, or other covered conveyance that shields the resin from the ambient air, vi. cover all reservoirs, tanks, sumps, or HAP-containing materials storage vessels except when they are being charged or filled, and vii. cover or shield from ambient air resin delivery systems to the wet-out area(s) from reservoirs, tanks, or sumps where practical.

¹Containers of 5 gallons or less may be open when active mixing is taking place, or during periods when they are in process (i.e., they are actively being used to apply resin). For polymer casting mixing operations, containers with a surface area of 500 square inches or less may be open while active mixing is taking place.

[70 FR 50133, Aug. 25, 2005]

Appendix C

Text from 40 CFR 63.4541(a)&(b)

(a) You must determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during the compliance period by using one of the options in paragraphs (1) through (5):

(1) *Method 311 (appendix A to 40 CFR part 63)*. You may use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in paragraphs (i) and (ii) when performing a Method 311 test.

(i) Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do not have to count it. Express the mass fraction of each organic HAP you count as a value truncated to four places after the decimal point (e.g., 0.3791).

(ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point (e.g., 0.763).

(2) *Method 24 (appendix A to 40 CFR part 60)*. For coatings, you may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may use the alternative method contained in appendix A to this subpart, rather than Method 24. You may use the volatile fraction that is emitted, as measured by the alternative method in appendix A to this subpart, as a substitute for the mass fraction of organic HAP.

(3) You may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. You must follow the procedure in 40 CFR 63.7(f) to submit an alternative test method for approval.

(4) You may rely on information other than that generated by the test methods specified in paragraphs (1) through (3) of this section, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. If there is a disagreement between such information and results of a test conducted according to paragraphs (1) through (3), then the test method results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(5) Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, you may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 3 or 4 to 40 CFR part 63 subpart PPPP. If you use the tables, you must use the values in Table 3 for all solvent blends that match Table 3 entries according to the instructions for Table 3, and you may use Table 4 only if the solvent blends in the materials you use do not match any of the solvent blends in Table 3 and you know only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) test indicate higher values than those listed on Table 3 or 4 to this subpart, the Method 311 results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(b) You must determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in paragraphs (1) through (3):

(1) *Method 24 (appendix A to 40 CFR part 60)*. Use Method 24 for determining the mass fraction of coating solids. For reactive adhesives in which some of the liquid fraction reacts to form solids, you may use the alternative method contained in appendix A to 40 CFR part 63, rather than Method 24, to determine the mass fraction of coating solids.

(2) *Alternative method*. You may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. You must follow the procedure in 40 CFR 63.7(f) to submit an alternative test method for approval.

(3) You may obtain the mass fraction of coating solids for each coating from the supplier or manufacturer. If there is disagreement between such information and the test method results, then the test method results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct

Appendix D

Text from 40 CFR 63.4551(a)-(g)

- (a) Determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in Appendix C of this Permit, paragraph (a).
- (b) Determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during each month according to the requirements in Appendix C of this Permit, paragraph (b).
- (c) Determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475-98, “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products” (incorporated by reference, see 40 CFR 63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-98 and other such information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 4-2A, 4-2B, 4-2C, and 4-3 of this section.
- (d) Determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine the volume of each material used. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 4-4A, 4-2B, 4-2C, and 4-3 of this section.
- (e) The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 4-2:

$$H_e = A + B + C - R_w \quad \text{(Equation 4-2)}$$

Where

H_e is the total mass of organic HAP emissions during the month, kg

A is the total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 4-2A of this section.

B is the total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 4-2B of this section.

C is the total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 4-2C of this section.

R_w is the total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to paragraph (e)(4) of this section. (You may assign a value of zero to R_w if you do not wish to use this allowance.)

- (1) Calculate the kg organic HAP in the coatings used during the month using Equation 4-2A:

$$A = \sum_{i=1}^m (Vol_{c,i})(D_{c,i})(W_{c,i}) \quad \text{(Equation 4-2A)}$$

Where

A is the total mass of organic HAP in the coatings used during the month, kg

Vol_{c,i} is the total volume of coating, i, used during the month, liters

D_{c,i} is the density of coating, i, kg coating per liter coating

W_{c,i} is the mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in 40 CFR 63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in 40 CFR, part 63, appendix A

m is the number of different coatings used during the month

- (2) Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 4-2B:

$$B = \sum_{j=1}^n (Vol_{t,j})(D_{t,j})(W_{t,j}) \quad (\text{Equation 4-2B})$$

Where

B is the total mass of organic HAP in the thinners and/or other additives used during the month, kg

Vol_{t,j} is the total volume of thinner and/or other additive, j, used during the month, liters

D_{t,j} is the density of thinner and/or other additive, j, kg per liter

W_{t,j} is the mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in 40 CFR 63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in 40 CFR, part 63, appendix A

n is the number of different thinners and/or other additives used during the month.

- (3) Calculate the kg organic HAP in the cleaning materials used during the month using Equation 4-2C:

$$C = \sum_{k=1}^p (Vol_{s,k})(D_{s,k})(W_{s,k}) \quad (\text{Equation 4-2C})$$

Where

C is the total mass of organic HAP in the cleaning materials used during the month, kg

Vol_{s,k} is the total volume of cleaning material, k, used during the month, liters

D_{s,k} is the density of cleaning material, k, kg per liter

W_{s,k} is the mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material

p is the number of different cleaning materials used during the month

- (4) If you choose to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 4-2, then you must determine the mass according to paragraphs (i) through (iv).
- (i) You may only include waste materials in the determination that are generated by coating operations in the affected source for which you use Equation 4-2 of this section and that will be treated or disposed of by a facility that is regulated as a TSDF under 40 CFR part 262, 264, 265, or 266. The TSDF may be either off-site or on-site. You may not include organic HAP contained in wastewater.
 - (ii) You must determine either the amount of the waste materials sent to a TSDF during the month or the amount collected and stored during the month and designated for future transport to a TSDF. Do not include in your determination any waste materials sent to a TSDF during a month

if you have already included them in the amount collected and stored during that month or a previous month.

- (iii) Determine the total mass of organic HAP contained in the waste materials specified in paragraph (ii).
 - (iv) You must document the methodology you use to determine the amount of waste materials and the total mass of organic HAP they contain, as required in 40 CFR 63.4530(g). If waste manifests include this information, they may be used as part of the documentation of the amount of waste materials and mass of organic HAP contained in them.
- (f) Determine the total mass of coating solids used, kg, which is the combined mass of coating solids for all the coatings used during each month, using Equation 4-3:

$$M_{st} = \sum_{i=1}^m (Vol_{c,i})(D_{c,i})(W_{s,i}) \quad \text{(Equation 4-3)}$$

Where

M_{st} is the total mass of coating solids used during the month, kg.

$Vol_{c,i}$ is the total volume of coating, i, used during the month, liters.

$D_{c,i}$ is the density of coating, i, kg per liter, determined according to 40 CFR 63.4551(c).

$W_{s,i}$ is the mass fraction of coating solids for coating, i, kgs solids per kg coating, determined according to 40 CFR 63.4541(b).

m is the number of different coatings used during the month.

- (g) Calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per kg (lb) coating solids used, using Equation 4-4:

$$H_{yr} = \frac{\sum_{y=1}^n H_e}{\sum_{y=1}^n M_{st}} \quad \text{(Equation 4-4)}$$

Where

H_{yr} is the average organic HAP emission rate for the compliance period, kg organic HAP emitted per kg coating solids used.

H_e is the total mass of organic HAP emissions from all materials used during month, y, kg, as calculated by Equation 4-2.

M_{st} is the total mass of coating solids used during month, y, kg, as calculated by Equation 4-3.

n is the total number of full or partial months in the compliance period (after the initial compliance period, n = 12).