

AIR EMISSION PERMIT NO. 10300014- 003
Total Facility Oper. Permit - Reissuance

IS ISSUED TO

Alumacraft Boat Company

ALUMACRAFT BOAT COMPANY
315 St. Julien Street West
St. Peter, Nicollet County, MN 56082

The emission units, control equipment and emission stacks at the stationary source authorized in this permit reissuance are as described in the Permit Applications Table.

Permit Applications Table

Permit Type	Application Date	Permit Action
Total Facility Operating Permit -Reissuance	11/09/2005, 04/19/2010	003

This permit reissuance supersedes Air Emission Permit No. 10300014-002 and authorizes the Permittee to operate the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Unless otherwise indicated, all the Minnesota rules cited as the origin of the permit terms are incorporated into the SIP under 40 CFR § 52.1220, and as such as are enforceable by U.S. Environmental Protection Agency (EPA) Administrator or citizens under the Clean Air Act.

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

Operating Permit Issue Date: June 16, 2010

Expiration Date: June 16, 2015

– Title I Conditions do not expire.

Don Smith, P.E., Manager
Air Quality Permits Section
Industrial Division

for Paul Eger
Commissioner
Minnesota Pollution Control Agency

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NOTICE TO THE PERMITTEE:

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

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

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

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

PERMIT SHIELD:

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

FACILITY DESCRIPTION:

Alumacraft Boat Company is an aluminum recreational boat manufacturing facility. This permit is for the reissuance of a Part 70 Operating Permit and authorizes operation of the facility.

The emission sources at the facility are four paint booths, gluing operations, and solvent cleaning. The facility also has a number of small combustion units that qualify as insignificant activities. Pollution control equipment at the facility includes panel filters on each of the paint booths.

The facility is a major source under the Part 70 Operating Permit Program as well as the National Emission Standards for Hazardous Air Pollutants (NESHAP) program (40 CFR § 70.2 and 40 CFR Pt. 63). The facility has accepted limits on particulate matter (PM), particulate matter less than 10 microns (PM_{10}), particulate matter less than 2.5 microns ($PM_{2.5}$), and volatile organic compounds (VOCs) such that the facility avoids the major source threshold for Prevention of Significant Deterioration (PSD) (40 CFR § 52.21).

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Alumacraft Boat Co
 Permit Number: 10300014 - 003

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

Subject Item:	Total Facility
What to do	Why to do it
SOURCE-SPECIFIC REQUIRMENTS	hdr
Permit Appendices: This permit contains 3 appendices as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in the appendices.	Minn. R. 7007.0800, subp. 2
OPERATIONAL REQUIREMENTS	hdr
The Permittee shall comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080. Compliance shall be demonstrated upon written request by the MPCA.	40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subps. 7A, 7L & 7M; Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subps. 14 and 16(J)
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
PERFORMANCE TESTING	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A and/or B.	Minn. R. ch. 7017

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Alumacraft Boat Co
 Permit Number: 10300014 - 003

<p>Performance Test Notifications and Submittals:</p> <p>Performance Tests are due as outlined in Table A of the permit. See Table B for additional testing requirements.</p> <p>Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test</p> <p>The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.</p>	<p>Minn. R. 7017.2018; Minn. R. 7017.2030, subps. 1-4, Minn. R. 7017.2035, subps. 1-2</p>
<p>Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change.</p>	<p>Minn. R. 7017.2025, subp. 3</p>
<p>MONITORING REQUIREMENTS</p>	<p>hdr</p>
<p>Monitoring Equipment Calibration: The Permittee shall calibrate all required monitoring equipment at least once every 12 months (any requirements applying to continuous emission monitors are listed separately in this permit).</p>	<p>Minn. R. 7007.0800, subp. 4(D)</p>
<p>Operation of Monitoring Equipment: Unless otherwise noted in Tables A and/or B, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.</p>	<p>Minn. R. 7007.0800, subp. 4(D)</p>
<p>RECORDKEEPING</p>	<p>hdr</p>
<p>Recordkeeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).</p>	<p>Minn. R. 7007.0800, subp. 5(C)</p>
<p>Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350, subp. 2), including records of the emissions resulting from those changes.</p>	<p>Minn. R. 7007.0800, subp. 5(B)</p>
<p>If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. For expiring permits, these records shall be kept for a period of five years from the date the change was made or until permit reissuance, whichever is longer. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format.</p>	<p>Minn. R. 7007.1200, subp. 4</p>
<p>REPORTING/SUBMITTALS (see also Table B)</p>	<p>hdr</p>
<p>Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3.</p> <p>At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.</p>	<p>Minn. R. 7019.1000, subp. 3</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Alumacraft Boat Co

Permit Number: 10300014 - 003

<p>Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2.</p> <p>At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.</p>	<p>Minn. R. 7019.1000, subp. 2</p>
<p>Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.</p>	<p>Minn. R. 7019.1000, subp. 1</p>
<p>Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description:</p> <ol style="list-style-type: none"> 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation. 	<p>Minn. R. 7019.1000, subp. 1</p>
<p>Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.</p>	<p>Minn. R. 7007.1150 through Minn. R. 7007.1500</p>
<p>For changes that do not require a permit amendment:</p> <ul style="list-style-type: none"> - The Permittee shall submit a Part 1 MACT application within 30 days of startup of any 112(j) affected source. The application shall meet the requirements of 40 CFR Section 63.53(a). - The Permittee shall submit a Part 2 MACT application within 90 days of startup of any 112(j) affected source. The application shall meet the requirements of 40 CFR Section 63.53(b). <p>112(j) affected source is defined in 40 CFR Section 63.51. As of permit issuance, 112(j) affected sources include industrial, commercial, and institutional boilers and process heaters; brick and structural clay products manufacturing; clay ceramics manufacturing.</p>	<p>40 CFR Section 63.52(b)(1) and 63.52(e)(1)</p>
<p>Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).</p>	<p>Minn. R. 7007.1400, subp. 1(H)</p>
<p>Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance, to be submitted on a form approved by the Commissioner.</p>	<p>Minn. R. 7019.3000 - 7019.3100</p>
<p>Emission Fees: due 60 days after receipt of an MPCA bill.</p>	<p>Minn. R. 7002.0005 through Minn. R. 7002.0095</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Alumacraft Boat Co
 Permit Number: 10300014 - 003

Subject Item: GP 001 VOC and PM Limits

- Associated Items:** EU 002 Paint Booth #1
 EU 003 Paint Booth #2
 EU 004 Paint Booth #3
 EU 005 Solvent Wipe Down
 EU 006 Gluing Sub assembly
 EU 007 Gluing Floor assembly
 EU 008 Gluing Hull prep
 EU 009 Spray Gun Cleaning
 EU 010 Paint Booth #4

What to do	Why to do it
EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies individually to each unit in GP 001.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20.0 percent opacity This limit applies individually to each unit in GP 001.	Minn. R. 7011.0715, subp. 1(B)
Volatile Organic Compounds: less than or equal to 95.0 tons/year using 12-month Rolling Sum to be calculated by the 15th day of each month for the previous 12-month period as described later in this permit.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid environmental review requirements under ch. 4410
PM < 10 micron: less than or equal to 95.0 tons/year using 12-month Rolling Sum to be calculated by the 15th day of each month for the previous 12-month period as described later in this permit.	Title I Condition: Limit to avoid classification as major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; to avoid environmental review requirements under ch. 4410
Total Particulate Matter: less than or equal to 95.0 tons/year using 12-month Rolling Sum to be calculated by the 15th day of each month for the previous 12-month period as described later in this permit.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid environmental review requirements under ch. 4410
PM < 2.5 micron: less than or equal to 95.0 tons/year using 12-month Rolling Sum To be calculated by the 15th day of each month for the previous 12-month period as described later in this permit.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid environmental review requirements under ch. 4410
MONITORING AND RECORDKEEPING	hdr
For daily recordkeeping and additional emission calculation equations see: EU 002, 003, 004, and 010 for each of the paint booths GP 002 for other VOC sources	hdr
Total Facility VOC Emission Calculations: By the 15th day of each month, calculate and record the total VOC emissions for the previous month and the 12-month rolling sum. Total VOC emissions for the previous month shall be determined as follows: $EVOC = EU002VOC + EU003VOC + EU004VOC + EU010VOC + GP002VOC$ where: EVOC = Total Facility Monthly VOC Emissions EU002VOC = EU 002 VOC emissions as determined under EU 002 EU003VOC = EU 003 VOC emissions as determined under EU 003 EU004VOC = EU 004 VOC emissions as determined under EU 004 EU010VOC = EU 010 VOC emissions as determined under EU 010 GP002VOC = GP 002 VOC emissions as determined under GP 002 The 12-month rolling sum shall be calculated by summing the EVOC calculated for each of the past 12 months.	Minn. R. 7007.0800, subsps. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Alumacraft Boat Co

Permit Number: 10300014 - 003

<p>Total Facility PM/PM10/PM2.5 Emission Calculations: By the 15th day of each month, calculate and record the total facility PM/PM10/PM2.5 emissions for the previous month, and the 12-month rolling sum of annual PM/PM10/PM2.5 emissions. Total PM emissions for the previous month shall be determined as follows:</p> <p>EPM = EU002EPM + EU003EPM + EU004EPM + EU010EPM</p> <p>where:</p> <p>EPM = tons of PM/PM10/PM2.5 emitted by the total facility during the previous month EU002EPM = EU 002 PM/PM10/PM2.5 emissions as determined under EU 002 EU003EPM = EU 003 PM/PM10/PM2.5 emissions as determined under EU 003 EU004EPM = EU 004 PM/PM10/PM2.5 emissions as determined under EU 004 EU010EPM = EU 010 PM/PM10/PM2.5 emissions as determined under EU 010</p> <p>The 12-month rolling sum shall be calculated by summing the EPM calculated for each of the past 12 months.</p> <p>The 12-month rolling sum shall be calculated by summing the EPM calculated for each of the past 12 months.</p>	<p>Title I Condition: Recordkeeping for conditions taken to restrict potential emissions to less than major source levels as defined by 40 CFR Section 52.21; Minn. R. 7007.3000</p>
<p>Material Content: VOC and Solids (PM, PM<10 microns, and PM<2.5 microns) contents shall be determined by the Material Safety Data Sheet (MSDS) provided by the supplier for each material used. If a material content range is given on the MSDS, the highest number in the range shall be used in all compliance calculations. When using the MSDS as the basis of calculating particulate emissions, the conservative assumption is made that PM consists entirely of PM less than 10 microns or less than 2.5 microns. Other alternative methods approved by the MPCA may be used to determine the VOC and solids contents. The Commissioner reserves the right to require the Permittee to determine the VOC and solids contents of any material, according to EPA or ASTM reference methods. If an EPA or ASTM reference method is used for material content determination, the data obtained shall supersede the MSDS.</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>Maximum Contents of Materials: The Permittee assumed certain worst-case contents of materials when determining the short term potential to emit of all emission units in GP 001. These assumptions are listed in Appendix B of this permit. Changing to a material that has a higher content of any of the given pollutants is considered a change in method of operation that must be evaluated under Minn. R. 7007.1200, subp. 3 to determine if a permit amendment or notification is required under Minn. R. 7007.1150.</p>	<p>Minn. R. 7005.0100, subp. 35a</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Alumacraft Boat Co
 Permit Number: 10300014 - 003

Subject Item: GP 002 Additional VOC Emission Sources

- Associated Items:** EU 005 Solvent Wipe Down
 EU 006 Gluing Sub assembly
 EU 007 Gluing Floor assembly
 EU 008 Gluing Hull prep
 EU 009 Spray Gun Cleaning

What to do	Why to do it
Daily Recordkeeping: Once each day, calculate and record the total quantity (in pounds) of each VOC-containing material (glue or solvent) used the previous day in any emission unit in GP 002.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid environmental review requirements under ch. 4410
<p>GP 002 VOC Emission Calculations: By the 15th day of each month, calculate and record the total GP 002 VOC emissions for the previous month. Total GP 002 VOC emissions for the previous month shall be determined by summing the calculated VOC emissions from each solvent or glue used during the previous month using the following equation:</p> $GP002VOC = E [Solvent/Glue * \%VOC/2000]$ <p>where:</p> <p>Solvent/Glue = Each solvent, glue, or other VOC-containing material used in the previous month, in pounds %VOC = VOC wt. percent in each solvent, glue, or other VOC-containing material GP002VOC = GP 002 VOC emissions E = Summation</p>	Minn. R. 7007.0800, subps. 4 and 5
Determination of VOC Content For Emission Calculations: VOC content in percent by weight of each material used shall be determined as described in the Material Content Requirement of GP 001 of Table A of this permit.	Minn. R. 7007.0800, subps. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Alumacraft Boat Co
 Permit Number: 10300014 - 003

Subject Item: GP 003 NESHAP Subp VVVV Requirements

- Associated Items:** EU 002 Paint Booth #1
 EU 003 Paint Booth #2
 EU 004 Paint Booth #3
 EU 005 Solvent Wipe Down
 EU 006 Gluing Sub assembly
 EU 007 Gluing Floor assembly
 EU 008 Gluing Hull prep
 EU 009 Spray Gun Cleaning
 EU 010 Paint Booth #4

What to do	Why to do it
APPLICABILITY	hdr
The affected source is the combination of all of the boat manufacturing operations listed in paragraphs (a) through (f) of 40 CFR Section 63.5689. For Alumacraft Boat Company, at the time of permit issuance, this includes: - Carpet and fabric adhesive operations - Aluminum hull and deck coating operations, including solvent wipedown operations and paint spray gun cleaning operations, on aluminum recreational boats.	40 CFR Section 63.5689; Minn. R. 7011.7370
STANDARDS FOR CARPET AND FABRIC ADHESIVE OPERATIONS	hdr
HAPs - Organic: less than or equal to 5.0 percent by weight for carpet and fabric adhesives. Demonstrate compliance with this limit by determining and recording the organic HAP content of the carpet and fabric adhesives using the methods in 40 CFR Section 63.5758.	40 CFR Section 63.5740(a); Minn. R. 7011.7370
STANDARDS FOR ALUMINUM RECREATIONAL BOAT SURFACE COATING OPERATIONS	hdr
HAPs - Organic: less than or equal to 1.55 kilograms/liter of total coating solids applied from the combined aluminum surface coatings and aluminum wipedown solvents, based on a 12-month rolling average to be calculated at the end of every month. This limit applies to the organic HAPs per liter of coating solids applied from aluminum surface coatings and aluminum wipedown solvents (aluminum primers, clear coats, and top coats) combined.	40 CFR Section 63.5743(a)(3); 40 CFR Section 63.5746(d); Minn. R. 7011.7370
WORK PRACTICE STANDARDS - Aluminum Recreational Boat Surface Coating Spray Gun Cleaning	hdr
When cleaning aluminum coating spray guns with solvents containing more than 5 percent organic HAP by weight, the Permittee shall disassemble the spray gun and manually clean the components in vat.	40 CFR Section 63.5743(b)(2); Minn. R. 7011.7370
COMPLIANCE REQUIREMENTS - Aluminum Recreational Boat Surface Coating Spray Gun Cleaning	hdr
The Permittee shall visually inspect all solvent containers at least once per month to ensure that the containers have covers and the covers fit with no visible gaps. The Permittee shall keep monthly records of the inspections and any repairs that are made to the covers.	40 CFR Section 63.5755; Minn. R. 7011.7370
COMPLIANCE REQUIREMENTS - Aluminum Wipedown Solvents and Aluminum Coatings	hdr
Organic HAP Content: The Permittee shall determine and record the organic HAP content (kg of organic HAP per kg of material, or weight fraction) of each aluminum wipedown solvent and aluminum coating (including primers, topcoats, clear coats, thinners, and activators). The Permittee shall used the methods in 40 CFR Section 63.5758 to determine organic HAP content. The Permittee chooses to use information from the supplier or manufacturer (as listed below).	40 CFR Section 63.5746(a); Minn. R. 7011.7370

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Alumacraft Boat Co
 Permit Number: 10300014 - 003

<p>Organic HAP Content Continued: To determine the organic HAP content for each material used in carpet and fabric adhesive operations or aluminum recreational boat surface coating operations the Permittee may rely on information from the supplier or manufacturer of the material, according to 40 CFR Section 63.5758(a)(5)(i)-(iv):</p> <p>(5)(i) Include in the organic HAP total 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.</p>	<p>40 CFR Section 63.5758(a)(5)(i); Minn. R. 7011.7370</p>
<p>Organic HAP Content Continued:</p> <p>(5)(ii) If the organic HAP content is provided by the material supplier or manufacturer as a range, then the Permittee must use the upper limit of the range for determining compliance. If a separate measurement of the total organic HAP content using the methods specified in 40 CFR Section 63.5758(a)(1)-(4) exceeds the upper limit of the range of the total organic HAP content provided by the material supplier or manufacturer, then you must use the measured organic HAP content to determine compliance.</p>	<p>40 CFR Section 63.5758(a)(5)(ii); Minn. R. 7011.7370</p>
<p>Organic HAP Content Continued:</p> <p>(5)(iii) If the organic HAP content is provided as a single value, the Permittee may assume the value is a manufacturing target value and actual organic HAP content may vary from the target value. If a separate measurement of the total organic HAP content using the methods specified in paragraphs (a)(1) through (4) of this section is less than 2 percentage points higher than the value for total organic HAP content provided by the material supplier or manufacturer, then you may use the provided value to demonstrate compliance. If the measured total organic HAP content exceeds the provided value by 2 percentage points or more, then you must use the measured organic HAP content to determine compliance.</p>	<p>40 CFR Section 63.5758(a)(5)(iii); Minn. R. 7011.7370</p>
<p>Organic HAP Content Continued:</p> <p>(6) Solvent blends may be listed as single components for some regulated materials in certifications provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP content of the materials. When detailed organic HAP content data for solvent blends are not available, you may use the values for organic HAP content that are listed in Table 5 or 6 to this subpart. The Permittee may use Table 6 to this subpart only if the solvent blends in the materials used do not match any of the solvent blends in Table 5 to this subpart and the Permittee knows only whether the blend is either aliphatic or aromatic. However, if test results indicate higher values than those listed in Table 5 or 6 to this subpart, then the test results must be used for determining compliance.</p>	<p>40 CFR Section 63.5758(a); Minn. R. 7011.7370</p>
<p>Solids Content: The Permittee shall determine and keep records of the solids content (liters of solids per liter of coating volume fraction) of each aluminum surface coating, including primers, topcoats, and clear coats. The Permittee shall use the methods listed in 40 CFR Section 63.5758(b) (listed below) to determine solids content.</p>	<p>40 CFR Section 63.57496(b); Minn. R. 7011.7370</p>
<p>Solids Content Continued: To determine the volume fraction of coating solids for each aluminum recreation boat surface coating, the Permittee shall use one of the following methods:</p> <p>(1) Use ASTM Method D2697-86(1998) or D6093-97 to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume percent obtained with the methods by 100 to calculate volume fraction of coating solids.</p> <p>(2) Use the volume fraction of coating solids for each coating from the supplier or manufacturer</p> <p>If the results obtained with method (2) does not agree with those obtained according to method (1), the Permittee shall use the results obtained with method (1) to determine compliance.</p>	<p>40 CFR Section 63.5758(b); Minn. R. 7011.7370</p>
<p>Density: The Permittee shall determine the density of each aluminum surface coating and wipedown solvent using the methods in 40 CFR Section 63.5758(c) (and listed below).</p>	<p>40 CFR Section 63.5746(c); Minn. R. 7011.7370</p>
<p>Density Continued: To determine the density of each aluminum recreational boat wipedown solvent, surface coating, thinner, and other additive, the Permittee shall use test results from ASTM Method D1475-90, 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 D1475-90 test results and other information sources, the Permittee shall use the test results to demonstrate compliance.</p>	<p>40 CFR Section 63.5758(c); Minn. R. 7011.7370</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Alumacraft Boat Co
 Permit Number: 10300014 - 003

<p>The Permittee shall calculate the organic HAP from aluminum wipedown solvents per liter of coating solids using equation 1 of Appendix C and calculate the kilograms of organic HAP from aluminum coatings per liter of coating solids using equation 2 of Appendix C.</p> <p>The Permittee shall keep records of the calculations used to determine compliance.</p>	<p>40 CFR Section 63.5746(e) and (f); Minn. R. 7011.7370</p>
<p>The Permittee shall calculate the combined weighted-average organic HAP content of aluminum wipedown solvents and aluminum recreational boat surface coatings using Equation 3 in Appendix C of the permit.</p> <p>The Permittee is in compliance with the emission limit if the 12-month rolling average combined organic HAP content does not exceed 1.55 kg of organic HAP per liter of total coating solids.</p>	<p>40 CFR Section 63.5753(a) and (b); Minn. R. 7011.7370</p>
<p>GENERAL RECORDKEEPING</p>	<p>hdr</p>
<p>The Permittee shall maintain the following records (in addition to other records required in Table A GP 003):</p> <p>(a) The Permittee shall keep a copy of each notification and report submitted to comply with the subpart.</p> <p>(b) The Permittee shall keep all documentation supporting any notification or report submitted.</p> <p>(c)(1) NA</p> <p>(c)(2) The Permittee shall keep records of the total amount of each aluminum coating used per month (including primers, top coats, clear coats, thinners, and activators) and the weighted-average organic HAP content as determined in 40 CFR Section 63.5752 (Equation 2 of Appendix C)</p> <p>(c)(3) The Permittee shall keep records of the total amount of aluminum wipedown solvent used per month and the weighted-average organic HAP content as determined in 40 CFR Section 63.5749 (Equation 1 of Appendix C).</p>	<p>40 CFR Section 63.5767; Minn. R. 7011.7370</p>
<p>The Permittee must keep each record for 5 years following the date that each record is generated. The record must be kept on site for at least 2 years after the date that it is generated, and then may be kept offsite for the remaining 3 years.</p>	<p>40 CFR Section 63.5770; Minn. R. 7011.7370</p>
<p>GENERAL REPORTING (also see Table B)</p>	<p>hdr</p>
<p>Contents of Semiannual Compliance Report:</p> <p>(1) Company name and address</p> <p>(2) A statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the report</p> <p>(3) The date of the report and the beginning and ending dates of the reporting period</p> <p>(4) A description of any changes in the manufacturing process since the last compliance report.</p> <p>(5) A statement or table showing, for each regulated operation, the applicable organic HAP content limit, application equipment requirement, or MACT model point value averaging provision with which the Permittee complying. The statement or table must also show the actual weighted-average organic HAP content or weighted-average MACT model point value (if applicable) for each operation during each of the rolling 12-month averaging periods that end during the reporting period.</p>	<p>40 CFR Section 63.5764(c); Minn. R. 7011.7370</p>
<p>Contents of Semiannual Compliance Report Continued:</p> <p>(6) A statement as to whether or not the Permittee was in compliance with the emissions limits and work practice standards during the reporting period.</p> <p>(7) If the Permittee deviated from an emission limit or work practice standard during the reporting period, the Permittee must also include the information in (i)-(iv) below:</p> <p>(i) A description of the operation involved in the deviation</p> <p>(ii) The quantity, organic HAP content, and application method (if relevant) of the materials involved in the deviation.</p> <p>(iii) A description of any corrective action the Permittee took to minimize the deviation and actions the Permittee have taken to prevent it from happening again.</p> <p>(iv) A statement of whether or not the facility was in compliance for the 12-month averaging period that ended at the end of the reporting period.</p>	<p>40 CFR Section 63.5764(c); Minn. R. 7011.7370</p>
<p>GENERAL PROVISIONS</p>	<p>hdr</p>
<p>The Permittee shall comply with the requirements of the General Provisions in 40 CFR part 63, subpart A, as specific in Table 8 to this subpart, with the exception of 40 CFR Sections 63.6(f)(1) and (h)(1). As of permit issuance, these sections are null and void.</p>	<p>40 CFR Section 63.5773; Minn. R. 7011.7370</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Alumacraft Boat Co

Permit Number: 10300014 - 003

Subject Item: GP 004 Panel Filter Requirements

Associated Items: CE 005 Split Paper + Polyester Paint Arrestor

CE 006 Split Paper + Polyester Paint Arrestor

CE 007 Split Paper + Polyester Paint Arrestor

CE 008 Split Paper + Polyester Paint Arrestor

What to do	Why to do it
The requirements of GP 004 apply separately to each panel filter in GP 004. Requirements relating to capture efficiency of the paint booths appear individually at EU 002, 003, 004, and 010.	hdr
The Permittee shall operate and maintain the panel filters at all times that any emission unit(s) controlled by the panel filter is (are) in operation. The Permittee shall document periods of non-operation of the control equipment (not including periods when emission unit(s) controlled by the panel filter is (are) not in operation).	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the control equipment such that it achieves a collection efficiency for Total Particulate Matter: greater than or equal to 92.0 percent collection efficiency	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the control equipment such that it achieves an collection efficiency for PM < 10 micron: greater than or equal to 92.0 percent collection efficiency	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the control equipment such that it achieves a collection efficiency for PM < 2.5 micron: greater than or equal to 92.0 percent collection efficiency	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
Daily Inspections: Once each operating day, the Permittee shall visually inspect the condition of each panel filter with respect to alignment, saturation, tears, holes and any other condition that may affect the filter's performance. The Permittee shall maintain a daily written record of filter inspections.	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subps. 4 and 5
Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subps. 4, 5, and 14
Corrective Actions: If the filters or any of their components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subps. 4, 5, and 14
Operation and Maintenance of Filters: The Permittee shall operate and maintain each filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Alumacraft Boat Co

Permit Number: 10300014 - 003

Subject Item: EU 002 Paint Booth #1

Associated Items: CE 008 Split Paper + Polyester Paint Arrestor

GP 001 VOC and PM Limits

GP 003 NESHAP Subp VVVV Requirements

SV 002 Paint Booth #1

What to do	Why to do it
The Permittee shall vent emissions from EU 002 to control equipment meeting the requirements of GP 004.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000
Daily Recordkeeping: Once each day, calculate and record the total quantity (in pounds) of each VOC and solids-containing material used the previous day at EU 002.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000
<p>EU 002 Monthly VOC Emissions Calculations: By the 15th day of each month, calculate and record the total EU 002 VOC emissions for the previous month. Total EU 002 VOC emissions for the previous month shall be determined by summing the calculated VOC emissions from each coating used during the previous month using the following equation:</p> $EU002VOC = E [PT * \%VOC/2000]$ <p>where:</p> <p>PT = coating use in EU 002 for the previous month (pounds of each coating) based on usage logs, purchase records, and/or paint kitchen inventory records %VOC = the wt. percent VOC in coating EU002VOC = total monthly VOC emissions in tons for all coating usage E = summation</p>	Minn. R. 7007.0800, subps. 4 and 5
<p>EU 002 PM/PM10/PM2.5 Emission Calculations: By the 15th day of each month, calculate and record the total EU 002 PM/PM10/PM2.5 emissions for the previous month. Total EU 002 PM/PM10/PM2.5 emissions for the previous month shall be determined by summing the calculated particulate emissions from each type of coating used during the previous month, using the following equation:</p> $EU002EPM = E [(1-0.3)*((PT * \%S * 0.2 + PT * \%S * (1-0.92)*0.8)/2000)]$ <p>where:</p> <p>PT = coating use in EU 002 for the previous month (pounds of each coating) based on usage logs, purchase records, and/or paint kitchen inventory records %S = the weight percent solids of each coating 0.8 = capture efficiency 0.2 = uncaptured portion of coating spray EU002EPM = tons of PM/PM10/PM2.5 emitted 0.3 = transfer efficiency 0.92 = collection efficiency of the HEPA wall filters E = summation</p>	Minn. R. 7007.0800, subps. 4 and 5
Determination of VOC and Solids Content For Emission Calculations: VOC and Solids content in percent by weight of each material used shall be determined as described in the Material Content Requirement of GP 001 of this permit.	Minn. R. 7007.0800, subps. 4 and 5
Initial Hood Certification and Evaluation: The control device hood on EU 002 must conform to the requirements listed in Minn. R. 7011.0072, subp. 2(B), and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. The Permittee shall maintain a copy of the evaluation and certification on site.	Minn. R. 7007.0800, subp. 4, 5, and 14
Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow indication method. The Permittee shall maintain a copy of the annual evaluation on site.	Minn. R. 7007.0800, subp. 4, 5, and 14

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Alumacraft Boat Co

Permit Number: 10300014 - 003

Subject Item: EU 003 Paint Booth #2

Associated Items: CE 005 Split Paper + Polyester Paint Arrestor

GP 001 VOC and PM Limits

GP 003 NESHAP Subp VVVV Requirements

SV 003 Paint Booth #2

What to do	Why to do it
EMISSION LIMITS AND OPERATING REQUIREMENTS	hdr
Volatile Organic Compounds: less than or equal to 30.0 tons/year using 12-month Rolling Sum for EU 003.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; BACT equivalency limit established in permit 10300014-001
The Permittee shall vent emissions from EU 003 to control equipment meeting the requirements of GP 004.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000
Paint Booth Total Enclosure: Paint booth doors must be closed during all spray painting and coating operations.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; BACT equivalency limit established in permit 10300014-001
Transfer Efficiency: The Permittee shall use the spray gun technology with the highest transfer efficiency possible during spraying operations.	Title I Condition: BACT equivalency limit established in permit 10300014-001
MONITORING AND RECORDKEEPING	hdr
Daily Recordkeeping: Once each day, calculate and record the total quantity (in pounds) of each VOC- and solids-containing material used the previous day in EU 003.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000
<p>EU 003 Monthly VOC Emissions Calculations: By the 15th day of each month, calculate and record the total EU 003 VOC emissions for the previous month and the previous 12-month period. Total EU 003 VOC emissions for the previous month shall be determined by summing the calculated VOC emissions from each coating used during the previous month using the following equation:</p> $EU003VOC = E [PT * \%VOC/2000]$ <p>where:</p> <p>PT = coating use in EU 003 for the previous month (pounds of each coating) based on daily usage logs, purchase records, and/or paint kitchen inventory records %VOC = the wt. percent VOC in coating EU003VOC = total monthly VOC emissions in tons for all coating usage E = summation</p> <p>VOC emissions for the previous 12-month period shall be calculated by summing the monthly VOC emissions for the previous 12 months.</p>	Minn. R. 7007.0800, subps. 4 and 5
<p>EU 003 PM/PM10/PM2.5 Emission Calculations: By the 15th day of each month, calculate and record the total PM/PM10/PM2.5 emissions for the previous month. Total EU 003 PM emissions for the previous month shall be determined by summing the calculated particulate emissions from each type of coating used during the previous month, using the following equation:</p> $EU003EPM = E [(1-0.3)*(PT * \%S * (1-0.92)/2000)]$ <p>where:</p> <p>PT = coating use in EU 003 for the previous month (pounds of each coating) based on usage logs, purchase records, and/or paint kitchen inventory records %S = the weight percent solids of each coating EU003EPM = tons of PM/PM10/PM2.5 emitted 0.3 = transfer efficiency 0.92 = collection efficiency of the HEPA wall filters E = summation</p>	Minn. R. 7007.0800, subps. 4 and 5
Determination of VOC and Solids Content For Emission Calculations: VOC and Solids content in percent by weight of each material used shall be determined as described in the Material Contents Requirement of GP 001 of Table A of this permit.	Minn. R. 7007.0800, subps. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Alumacraft Boat Co

Permit Number: 10300014 - 003

Subject Item: EU 004 Paint Booth #3

Associated Items: CE 006 Split Paper + Polyester Paint Arrestor

GP 001 VOC and PM Limits

GP 003 NESHAP Subp VVVV Requirements

SV 004 Paint Booth #3

What to do	Why to do it
EMISSION LIMITS AND OPERATING REQUIREMENTS	hdr
Volatile Organic Compounds: less than or equal to 30.0 tons/year using 12-month Rolling Sum for EU 004.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; BACT equivalency limit established in permit 10300014-001
The Permittee shall vent emissions from EU 004 to control equipment meeting the requirements of GP 004.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000
Paint Booth Total Enclosure: Paint booth doors must be closed during all spray painting and coating operations.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; BACT equivalency limit established in permit 10300014-001
Transfer Efficiency: The Permittee shall use the spray gun technology with the highest transfer efficiency possible during spraying operations.	Title I Condition: BACT equivalency limit established in permit 10300014-001
MONITORING AND RECORDKEEPING	hdr
Daily Recordkeeping: Once each day, calculate and record the total quantity (in pounds) of each VOC- and solids-containing material used the previous day in EU 004.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000
<p>EU 004 Monthly VOC Emissions Calculations: By the 15th day of each month, calculate and record the total EU 004 VOC emissions for the previous month and the previous 12-month period. Total EU 004 VOC emissions for the previous month shall be determined by summing the calculated VOC emissions from each coating used during the previous month using the following equation:</p> $EU004VOC = E [PT * \%VOC/2000]$ <p>where:</p> <p>PT = coating use in EU 004 for the previous month (pounds of each coating) based on usage logs, purchase records, and/or paint kitchen inventory records %VOC = the wt. percent VOC in coating EU004VOC = total monthly VOC emissions in tons for all coating usage E = summation</p> <p>VOC emissions for the previous 12-month period shall be calculated by summing the monthly VOC emissions for the previous 12 months.</p>	Minn. R. 7007.0800, subps. 4 and 5
<p>EU 004 PM/PM10/PM2.5 Emission Calculations: By the 15th day of each month, calculate and record the total PM/PM10/PM2.5 emissions for the previous month. Total EU 004 PM emissions for the previous month shall be determined by summing the calculated particulate emissions from each type of coating used during the previous month, using the following equation:</p> $EU004EPM = E [(1-0.3)*(PT * \%S * (1-0.92)/2000)]$ <p>where:</p> <p>PT = coating use in EU 004 for the previous month (pounds of each coating) based on usage logs, purchase records, and/or paint kitchen inventory records %S = the weight percent solids of each coating EU004EPM = tons of PM/PM10/PM2.5 emitted 0.3 = transfer efficiency 0.92 = collection efficiency of the HEPA wall filters E = summation</p>	Minn. R. 7007.0800, subps. 4 and 5
Determination of VOC and Solids Content For Emission Calculations: VOC and Solids content in percent by weight of each material used shall be determined as described in the Material Content Requirement in GP 001 of Table A of this permit.	Minn. R. 7007.0800, subps. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Alumacraft Boat Co
 Permit Number: 10300014 - 003

Subject Item: EU 010 Paint Booth #4

Associated Items: CE 007 Split Paper + Polyester Paint Arrestor
 GP 001 VOC and PM Limits
 GP 003 NESHAP Subp VVVV Requirements
 SV 005 Paint Booth #4

What to do	Why to do it
EMISSION LIMITS AND OPERATING REQUIREMENTS	hdr
Volatile Organic Compounds: less than or equal to 25.0 tons/year using 12-month Rolling Sum for EU 010.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; BACT equivalency analysis established in permit 10300014-001
The Permittee shall vent emissions from EU 010 to control equipment meeting the requirements of GP 004.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000
Paint Booth Total Enclosure: Paint booth doors must be closed during all spray painting and coating operations.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; BACT equivalency limit established in permit 10300014-001
Transfer Efficiency: The Permittee shall use the spray gun technology with the highest transfer efficiency possible during spraying operations.	Title I Condition: BACT equivalency limit established in permit 10300014-001
MONITORING AND RECORDKEEPING	hdr
Daily Recordkeeping: Once each day, calculate and record the total quantity (in pounds) of each VOC- and solids-containing material used the previous day in EU 010.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000
<p>EU 010 Monthly VOC Emissions Calculations: By the 15th day of each month, calculate and record the total EU 010 VOC emissions for the previous month and the previous 12-month period. Total EU 010 VOC emissions for the previous month shall be determined by summing the calculated VOC emissions from each coating used during the previous month using the following equation:</p> $EU010VOC = E [PT * \%VOC/2000]$ <p>where:</p> <p>PT = coating use in EU 010 for the previous month (pounds of each coating) based on usage logs, purchase records, and/or paint kitchen inventory records %VOC = the wt. percent VOC in coating EU010VOC = total monthly VOC emissions in tons for all coating usage E = summation</p> <p>VOC emissions for the previous 12-month period shall be calculated by summing the monthly VOC emissions for the previous 12 months.</p>	Minn. R. 7007.0800, subps. 4 and 5
<p>EU 010 PM/PM10/PM2.5 Emission Calculations: By the 15th day of each month, calculate and record the total PM/PM10/PM2.5 emissions for the previous month. Total EU 010 PM emissions for the previous month shall be determined by summing the calculated particulate emissions from each type of coating used during the previous month, using the following equation:</p> $EU010EPM = E [(1-0.3)*((PT * \%S * (1-0.92)/2000)]$ <p>where:</p> <p>PT = coating use in EU 010 for the previous month (pounds of each coating) based on usage logs, purchase records, and/or paint kitchen inventory records %S = the weight percent solids of each coating EU010EPM = tons of PM/PM10/PM2.5 emitted 0.3 = transfer efficiency 0.92 = collection efficiency of the HEPA wall filters E = summation</p>	Minn. R. 7007.0800, subps. 4 and 5
Determination of VOC and Solids Content For Emission Calculations: VOC and Solids content in percent by weight of each material used shall be determined as described in the Material Content Requirement in GP 001 of Table A of this permit.	Minn. R. 7007.0800, subps. 4 and 5

TABLE B: SUBMITTALS

B-1 06/16/10

Facility Name: Alumacraft Boat Co
Permit Number: 10300014 - 003

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

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

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

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

Send any application for a permit or permit amendment to:

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

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

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

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

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

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

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

B-2 06/16/10

Facility Name: Alumacraft Boat Co

Permit Number: 10300014 - 003

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility

TABLE B: RECURRENT SUBMITTALS

B-3 06/16/10

Facility Name: Alumacraft Boat Co

Permit Number: 10300014 - 003

What to send	When to send	Portion of Facility Affected
Semiannual Compliance Report	due 31 days after end of each calendar half-year starting 08/23/2005. The report shall contain the information specified in Table A of this permit, GP 003. The first semiannual compliance report must cover the first semiannual reporting period which begins 08/23/05 and ends on 12/31/05. Each subsequent semiannual compliance report must cover the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. This report must contain the elements outlined in Table A, GP 003 "Contents of Semiannual Compliance Report." This report may be submitted with the Semiannual Deviations Report also listed in Table B of this permit.	GP003
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance	Total Facility
Compliance Certification	due 30 days after end of each calendar year starting 05/15/2001 (for the previous calendar year). The Permittee shall submit this on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility

APPENDIX A: Insignificant Activities and General Applicable Requirements

Facility Name: Alumacraft Boat Co

Permit Number: 10300014-003

Minn. R.	Rule Description of the Activity	General Applicable Requirement
7007.1300 subp. 3(A)	Fuel use: space heaters fueled by natural gas. <i>Alumacraft has several infrared gas heaters and gas unit heaters that qualify under this subpart.</i>	Minn. R. 7011.0510/0515 (PM & Opacity)
7007.1300 subp. 3(B)(1)	Furnaces & Boilers: Fuel burning equipment with a capacity less than 500,000 Btu/hr. <i>Alumacraft has 10 gas furnaces with a combined capacity of 781,000 Btu/hr that qualify under this subpart.</i>	Minn. R. 7011.0510/0510 (PM & Opacity)
7007.1300 subp. 3(I)	Individual emissions units at a stationary source, each of which have a potential to emit the following pollutants in amounts less than: 1) 2tpy of carbon monoxide and 2) 1tpy of each nitrogen oxide, sulfur dioxide, particulate matter, particulate matter less than ten microns, volatile organic compounds (including hazardous air pollutant-containing VOC), and ozone. <i>The facility has 3 air make up units, and 4 paint-drying bake ovens that qualify under this subpart.</i>	Minn. R. 7011.0715; Minn. R. 7011.0610 (PM & opacity)

APPENDIX B: Maximum* Materials Contents and Application Rates

Facility Name: Alumacraft Boat Co

Permit Number: 10300014-003

The tables below give the maximum application rate and maximum materials contents (at the time of permit issuance) used in calculating potential to emit for the emission units at the facility. The values listed in the table are not limits; however, changing to a material that has a higher VOC or solids content, or increasing the application rate, is considered a change in method of operation that must be evaluated under Minn. R. 7007.1200, subp. 3 to determine if a permit amendment or notification is required under Minn R. 7007.1150.

Process/ Emission Unit	Max Solids Content (lb/gal coating)	Max VOC Content (lb/gal coating)	Max Application Rate (gal/min)
Paint Booth #1/ EU 002	?	4.14	0.75
Paint Booth #2/ EU 003	1.47	6.72	0.25
Paint Booth #3/ EU 004	7.16	7.00	0.25
Paint Booth #4/ EU 010	7.64	7.00	0.25
Gluing Sub Assembly/ EU 006	NA	3.51	1.05
Gluing Floor Assembly/ EU 007	NA	3.51	0.35
Gluing Hull Prep/ EU 008	NA	3.61	0.35
Cleaning/ EU 009	NA	6.8	3.80×10^{-3}

Process/Emission Unit	Max VOC Content (%)	Max Application Rate (lb/hr)
Solvent Wipe-Down/ EU 005	100	11

*Maximum at the time of permit issuance

APPENDIX C: NESHAP Subpart VVVV Compliance Equations

Facility Name: Alumacraft Boat Co

Permit Number: 10300014-003

(Note: Equations numbers in Appendix C do not necessarily correspond to equation numbers given in 40 CFR subpart VVVV)

$$HAP_{WD} = \frac{\sum_{j=1}^n (Vol_j)(D_j)(W_j)}{\sum_{j=1}^n (Vol_j)(Solids_j)} \quad (Eq. 1) \quad (from 40 CFR Section 63.5749(a))$$

Where:

HAP_{WD} = weighted-average organic HAP content of aluminum wipedown solvents (kg of HAP per liter of total coating solids from aluminum primers, top coats, and clear coats)

n = number of different wipedown solvents used in the past 12 months

Vol_j = volume of aluminum wipedown solvent j used in the past 12 months (liters)

D_j = density of aluminum wipedown solvent j , (kg per liter)

W_j = mass fraction of organic HAP in aluminum wipedown solvent j

m = number of different aluminum surface coatings (primers, top coats, and clear coats) used in the past 12 months

Vol_i = volume of aluminum primer, top coat, or clear coat i used in the past 12 months (liters)

$Solids_i$ = solids content aluminum primer, top coat, or clear coat i (liter solids per liter of coating)

$$HAP_{SC} = \frac{\sum_{i=1}^m (Vol_i)(D_i)(W_i) + \sum_{k=1}^P (Vol_k)(D_k)(W_k)}{\sum_{i=1}^m (Vol_i)(Solids_i)} \quad (Eq. 2) \quad (From 40 CFR Section 63.5752(a))$$

Where:

HAP_{SC} = weighted-average organic HAP content for all aluminum coating materials (kg of organic HAP per liter of coating solids)

m = number of different aluminum primers, top coats, and clear coats used in the past 12 months.

Vol_i = volume of aluminum primer, top coat, or clear coat i used in the past 12 months (liters)

D_i = density of coating i (kg per liter)

W_i = mass fraction of organic HAP in coating i (kg of organic HAP per kg of coating)

P = number of different thinners, activators, and other coating additives used in the past 12 months

Vol_k = total volume of thinner, activator, or additive k used in the past 12 months (liters)

D_k = density of thinner, activator, or additive k (kg per liter)

W_k = mass fraction of organic HAP in thinner, activator, or additive k (kg of organic HAP per kg of thinner or activator)

$Solids_i$ = solids content of aluminum primer, top coat, or clear coat i (liter solids per liter coating)

$$HAP_{combined} = HAP_{WD} + HAP_{RC} \quad (eq. 3) \quad (From 40 CFR Section 63.5753(a))$$

Where:

$HAP_{combined}$ = the combined weighted-average HAP content of aluminum wipedown solvents and aluminum recreational boat surface coatings

HAP_{WD} = the weighted-average organic HAP content of aluminum wipedown solvents used in the past 12 months, calculated using equation 1 of Appendix C

HAP_{RC} = the weighted-average organic HAP content of aluminum recreational boat surface coatings used in the past 12 months, calculated using equation 2 of Appendix C

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 10300014-003

This Technical Support Document (TSD) is for all parties interested in the permit and meets the requirements set forth by the federal and state regulations (40 CFR § 70.7(a)(5) and Minn. R. 7007.0850, subp. 1). This document provides the legal and factual justification for each applicable requirement or policy decision considered in the determination to issue the permit.

1. General Information

1.1. Applicant and Stationary Source Location:

Applicant/Address	Stationary Source/Address (SIC Code: 3732)
Alumacraft Boat Co. 315 West Julien Street St. Peter, MN 58082	315 West St. Julien Street St. Peter Nicollet County
Contact: Tom Beckius Phone: (507) 931-1050	

1.2. Facility Description and Permit Action

This permit action is for the reissuance of a Part 70 Operating Permit. The action is for operation of the facility.

Alumacraft Boat Co. (Alumacraft or Permittee) manufactures aluminum recreational boats. The facility consists of the manufacturing plant, shipping building, and boat storage yard. The operations performed include stretching, shearing, sawing, punching, routing, bending, plasma-arc cutting, forming, notching, and piercing of aluminum sheet and coil. Some of the aluminum parts are cleaned, and then artificially age hardened in a heat treating oven before they are sent to the assembly areas. The parts are then assembled into boat/canoe hulls which are then solvent cleaned, primed, and painted. Various aluminum and wood parts are covered with carpet at one of the several gluing stations. Various painted, carpeted, and purchased parts are installed in the final assembly areas.

The emission sources are four paint booths, gluing operations, and solvent cleaning. The facility also has a number of small combustion units that qualify as insignificant activities. Pollution control equipment at the facility includes panel filters on each of the paint booths.

The facility is a major source under the Part 70 Operating Permit Program as well as the National Emission Standards for Hazardous Air Pollutants (NESHAP) Program. The facility has accepted limits on particulate matter (PM), particulate matter less than 10 micros (PM₁₀), particulate matter less than 2.5 microns (PM_{2.5}), and volatile organic compounds (VOCs) such that the facility avoids the major source threshold for Prevention of Significant Deterioration (PSD).

1.3 Description of any Changes Allowed with this Permit Issuance

No change are authorized by this permit action.

1.4 Description of All Amendments Issued Since the Issuance of the Last Total Facility Permit

Permit Number and Issuance Date	Action Authorized
16300005-002 May 15, 2001	Administrative Amendment: Correction to PM/PM ₁₀ recordkeeping requirements.

1.5. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary

	PM tpy	PM ₁₀ tpy	PM _{2.5} tpy	SO ₂ tpy	NO _x tpy	CO tpy	VOC tpy	Single HAP tpy	All HAPs tpy
Total Facility Limited Potential Emissions	95	95	95	0	0	0	95	95	95
Total Facility Actual Emissions (2008)	0.48	0.48	*	0	.02	.02	47.32	HAPs not reported in emission inventory	

* PM_{2.5} not reported in 2008

Note: The facility emits small amounts of SO₂, NO_x, and CO from combustion units that are listed as insignificant activities; however there are no emission units that emit SO₂, NO_x, and CO.

Table 2. Facility Classification

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD		PM, PM ₁₀ , PM _{2.5} , VOC	CO, NO _x , SO ₂
Part 70 Permit Program	HAPs	PM ₁₀ , PM _{2.5} , VOC	CO, NO _x , SO ₂
Part 63 NESHAP	X		

1.6 Changes to Permit

The following changes have been made in the reissued permit:

- Updated to reflect current MPCA templates and standard citation formatting
- Completed requirements and requirements for equipment that has been removed have been deleted
- Data has been updated for changes in operation and new information submitted by the Permittee
- Some requirements have been reordered to help with clarity
- The permit now requires that if the Permittee wishes to change coatings, or to increase the usage rate of coatings, they cannot do so without first evaluating whether the change requires an amendment or a notification. The Permittee was always subject to this requirement, but now it is explicitly laid out in the permit. (See Discussion under Section 3.1 “Potential to Emit”) (Appendix B for Maximum Materials Contents and Application Rates added to the permit)
- Requirements for NESHAP VVVV added (Appendix C for VVVV compliance equations added to the permit)
- All combustion equipment was moved to the insignificant activities list
- PM_{2.5} 12-month rolling sum limit and associated monitoring and recordkeeping added at GP 001. PM_{2.5} potential to emit data added to the MPCA’s Delta database.
- The Group structure of the permit was reorganized as follows:

Permit Action 002	Permit Action 003
FC: Site specific VOC and PM limits; Standard requirements for all facilities in MN	FC: Standard requirements for all facilities in MN
GP 001: Paint Booths – IPER limits; control equipment requirements	GP 001: VOC and PM limits – IPER limits; site specific VOC and PM limits
GP 002: Additional VOC Emissions Sources	GP 002: Additional VOC Emission Sources
NA	GP 003: NESHAP VVVV Requirements
NA	GP 004: Panel Filter Requirements

2. Regulatory and/or Statutory Basis

New Source Review

The facility has taken limits to avoid major source classification under New Source Review regulations.

Part 70 Permit Program

The facility is a major source under the Part 70 permit program because its potential HAP emissions are above the major source thresholds.

New Source Performance Standards (NSPS)

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

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The facility is subject to Subpart VVVV NESHAP for Boat Manufacturing:

The applicable requirements of the NESHAP regulate carpet and fabric adhesive operations and aluminum recreational boat surface coating operations. Of the options for emissions limits contained in the NESHAP, the facility complies with the “combined aluminum surface coating and aluminum wipedown solvents” limit.

Minnesota State Rules

Portions of the facility are subject to the following Minnesota Standards of Performance:

- Minn. R. 7011.0510 Standards of Performance for Existing Indirect Heating Equipment
- Minn. R. 7011.0515 Standards of Performance for New Indirect Heating Equipment
- Minn. R. 7011.0610 Standards of Performance for Direct Heating Fossil-Fuel-Burning Equipment
- Minn. R. 7011.0715 Standards of Performance for Post-1969 Industrial Process Equipment

Compliance Assurance Monitoring (CAM)

Each of the paint booths are controlled by separate panel filters. The filters are used to comply with the Industrial Process Equipment Rule and 12-month rolling sum PM/PM₁₀/PM_{2.5} limits. However, the paint booths are subject to a combined limit of 95 ton/yr, and therefore the units are not subject to CAM (the potential pre-control device emissions of PM/PM₁₀/PM_{2.5} are less than 100 percent of the amount required for a source to be classified as a major source).

The facility is major for HAPs, but the emissions are subject to a Maximum Achievable Control Technology (MACT) standard promulgated after the 1990 Clean Air Act Amendments. Therefore, CAM does not apply to the pollutant specific HAP emission units per 40 CFR Section 64.2(b)(1)(i).

The remainder of the emission units at the facility are uncontrolled.

Table 3. Regulatory Overview of Facility

EU, GP, or SV	Applicable Regulations	Comments:
FC (total facility level)	40 CFR § 52.21 and Minn. R. 7007.3000 40 CFR § 63.52(b)(1) and 63.52(e)(1) Minn. R. chs.7002, 7007,	Prevention of Significant Deterioration (PSD): The facility cannot make any changes that would make the facility a major source under New Source Review without first obtaining a permit amendment. For changes that do not require a permit application, requirement to submit a MACT application prior to the start-up of a new 112j source. This requirement applies to all major facilities under 40 CFR pt 63. Table A contains requirements that apply to all facilities in

	7009, 7019, & 7030 40 CFR pt 50; Minn. R. 7009.0010-0080	Minnesota. Reporting requirements are contained in Table B of the permit. Requirements to ensure that emissions do not cause a violation of ambient air quality standards.
GP 001: PM and VOC Limits	40 CFR § 52.21 and Minn. R. 7007.3000; Minn. R. ch. 4410 Minn. R. 7005.0100, subp. 35a Minn. R. 7011.0715	PSD and Environmental Review: Limits on PM/PM ₁₀ /PM _{2.5} and VOC below PSD major source thresholds. Additionally, at the time these limits were established they served to avoid the requirement for the completion of an Environmental Assessment Worksheet (EAW). (Note: at the time of issuance of permit action 10300014-001, the threshold for an EAW was 100 tpy. Since then, the threshold has been raised to 250 tpy; however, the facility's limit will remain below 100 tpy.) Requirements include calculating the 12-month rolling sum PM/PM ₁₀ /PM _{2.5} and VOC emissions. Maximum Contents of Materials and Application Rate: Requirement to evaluate any proposed increase in application rate or VOC or solids content of a material for the requirement to submit a permit amendment or notification. Standards of Performance for Post-1969 Industrial Process Equipment.
GP 002: Other VOC Sources	40 CFR § 52.21 and Minn. R. 7007.3000	PSD: Daily recordkeeping and monthly calculations.
GP 003: Subp. VVVV NESHAP	40 CFR Part 63 subpart VVVV; Minn. R. 7011.7370	Boat Manufacturing NESHAP: The facility is subject to this standard because it manufactures aluminum recreational boats at a major source of HAP. The facility is subject to standards for carpet and adhesive operations and aluminum recreational boat surface coating operations. Note: any reference to General Provisions, 40 CFR §§ 63.6(f)(1) and (h)(1), regulating the emission of HAPs during periods of startup, shutdown, and malfunction is omitted from the permit as the subpart VVVV NESHAP is one of the source category rules affected by the mandate in Sierra Club v. EPA making 40 CFR §§ 63.6(f)(1) and (h)(1) null and void. (Subpart VVVV NESHAP does nothing more than automatically incorporate those two sections).
GP 004: Panel Filters	40 CFR § 52.21 and Minn. R. 7007.3000	PSD: Overall control efficiency and other operating parameter requirements to limit PM/PM ₁₀ /PM _{2.5} PTE to avoid major source classification under PSD.
EU 002: Paint Booth #1	40 CFR § 52.21 and Minn. R. 7007.3000	PSD: Daily recordkeeping and monthly calculations; requirement to vent emissions to control equipment that meets the requirements of GP 004.

<p>EU 003,004, & 010 (Paint Booths #2-4)</p>	<p>40 CFR § 52.21 and Minn. R. 7007.3000;</p>	<p>PSD and BACT equivalency analysis: At the time the booths were installed, prior to permit action 001, the VOC PTE was significant under PSD (but actual emissions were not significant). Several emission and operating limits were established in permit 10300014-001 to achieve BACT equivalent reductions in an injunctive relief situation. The facility performed a BACT equivalency analysis for EUs 003, 004, 010. From these analyses came the following requirements: limits on VOC emissions to less than major modification levels; requirement to maintain booths as total enclosure during all coating and painting operations; requirement to use spray guns with the highest transfer efficiency possible.</p> <p>Additional requirements include: venting emissions to control equipment meeting the requirements of GP 004; daily recordkeeping and calculations.</p>
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3. Technical Information

3.1 Calculations of Potential to Emit

Attachment 1 to this TSD contains detailed calculations and supporting information prepared by the MPCA.

Paint Booths Emissions: The PTE calculations for the paint booths are based on mass balance approach using the maximum solids, VOC, and HAP contents in the coatings used at each booth. All PTE calculations were done assuming a maximum transfer efficiency of 30 percent for air-assisted airless spray. For many coating operations, the Permittee uses High Volume Low Pressure (HVLP) guns that achieve a transfer efficiency of 75 percent. However, the Permittee is not able to properly apply some coatings (mainly primer) with HVLP guns. Therefore, for PTE calculations, as well as for the calculations of 12-month rolling sums, Alumacraft uses a 30 percent transfer efficiency.

Paint Booth #1 (EU002) also performs abrasive blasting. So, for PM/ PM₁₀/PM_{2.5} emissions from EU 002 AP-42 factors for abrasive blasting emissions were used. The controlled PTE for PM/PM₁₀/PM_{2.5} take into account a 92 percent control efficiency. Booths #2-4 (EU 003, 004, 010) are totally enclosed, so a capture efficiency of 100 percent was assumed. Booth #1 (EU 002) is not totally enclosed, and the default 80 percent capture efficiency for a certified hood is used.

Other VOC Emissions: VOC emissions from adhesives applications and cleaning are based on maximum VOC and HAP content of the materials and maximum application rate. All VOC/HAP used is considered emitted.

Maximum Material Contents and Application Rates: The worst-case VOC, HAP, and solids contents and application rates for all units are documented in Appendix B of the permit. The

Permittee can change formulations or solutions, but changing to a material that has a higher content of any of the given pollutants or increasing the application rate is considered a change in method of operation that must be evaluated to determine if a permit amendment or notification is required.

Fine Particulate Emissions: Primary PM_{2.5} emissions from Alumacraft's coating operations are expected to be smaller than PM/PM₁₀ emissions. Significant condensable PM_{2.5} emissions are not reasonably expected from these types of operations. However, lacking further data on the PM_{2.5} emissions from these sources, the conservative assumption is made that PM_{2.5} emissions are the same as PM/PM₁₀ emissions for this permit action. This assumption should be reevaluated upon the permit's next reissuance.

Insignificant Activities: There are a comparatively large number of units listed on the insignificant activities list; however, based on the large buffer with the PSD threshold provided by the 95 tpy limit on VOC and PM/PM₁₀/PM_{2.5}, it is acceptable to have a large number of insignificant activities with untracked emissions.

3.2 Periodic Monitoring

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

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

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

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

Table 4. Periodic Monitoring

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
GP 001: PM and VOC limits	<p>VOC \leq 95.0 tpy; PM/PM₁₀/PM_{2.5} \leq 95.0 tpy (12-mo rolling sum)</p> <p>(limit to avoid PSD, EAW)</p> <p>PM/PM₁₀ \leq X gr/dscf, variable for each unit</p> <p>Opacity: \leq 20.0%</p> <p>(Minn. R. 7011.0715)</p>	<p>Recordkeeping: on-going records of material content (MSDS); Monthly Calculations of emission</p> <p>(Daily records of material usage used in monthly calculations appear in GP 002, EU 002-004, EU 010)</p> <p>None</p>	<p>Monthly PM/PM₁₀/PM_{2.5} and VOC emissions must be calculated using the equations in GP 001. The permittee shall maintain up-to-date records of material content. Unless otherwise approved by the MPCA, the material content shall be based on what is provided in the MSDS for the various coatings, solvents, adhesives, etc used at the facility.</p> <p>The Permittee is required to keep daily records of material usage to demonstrate compliance with additional VOC limits that apply to paint booths #2-4 individually; however, these daily records also can be used in the calculations of the total facility 12-month rolling sum emissions. It would be redundant to include the daily recordkeeping requirements at GP 001, so the calculation requirement under GP 001 references the daily records and monthly calculations that are required individually under G P002, EU 002-004 and EU 010.</p> <p>These limits apply individually to each unit. For the paint booths, the monitoring requirements associated with the panel filters are considered adequate to ensure that the applicable requirements are met. See Attachment 1 for calculations that show that the units meet the limit with the use of control equipment.</p> <p>For the other units, these units only generate VOCs. These VOCs/processes are not likely to form condensable particulate matter and the units to not otherwise generate particulate matter, therefore it is unlikely that the units could violate the applicable limits and no additional monitoring is required.</p>
GP 003: Subpart VVVV NESHAP	<p>Organic HAP \leq 5.0 wt % for carpet and fabric adhesives</p> <p>Organic HAP \leq 1.55 kg/L applied coating solids (for surface coating and wipedown solvents combined)</p>	None	Monitoring associated with the NESHAP is adequate to provide a reasonable assurance of compliance.
GP 004: Panel Filters	<p>PM/PM₁₀/PM_{2.5} collection efficiency \geq 92%</p>	<p>Daily inspections, periodic inspections, recordkeeping, O&M</p>	Monitoring based on the Minnesota Performance Standard for Control Equipment for panel filters adequate to fulfill the requirements.

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
		plan, corrective actions	The limit for the panel filter control is a collection efficiency limit, not an overall control efficiency limit because the various paint booths have different capture efficiencies (EU 002 has 80% capture, EUs 003, 004, 010 have 100% capture). Hood certification requirements appear at EU 002 and requirements to maintain the booths as total enclosures appear at EU 003, 004, and 010 in the permit.
EU 002: Paint Booth #1	No pollutant limits specific to EU 002, but emissions limited under GP 001.	Daily records of coating usage, monthly calculations, hood certification. (on-going records of material content and 12-mo. rolling sum calculations at GP 001)	The Permittee is required to keep daily records of material usage at each paint booth based on usage logs. The Permittee reconciles daily usage logs with monthly purchase records and monthly paint kitchen inventory records. Therefore, the Permittee may use either daily usage records, purchase records, and/or paint kitchen inventory records in calculating the 12-month rolling sum emissions
EU 003 and EU 004: Paint Booth #2 and Paint Booth #3	VOC \leq 30.0 tpy (12-mo rolling sum) (limit to avoid PSD)	Daily records of coating usage, monthly calculations. (on-going records of material content and 12 mo. rolling sum calculations at GP 001)	The Permittee is required to keep daily records of material usage at each paint booth based on usage logs. The Permittee reconciles daily usage logs with monthly purchase records and monthly paint kitchen inventory records. Therefore, the Permittee may use either daily usage records, purchase records, and/or paint kitchen inventory records in calculating the 12-month rolling sum emissions
EU 010: Paint Booth #4	VOC \leq 25.0 tpy (12-mo rolling sum) (limit to avoid PSD)	Daily records of coating usage, monthly calculations. (on-going records of material content and 12-mo. rolling sum calculations at GP 001)	The Permittee is required to keep daily records of material usage at each paint booth based on usage logs. The Permittee reconciles daily usage logs with monthly purchase records and monthly paint kitchen inventory records. Therefore, the Permittee may use either daily usage records, purchase records, and/or paint kitchen inventory records in calculating the 12-month rolling sum emissions

3.3 Insignificant Activities

Alumacraft Boat Company has several operations which are classified as insignificant activities. These are listed in Appendix A to the permit.

The permit is required to include periodic monitoring for all emissions units, including insignificant activities, per EPA guidance. The insignificant activities at this Facility are only subject to general applicable requirements. Using the criteria outlined earlier in this TSD, the following table documents the justification why no additional periodic monitoring is necessary for the current insignificant activities. See Attachment 1 of this TSD for PTE information for the insignificant activities.

Table 5. Insignificant Activities

Insignificant Activity	General Applicable Emission limit	Discussion
<p>Fuel Use: Space heaters fueled by natural gas (Minn. R. 7007.1300 subp. 3(A))</p>	<p>PM \leq 0.40 lb/MMBtu Opacity \leq 20.0 % (with exceptions) (Minn. R. 7011.0510/0515)</p>	<p>Alumacraft has several infrared gas heaters and gas unit heaters that qualify under this subpart. The combustion units only burn natural gas. For these units, based on the fuels used and EPA published emissions factors, it is highly unlikely that they could violate the applicable requirements.</p>
<p>Furnaces & Boilers: Fuel burning equipment with a capacity less than 500,000 Btu/hr and a combined capacity of less than 2,000,000 Btu/hr (Minn. R. 7007.1300 subp. 3(B))</p>	<p>PM \leq 0.40 lb/MMBtu Opacity \leq 20.0 % (with exceptions) (Minn. R. 7011.0510/0515)</p>	<p>Alumacraft has 10 gas furnaces with a combined capacity of 781,000 Btu/hr that qualify under this subpart. The combustion units only burn natural gas with a propane back-up. For these units, based on the fuels used and EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement.</p>
<p>Individual units with actual emissions less than 1.) 2 tpy of CO and 2.) 1 tpy each of NO_x, PM, PM₁₀, PM_{2.5}, VOC (including HAP-containing VOCs), and ozone.</p>	<p>PM, variable depending on airflow Opacity \leq 20.0% (with exceptions) (Minn. R. 7011.0610)</p>	<p>The facility has 3 air make up units, and 4 paint-drying bake ovens that qualify under this subpart. The combustion units only burn natural gas with a propane back-up. For these units, based on the fuels used and EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. In addition, all of these units are operated and vented inside a building, so testing for PM or opacity is not feasible. The foam blowing operations area is not expected to generate particulate matter.</p>

3.4 Permit Organization

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements. One area where this permit deviates slightly from Delta guidance is in the use of appendices. While appendices are fully enforceable parts of the permit, in general, any requirement that the MPCA thinks should be tracked (e.g., limits, submittals, etc.), should be in Table A or B. The main reason is that the appendices are word processing sections and are not part of the tracking system. Violation of the appendices can be enforced, but the computer system will not automatically generate the necessary enforcement notices or documents. Staff must generate these.

3.5 Comments Received

Public Notice Period: April 30th, 2010 – June 10th, 2010

EPA Review Period: April 30th, 2010 – June 14th, 2010

The MPCA received no comments during the public notice period.

4. Permit Fee Assessment

This permit action is the reissuance of an individual Part 70 with no rolled in amendments; therefore, no application fees apply under Minn. R. 7002.0016, subp. 1. The reissuance rolls in two reopening for the incorporation of NESHAP VVVV. Reopenings are not chargeable activities; the NESHAP was an existing standard that applied to the facility and was not triggered by any modifications to the facility.

5. Conclusion

Based on the information provided by Alumacraft Boat Company, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 10300014-003, and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Kelsey Suddard (permit writer/engineer)
 Jennifer Lovett (enforcement)
 Marshall Cole (peer reviewer)

AQ File No. 2664; DQ 759

Attachments: 1. PTE Summary and Calculation Spreadsheets
 2. CD-01 Forms