

**AIR EMISSION PERMIT NO. 05300138- 002**

**IS ISSUED TO**

Northland Aluminum Products, Inc.  
5005 County Road 25  
St. Louis Park, Hennepin County, MN 55416

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

Permit Type	Application Date	Issuance Date	Action Number
Total Facility Operating Permit	January 2, 2001	September 24, 2001	001
Major Amendment	August 17, 2005	See below	002

This permit 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.

**Permit Type:** Federal; Pt 70/Minor for NSR

**Issue Date:** December 22, 2005

**Expiration:** September 24, 2006  
Title I Conditions do not expire.

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Richard J. Sandberg, Manager  
Air Quality Permits Section  
Industrial Division

for Sheryl A. Corrigan  
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:**

Northland Aluminum Products manufactures metal and plastic cookware/bakeware and conducts some custom parts surface coating. Air emission sources at the facility include plastics compression molding, metal surface preparation (sandblasting and thermal spraying), coating, and combustion. Coating operations includes spray application of liquid and powder coatings. The site combustion equipment includes boilers and curing ovens fueled by natural gas with propane back up. The facility's thermal spraying and sandblasting operations are controlled by baghouses. All of the facility's coating lines have panel filters for particulate control.

This permit was written as a flex cap permit for the painting and/or coating booths, molding equipment, sandblasting, and the curing ovens. The permit authorizes the Permittee to add, delete or modify coating booths, molding equipment, sandblasting operations, or curing ovens at any time over the life of the permit. The stationary source as changed must abide by the usage limits and meet all conditions of the permit at all times.

### **Action No. 002**

This amendment does three things. It changes the requirements for calculating particulate emissions, a Title I Condition, such that the emissions from sandblasting and thermal spraying are included. These were inadvertently left out of the original permit. Also changed is an allowance for the company to use a control efficiency for the particulate matter control equipment that is based on stack emission testing rather than that specified in Minn. R. 7007.0020-0080.

Secondly, a correction is made such that the emissions not transferred to the coated object are calculated rather than calculating emissions such that the solid matter transferred to the coated object are calculated. The surface coating particulate calculation included in Permit No. 05300138-001, in error, calculated solids transferred.

It removes an incorrect reference in the permit that states that the limit is set to keep the source from being classified as a major Part 70 source. The source is a major Part 70 source.

There is no change in allowable or actual emissions with this permitting action.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

12/22/05

Facility Name: Northland Aluminum Products Inc

Permit Number: 05300138 - 002

**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**

<b>What to do</b>	<b>Why to do it</b>
MACT STANDARDS	hdr
The Permittee will likely be subject to three Upcoming 10 year MACT Standards (Rules not yet proposed or promulgated). These include Subpart DDDDD, Industrial, Commercial and Institutional Boilers and Process Heaters; Subpart MMMM, Miscellaneous Metal Parts and Products (surface coating); and Subpart PPPP, Plastic Parts (surface coating). The Permittee will be subject to the requirements of the upcoming standards as they are promulgated.	Title III Upcoming MACT Standards
OPERATIONAL REQUIREMENTS	hdr
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
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
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)
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
PERFORMANCE TESTING	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as specified by Minn. R. 7017.2025 following formal review of a subsequent performance test on the same unit.	Minn. R. 7017.2025
MONITORING REQUIREMENTS	hdr
Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued.	Minn. R. 7007.0800, subp. 4(D)
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
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.	Minn. R. 7007.0800, subp. 4(D)
RECORDKEEPING	hdr
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).	Minn. R. 7007.0800, subp. 5(C)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

12/22/05

Facility Name: Northland Aluminum Products Inc

Permit Number: 05300138 - 002

Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007. 1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007. 0800, subp. 5(B)
REPORTING	hdr
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3.  At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2.  At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
MISCELLANEOUS REQUIREMENTS	hdr
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
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)
Emission Inventory Report: due 91 days after end of each calendar year following permit issuance (April 1). To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3010
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
This permit authorizes the Permittee to add, delete or modify coating booths, molding equipment, sandblasting operations, or curing ovens at any time over the life of the permit. The stationary source as changed must abide by the usage limits and meet all conditions of the permit at all times. See Group 4 for the related flexible permit requirements.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

12/22/05

Facility Name: Northland Aluminum Products Inc

Permit Number: 05300138 - 002

**Subject Item: GP 001 Industrial Process Equipment**

**Associated Items:** EU 001 Line A Primer Paint Booth  
 EU 002 Line A Finish Paint Booth  
 EU 003 Line B Primer Paint Booth  
 EU 004 Line B Finish Paint Booth  
 EU 005 Line C Primer Paint Booth  
 EU 006 Line C Finish Paint Booth  
 EU 007 Line D Primer Paint Booth  
 EU 008 Line D Finish Paint Booth  
 EU 009 Line E Paint Booth  
 EU 010 Line F Primer Paint Booth  
 EU 011 Line F Finish Paint Booth  
 EU 012 Line G Spray Booth  
 EU 013 Line H1 Paint Booth  
 EU 014 Line J1 Paint Booth  
 EU 015 Line J2 Paint Booth  
 EU 016 Line J3 Paint Booth  
 EU 017 Line H2 Paint Booth  
 EU 018 Thermal Spray Booth  
 EU 023 Sandblasting Reclaimer

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735. This limit applies to each unit individually.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
For periodic monitoring requirements see Group 5 for the Panel Filters on the paint booths and CE 018 and CE 019 for the fabric filters on the Thermal Spray Booth and the Sandblasting Reclaimer respectively.	hdr

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

12/22/05

Facility Name: Northland Aluminum Products Inc

Permit Number: 05300138 - 002

**Subject Item:** GP 002 Indirect Heating Equipment**Associated Items:** EU 019 Continental Steam Boiler

EU 020 American Standard Hot Water Boiler

EU 021 Kewanee Steam Boiler

EU 026 Line C Curing Oven

EU 028 Line E Curing Oven

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input . This limit applies to each unit individually.	Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. This limit applies to each unit individually.	Minn. R. 7011.0510, subp. 2
The permittee shall burn only natural gas or propane in EU019, EU020, EU021, EU026 and EU028. Records of fuel usage shall be recorded and kept on-site.	Minn. R. 7011.0510



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

12/22/05

Facility Name: Northland Aluminum Products Inc

Permit Number: 05300138 - 002

**Subject Item:** GP 003 Direct Heating Equipment

**Associated Items:** EU 024 Line A Curing Oven  
EU 025 Line B Curing Oven  
EU 027 Line D Curing Oven  
EU 029 Line F Curing Oven  
EU 030 Line G Curing Oven  
EU 031 Line H1 Curing Oven  
EU 032 Line J2 Curing Oven  
EU 033 Line J3 Curing Oven

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies to each unit individually.	Minn. R. 7011.0610, subp. 1A(1)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. This limit applies to each unit individually.	Minn. R. 7011.0610, subp. 1A(2)
The permittee shall burn only natural gas or propane in EU024, EU025, EU027, EU029, EU030, EU031, EU032 and EU033. Records of fuel usage shall be recorded and kept on-site.	Minn. R. 7011.0610

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

12/22/05

Facility Name: Northland Aluminum Products Inc

Permit Number: 05300138 - 002

**Subject Item: GP 004 VOC and PM Sources****Associated Items:** EU 001 Line A Primer Paint Booth

EU 002 Line A Finish Paint Booth

EU 003 Line B Primer Paint Booth

EU 004 Line B Finish Paint Booth

EU 005 Line C Primer Paint Booth

EU 006 Line C Finish Paint Booth

EU 007 Line D Primer Paint Booth

EU 008 Line D Finish Paint Booth

EU 009 Line E Paint Booth

EU 010 Line F Primer Paint Booth

EU 011 Line F Finish Paint Booth

EU 012 Line G Spray Booth

EU 013 Line H1 Paint Booth

EU 014 Line J1 Paint Booth

EU 015 Line J2 Paint Booth

EU 016 Line J3 Paint Booth

EU 017 Line H2 Paint Booth

EU 018 Thermal Spray Booth

EU 022 Molding Room Including 19 Compression Molding Presses

EU 023 Sandblasting Reclaimer

What to do	Why to do it
Volatile Organic Compounds: less than or equal to 200 tons/year using 12-month Rolling Sum by restricting the total paints, coatings, solvents and molding compounds used in any 12-month period.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 100 tons/year using 12-month Rolling Sum by restricting the total paints, coatings, solvents and molding compounds used in any 12-month period.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 100 tons/year using 12-month Rolling Sum by restricting the total paints, coatings, solvents and molding compounds used in any 12-month period.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000
Daily Recordkeeping. On each day of operation, the Permittee shall record the total quantity of all coatings and other VOC, solids, and HAP containing materials used at the facility. This shall be based on written usage logs and/or flowmeters and/or delivery records.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 and 5
Monthly Recordkeeping - Solids Usage. By the 15th of the month, the Permittee shall calculate and record the following: 1) The total usage of each solids containing material for the previous calendar month using the daily usage records. This record shall also include solids contents of each material as determined by the Material Content requirement of this permit. 2) The solids usage for the previous month using the formulas specified in this permit. 3) The 12 month rolling sum solids usage for the previous 12 month period by summing the monthly solids usage data for the previous 12 months.	Minn. R. 7007.0800, subp. 4 and 5

# TABLE A: LIMITS AND OTHER REQUIREMENTS

12/22/05

Facility Name: Northland Aluminum Products Inc

Permit Number: 05300138 - 002

<p>Monthly Recordkeeping -- VOC Emissions.</p> <p>By the 15th of the month, the Permittee shall calculate and record the following:</p> <p>1) The total usage of VOC containing materials for the previous calendar month using the daily usage records. This record shall also include the VOC and solids contents of each material as determined by the Material Content requirement of this permit.</p> <p>2) The VOC emissions for the previous month using the formulas specified in this permit.</p> <p>3) The 12 month rolling sum VOC emissions for the previous 12 month period by summing the monthly VOC emissions data for the previous 12 months.</p>	Minn. R. 7007.0800, subp. 4 and 5
<p>By the 15th of each month the Permittee shall calculate PM, PM-10, and VOC emissions for the previous 12 months using the following equations:</p> <p><math>E \text{ (VOC)} = \text{sum}[X \text{ (coatings/solvents)} \times U \text{ (coatings/solvents)}] + \text{sum}[X \text{ (molding)} \times 0.03 \times U \text{ (molding)}] - \text{sum}[X \text{ (offsite recycling)} \times U \text{ (offsite recycling)}]</math></p> <p><math>E \text{ (PM/PM-10)} = \text{sum}[Y \text{ (coatings)} \times (1-T) \times U \text{ (coatings)} \times (1-CE)] + \text{sum}[W \text{ (blasting/thermal spray)} \times (1 - CE \text{ (blasting/thermal spray)}) / CE \text{ (blasting/thermal spray)}]</math></p>	Minn. R. 7007.0800, subp. 4 and 5
<p>Where:</p> <p>E = 12-month rolling sum emissions (tons/yr)</p> <p>X = VOC content by weight (lb VOC/lb material)</p> <p>Y = Solids content by weight (lb solid/lb material)</p> <p>U = Usage for the previous 12-month rolling period (tons/yr)</p> <p>0.03 = VOC emission factor for closed molding process (lb emitted/lb VOC used)</p> <p>T = Transfer efficiency</p> <p>CE = Control Efficiency, Minn. R. 7011.0070 or the control efficiency demonstrated by stack emission testing.</p> <p>W = Weight of particulate or solids collected by blasting/thermal spraying control equipment (tons/yr)</p>	continued from above
<p>The Permittee may use a control efficiency for each piece of particulate control equipment if stack emission testing is performed pursuant to Minn. R. Chapter 7017. In the event that the Permittee chooses to do so, all notification and submittal requirements of Chapter 7017 shall be met.</p> <p>The Permittee may use the tested control efficiency in its calculations upon written approval of the MPCA.</p>	continued from above
<p>This permit authorizes the Permittee to add, delete or modify coating booths, sandblasting operations, or curing ovens at any time over the life of the permit. The stationary source as changed must abide by the usage limits and meet all conditions of the permit at all times. The Permittee shall keep records of any changes made including documenting any new units or new materials used.</p>	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000
<p>Material Content: VOC, HAPs, and Solids (PM and PM&lt;10 microns) contents in coating materials 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. Other alternative methods approved by the MPCA may be used to determine the VOC, HAPs, and solids contents. The Commissioner reserves the right to require the Permittee to determine the VOC, HAP, 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>	Minn. R. 7007.0800, subp. 4 and 5
<p>Waste Credit: If the Permittee elects to obtain credit for HAPs, solids, and/or VOC shipped in waste materials, the Permittee shall either use item 1 or 2 to determine the VOC, solids, and/or total and individual HAP content for each credited shipment.</p> <p>1) The Permittee shall analyze a composite sample of each waste shipment to determine the weight content of VOC, solids, total HAP, and each individual HAP, excluding water.</p> <p>2) The Permittee may use supplier data for raw materials to determine the VOC, solids, and total and individual HAP contents of each waste shipment, using the same content data used to determine the content of raw materials. If the waste contains several materials, the content of mixed waste shall be assumed to be the lowest VOC, solids, and total and individual HAP content of any of the materials.</p>	Minn. R. 7007.0800, subp. 4 and 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

12/22/05

Facility Name: Northland Aluminum Products Inc

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Insignificant Activities: The Permittee shall evaluate the emissions from changes made under Minn. R. 7007.1300 on an annual basis. The Permittee shall not make any change that causes emissions to exceed permit thresholds in Minn. R. ch. 7007 without first obtaining a major permit amendment.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000
This permit establishes limits on the facility to keep it a minor source under New Source Review. The Permittee cannot make any change at the source that would make the source a major source under New Source Review until a permit amendment has been issued. This includes changes that might otherwise qualify as insignificant modifications and minor or moderate amendments.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000
The Permittee shall not begin construction of any single project or projects that are connected or phased which will cause a total increase in actual emissions of greater than 99 tons per year for any criteria pollutant without first getting a permit amendment to authorize the project. Connected and phased have meanings as defined in Minn. R. 4410.0200 subps. 9b and 60. The Permittee shall not begin construction of any other project which is listed in Minn. R. 4410.4300 or Minn. R. 4410.4400 without first getting a permit amendment to authorize the project. Such projects may require the completion of an Environmental Assessment Worksheet or an Environmental Impact Statement prior to the amendment being issued. This is a state only requirement and is not federally enforceable.	Minn. R. 4410.4300 and Minn. R. 4410.4400

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

12/22/05

Facility Name: Northland Aluminum Products Inc

Permit Number: 05300138 - 002

**Subject Item: GP 005 Panel Filters****Associated Items:** CE 001 Mat or Panel Filter

CE 002 Mat or Panel Filter

CE 003 Mat or Panel Filter

CE 004 Mat or Panel Filter

CE 005 Mat or Panel Filter

CE 006 Mat or Panel Filter

CE 007 Mat or Panel Filter

CE 008 Mat or Panel Filter

CE 009 Mat or Panel Filter

CE 010 Mat or Panel Filter

CE 011 Mat or Panel Filter

CE 012 Mat or Panel Filter

CE 013 Mat or Panel Filter

CE 014 Mat or Panel Filter

CE 015 Mat or Panel Filter

CE 016 Mat or Panel Filter

CE 017 Mat or Panel Filter

<b>What to do</b>	<b>Why to do it</b>
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.	40 CFR 71.6(a)(3)
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.	40 CFR 71.6(a)(3)
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.	40 CFR 71.6(a)(3)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

12/22/05

Facility Name: Northland Aluminum Products Inc

Permit Number: 05300138 - 002

**Subject Item:** EU 022 Molding Room Including 19 Compression Molding Presses**Associated Items:** GP 004 VOC and PM Sources

What to do	Why to do it
<p>This equipment is subject to 40 CFR Part 63, Subp. WWWW. It must be in compliance with the following requirements by April 21, 2006.</p> <p>These requirements are limited to reinforced plastic composites production in which reinforced and/or nonreinforced plastic composites or plastic molding compounds are manufactured using thermoset resins and/or gel coats that contain styrene to produce plastic composites. This also includes cleaning, mixing, HAP-containing materials storage, and repair operations associated with the production of plastic composites.</p>	hdr
WORK PRACTICE STANDARDS	hdr
1. 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.	Table 4 to Subpart WWWW of Part 63
2. Do not use cleaning solvents that contain HAP, except that styrene may be used as a cleaner in closed systems, and organic HAP containing cleaners may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin.	continued from above
3. 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.	continued from above
REPORTING	hdr
See Table B for the Semiannual Compliance Report required by 40 CFR Section 63.5910.	
Semiannual Compliance Report: due 31 days after the end of each calendar half-year after April 21, 2006.	Table 14 to 40 CFR Part 63, subp. WWWW, 40 CFR Section 63.5910(b) and (d) and Minn. R. 7007.0800, subp. 6(A)(2)
(The compliance report must contain the information below:	
(1) Company name and address.	
(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.	
(3) Date of the report and beginning and ending dates of the reporting period.	
(4) If there are no deviations from any organic HAP emissions limitations (emissions limit and operating limit) that apply to you, and there are no deviations from the requirements for work practice standards in Table 4 to this subpart, a statement that there were no deviations from the organic HAP work practice standards during the reporting period.	continued from above
For each deviation from the requirements for work practice standards that occurs at an affected source, the compliance report must also contain the information in paragraphs below. This includes periods of startup, shutdown, and malfunction.	continued from above
(1) The total operating time of each affected source during the reporting period.	
(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.	

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

12/22/05

Facility Name: Northland Aluminum Products Inc

Permit Number: 05300138 - 002

**Subject Item:** CE 018 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 018 Thermal Spray Booth

What to do	Why to do it
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0065, subp. 1(A)
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 99 percent control efficiency	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0065, subp. 1(A)
Pressure Drop: greater than or equal to 0.5 inches of water column and less than or equal to 5 inches of water column , unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3, based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated. The Permittee shall record the pressure drop once every 24 hours when in operation.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0080
Visible Emissions: The Permittee shall check the fabric filter stack (SV # 018) for any visible emissions once each week during daylight hours.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0080
Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0080
The control equipment is considered listed control equipment under Minn. R. 7011.0060 to 7011.0080. The Permittee shall operate and maintain the fabric filter at all times that any process equipment controlled by the fabric filter is operating.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0065, subp. 2(A)
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range and/or 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 fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subp. 4, 5, and 14
Alternative Pressure Drop Range: If the Permittee wishes to propose an alternative pressure drop range to the one specified in this permit without conducting a performance test, the Permittee shall submit the proposal to MPCA for review. The proposal shall contain control equipment vendor data, actual operating data, or other information as necessary, in order to justify an alternative range. Upon written approval by MPCA, the alternative range shall become an enforceable part of this permit.	Minn. R. 7007.0800, subp. 2
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.	Minn. R. 7011.0075, subp. 3
The Permittee shall maintain each piece of control equipment according to the manufacturer's specification, shall conduct inspections, and maintain documentation of those actions as required by Minn. R. 7011.0075, subp. 2(A) to 2(I).	Minn. R. 7011.0075, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

12/22/05

Facility Name: Northland Aluminum Products Inc

Permit Number: 05300138 - 002

**Subject Item:** CE 019 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 023 Sandblasting Reclaimer

What to do	Why to do it
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0065, subp. 1(A)
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 99 percent control efficiency	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0065, subp. 1(A)
Pressure Drop: greater than or equal to 1 inches of water column and less than or equal to 9 inches of water column , unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3, based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated. The Permittee shall record the pressure drop once every 24 hours when in operation.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0080
Visible Emissions: The Permittee shall check the fabric filter stack (SV # 024) for any visible emissions once each week during daylight hours.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0080
Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0080
The control equipment is considered listed control equipment under Minn. R. 7011.0060 to 7011.0080. The Permittee shall operate and maintain the fabric filter at all times that any process equipment controlled by the fabric filter is operating.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0065, subp. 2(A)
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range and/or 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 fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subp. 4, 5, and 14
Alternative Pressure Drop Range: If the Permittee wishes to propose an alternative pressure drop range to the one specified in this permit without conducting a performance test, the Permittee shall submit the proposal to MPCA for review. The proposal shall contain control equipment vendor data, actual operating data, or other information as necessary, in order to justify an alternative range. Upon written approval by MPCA, the alternative range shall become an enforceable part of this permit.	Minn. R. 7007.0800, subp. 2
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.	Minn. R. 7011.0075, subp. 3
The Permittee shall maintain each piece of control equipment according to the manufacturer's specification, shall conduct inspections, and maintain documentation of those actions as required by Minn. R. 7011.0075, subp. 2(A) to 2(I).	Minn. R. 7011.0075, subp. 2



## TABLE B: SUBMITTALS

12/22/05

Facility Name: Northland Aluminum Products Inc  
Permit Number: 05300138 - 002

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.

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

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.

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

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

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

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

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

**TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS**

12/22/05

Facility Name: Northland Aluminum Products Inc

Permit Number: 05300138 - 002

<b>What to send</b>	<b>When to send</b>	<b>Portion of Facility Affected</b>
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Operation and Maintenance Plan	due 60 days after 09/24/2001 . At a minimum, the O & M plan shall identify all air pollution control equipment and shall include a preventative maintenance program for that equipment, a description of the minimum, but not necessarily the only, corrective actions to be taken to restore the equipment 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 the records kept to demonstrate plan implementation.	Total Facility

**TABLE B: RECURRENT SUBMITTALS**

12/22/05

Facility Name: Northland Aluminum Products Inc

Permit Number: 05300138 - 002

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	<p>due 30 days after end of each calendar half-year starting 09/24/2001 (January 31st or July 31st). The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.</p> <p>This fulfills the requirements of the semiannual compliance report for those sources subject to 40 CFR Part 63, Subp. WWW if the information in 40 CFR 63.5910(b) is submitted.</p>	Total Facility
Annual Report	<p>due 30 days after year starting 09/24/2001 . The Permittee shall submit an annual report by January 30 that describes the changes made at the facility during the previous calendar year using the latest MPCA forms. The report shall document the VOC 12-month rolling sum calculations for the previous calendar year and New Source performance Standards that were triggered in the last calendar year. The report shall be submitted with the annual Compliance Certification listed in Table B. As part of the Annual Report, the Permittee shall verify and certify that the facility has maintained minor source status for New Source Review.</p>	GP004
Compliance Certification	<p>due 31 days after end of each calendar year starting 09/24/2001 (for the previous calendar year). To be submitted 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.</p>	Total Facility

**TECHNICAL SUPPORT DOCUMENT**  
**For**  
**AIR EMISSION PERMIT NO. 05300138-002**

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

**1. General Information**

1.1. Applicant and Stationary Source Location:

Owner and Operator Address and Phone Number	Facility Address (SIC Code: 3499)
Highway 7 at 100 St. Louis Park, Minnesota 55416 (952) 924-9645	Highway 7 at 100 St. Louis Park Hennepin County

**1.2. Description of the Permit Action**

This is a major amendment to a Part 70 permit.

**1.3 Description of the Activities Allowed by this Permit Action**

This amendment does three things. It changes the requirements for calculating particulate emissions, a Title I Condition, such that the emissions from sandblasting and thermal spraying are included. These were inadvertently left out of the original permit. Also changed is an allowance for the company to use a control efficiency for the particulate matter control equipment that is based on stack emission testing rather than that specified in Minn. R. 7007.0020-0080.

Secondly, a correction is made such that the emissions not transferred to the coated object are calculated rather than calculating emissions such that the solid matter transferred to the coated object are calculated.

It removes an incorrect reference in the permit that states that the limit is set to keep the source from being classified as a major Part 70 source. The source is a major Part 70 source.

There is no change in allowable or actual emissions with this permitting action.

### Total Facility Permitted Potential to Emit Summary

Pollutant	Coating Spraying and Other VOC Usage (tpy)	Boilers and Curing Ovens (tpy)	Total Facility (tpy)
Particulate Matter (PM)	100	1	101
Particulate Matter less than 10 microns (PM <sub>10</sub> )	100	1	101
Nitrogen Oxides (NO <sub>x</sub> )	neg.	17.3	17.3
Sulfur Oxides (SO <sub>x</sub> )	neg.	0.05	0.05
Volatile Organic Compounds (VOC)	200	1	201
Carbon Monoxide (CO)	neg.	9	9
Hazardous Air Pollutants (HAPs)			
Cumene	200	1	201
Dimethyl Formamide	200	1	201
Dimethyl Phthalate	200	1	201
1,4 dioxane	200	1	201
Ethyl Benzene*	200	1	201
Ethylene Dichloride	200	1	201
Formaldehyde	200	1	201
Glycol Ethers*	200	1	201
Methanol	200	1	201
Methyl Ethyl Ketone*	200	1	201
Methyl Isobutyl Ketone	200	1	201
Naphthalene	200	1	201
Phenol	200	1	201
Propylene Oxide	200	1	201
Styrene	200	1	201
Toluene	200	1	201
Triethylamine	200	1	201
Xylene	200	1	201
Antimony	200	neg.	200
Chromium	200	neg.	200
Cobalt	200	neg.	200
Lead	200	neg.	200
Manganese	200	neg.	200
Nickel	200	neg.	200

Pollutant	Coating Spraying and Other VOC Usage (tpy)	Boilers and Curing Ovens (tpy)	Total Facility (tpy)
Phosphorous	200	neg.	200
Zinc	200	neg.	200
Total HAP*	200	1	401

tpy = tons per year

neg. = negligible

\*HAPs that are limited by the VOC limit.

	PM tpy	PM10 tpy	SO2 tpy	NOx tpy	CO tpy	VOC tpy	Single HAP tpy	All HAPs tpy
Total Facility Limited Potential Emissions	100	100	--	--	--	200	201	201
Total Facility Actual Emissions	1.05	1.05	0.03	3.34	2.7	56.1	9.0	23.6

**Table 2. Facility and Permit Classification**

Program	Major Source	*Synthetic Minor	*Minor
Prevention of Significant Deterioration		VOC, PM/PM <sub>10</sub>	Pb
Nonattainment Area Review	NA	NA	NA
Part 70 Permit Program	HAP, VOC, PM <sub>10</sub>		
Part 63 National Emissions Standards for Hazardous Air Pollutants (NESHAP)	X		

\* Refers to PTE less than those specified as major by 40 CFR § 52.21, 40 CFR pt. 70, and 40 CFR pt. 63.

## 2. Regulatory and/or Statutory Basis for changes

### New Source Review

The total facility operating permit contains limits that restrict potential emissions to less than major source levels. This permit retains those limits.

### Part 70 Permit Program

The facility is a major source as defined by 40 CFR Section 70.2. This permit does not change the status of the facility.

### National Emission Standards for Hazardous Air Pollutants (NESHAP)

The source is subject to 40 CFR Part 63, subps. DDDDD, MMMM, and PPPP. Those requirements have been incorporated into this permit.

### **3. Comments Received**

Public Notice Period: November 4, 2005 – December 5, 2005

EPA 45-day Review Period: November 4, 2005 – December 19, 2005

No comments from EPA or the public were received during the notice period. The company did submit comments request minor changes to permitting language for clarification purposes.

### **4. Conclusion**

Based on the information provided by Northland Aluminum Products, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 05300138-002 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team:      Jenny Reinertsen (permit writer/engineer)  
   Suzanne Venum (enforcement)  
   Gregory Kvaal (peer reviewer)

## **2. CD-01 Form for changed Title I Condition for Group 4**