

AIR EMISSION PERMIT NO. 16300120-003

IS ISSUED TO

Industrial Painting Specialists

INDUSTRIAL PAINTING SPECIALISTS

5858 152nd Street North
Hugo, Washington County, MN 55038

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 | Issue Date | Action Number |
|---------------------------------|------------------|------------|---------------|
| Registration Permit Option D | | 12/17/1998 | 001 |
| Registration Permit Option D | | 07/22/1999 | 002 |
| Total Facility Operating Permit | 09/12/2003 | See below | 003 |

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 defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: State; Limits to Avoid Parts 63 and 70, and New Source Review

Issue Date: September 14, 2004

Expiration: Permit does not expire
Title I Conditions do not expire.

Ann M. Foss
Major Facilities Section Manager
Majors Air and Construction Section

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:

PER 001

PER 001 was an Option D Registration Permit authorizing operation of this metal coating job shop facility when it was previously located in Oakdale, Minnesota. This permit was voided July 22, 1999.

PER 002

PER 002 was an Option D Registration Permit authorizing operating of the facility at the current location in Hugo, Minnesota.

PER 003

PER 003 is a federally enforceable state operating permit for this facility located in Hugo, Minnesota. Limits on emissions of particulate matter, particulate matter smaller than 10 microns, volatile organic compounds, and hazardous air pollutants restrict emissions to less than major source levels.

The facility is a job shop for coating metal products. Metal products are cleaned in grit blast booths, spray coated with paint in spray booths, and then cured in ovens. Spray booth and grit blasting particulate matter emissions are controlled by panel filters and fabric filters, respectively. Combustion sources are limited to firing only natural gas and propane. This permit does not authorize any changes at the facility.

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/14/04

Facility Name: Industrial Painting Specialist
 Permit Number: 16300120 - 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 |
| OPERATIONAL REQUIREMENTS | hdr |
| If the Permittee makes insignificant modifications described in Minn. R. 7007.1250 or adds insignificant activities listed in Minn. R. 7007.1300, the Permittee shall determine the potential emissions from those modifications on a ton per year basis, and verify that the permitted emissions from the total facility including the insignificant modifications and activities, do not exceed the major source threshold in 40 CFR Sections 52.21, 63.2, or 70.2. | Title I Condition: to avoid major source status under Sections 52.21 and 63.2; Minn. R. 7007.0800, subp. 2 to avoid major source status under 40 CFR Section 70.2 |
| 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 (O & M) plan for all air pollution control equipment. 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. | Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 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, B, and/or C. | Minn. R. ch. 7017 |
| MONITORING REQUIREMENTS | hdr |
| 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, B, and/or C, 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

09/14/04

Facility Name: Industrial Painting Specialist

Permit Number: 16300120 - 003

| | |
|---|---|
| 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/SUBMITTALS | hdr |
| <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> | Minn. R. 7019.1000, subp. 3 |
| <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> | 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 |
| <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. | Minn. R. 7019.1000, subp. 1 |
| 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) |
| 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. 7019.3100 |
| Emission Fees: due 60 days after receipt of an MPCA bill. | Minn. R. 7002.0005 through Minn. R. 7002.0095 |

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/14/04

Facility Name: Industrial Painting Specialist

Permit Number: 16300120 - 003

Subject Item: GP 001 Indirect Heating Equipment**Associated Items:** EU 007 Large Air Makeup Unit

EU 008 Small Air Makeup Unit

EU 009 Office Heater 1

EU 010 Office Heater 2

| What to do | Why to do it |
|---|-----------------------------|
| Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input for each emission unit in GP 001. The potential emission rate is 0.008 lb/mmBtu. | Minn. R. 7011.0515, subp. 1 |
| Opacity: less than or equal to 20 percent except for one six-minute period per hour of not more than 60 percent opacity for each emission unit in GP 001. | Minn. R. 7011.0515, subp. 2 |
| Permitted Fuels: restricted to Natural Gas and Propane. | Minn. R. 7007.0800, subp. 2 |

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/14/04

Facility Name: Industrial Painting Specialist

Permit Number: 16300120 - 003

Subject Item: GP 002 Paint Booths

Associated Items: CE 003 Mat or Panel Filter

CE 004 Mat or Panel Filter

EU 002 Big Paint Booth (SV 002 & SV 003/CE 003)

EU 005 Small Paint Booth (SV 005/CE 004)

| What to do | Why to do it |
|--|---|
| LIMITS | hdr |
| <p>Particulate Matter < 10 micron: less than or equal to 90 tons/year using 12-month Rolling Sum calculated on a monthly basis by the last day of each month. This limit applies to all PM10 emissions from coating activities at the Facility.</p> <p>If the Permittee replaces, adds, or modifies any coating equipment, such equipment is subject to this permit limit as well as all of the requirements of GP 002. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to repeat PM10 calculations described in Minn. R. 7007.1200, subp. 2.</p> <p>A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping requirements in this permit.</p> | <p>Title I Condition: to avoid major source status under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2 to avoid major source status under 40 CFR Section 70.2</p> |
| <p>Total Particulate Matter: less than or equal to 90 tons/year using 12-month Rolling Sum calculated on a monthly basis by the last day of each month. This limit applies to all PM emissions from coating activities at the Facility.</p> <p>If the Permittee replaces, adds, or modifies any coating equipment, such equipment is subject to this permit limit as well as all of the requirements of GP 002. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to repeat PM calculations described in Minn. R. 7007.1200, subp. 2.</p> <p>A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping requirements in this permit.</p> | <p>Title I Condition: to avoid major source status under 40 CFR Section 52.21</p> |
| <p>Volatile Organic Compounds: less than or equal to 90 tons/year using 12-month Rolling Sum calculated on a monthly basis by the last day of each month. This limit applies to all VOCs emissions from coating and coating-related activities (such as cleanup) at the Facility.</p> <p>If the Permittee replaces, adds, or modifies any coating equipment, such equipment is subject to this permit limit as well as all of the requirements of GP 002. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to repeat VOC calculations described in Minn. R. 7007.1200, subp. 2.</p> <p>A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping requirements in this permit.</p> | <p>Title I Condition: to avoid major source status under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2 to avoid major source status under 40 CFR Section 70.2</p> |
| <p>HAP-Single: less than or equal to 9.0 tons/year using 12-month Rolling Sum calculated on a monthly basis by the last day of each month. This limit applies to all single HAP emissions from coating and coating-related activities (such as cleanup) at the Facility.</p> <p>If the Permittee replaces, adds, or modifies any coating equipment, such equipment is subject to this permit limit as well as all of the requirements of GP 002. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping requirements in this permit.</p> | <p>Title I Condition: to avoid major source status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 2 to avoid major source status under 40 CFR Section 70.2</p> |

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/14/04

Facility Name: Industrial Painting Specialist

Permit Number: 16300120 - 003

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| <p>HAPs - Total: less than or equal to 22.5 tons/year using 12-month Rolling Sum calculated on a monthly basis by the last day of each month. This limit applies to all total HAP emissions from coating and coating-related activities (such as cleanup) at the Facility.</p> <p>If the Permittee replaces, adds, or modifies any coating equipment, such equipment is subject to this permit limit as well as all of the requirements of GP 002. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping requirements in this permit.</p> | <p>Title I Condition: to avoid major source status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 2 to avoid major source status under 40 CFR Section 70.2</p> |
| <p>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 paint booth stack/vent.</p> | <p>Minn. R. 7011.0715, subp. 1(A)</p> |
| <p>Opacity: less than or equal to 20 percent opacity. This limit applies individually to each paint booth stack/vent.</p> | <p>Minn. R. 7011.0715, subp. 1(B)</p> |
| <p>CONTROL EQUIPMENT REQUIREMENTS</p> | <p>hdr</p> |
| <p>The Permittee shall operate and maintain each spray booth panel filter system so that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 74 percent control efficiency</p> | <p>Title I Condition: to avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 14</p> |
| <p>The Permittee shall operate and maintain each spray booth panel filter system so that it achieves an overall control efficiency for Particulate Matter < 10 micron: greater than or equal to 74 percent control efficiency</p> | <p>Title I Condition: to avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2 to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 14</p> |
| <p>The Permittee shall operate and maintain the panel filters any time that any spray booth that vents to the panel filters is in operation.</p> | <p>Title I Condition: to avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2 to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 14</p> |
| <p>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.</p> | <p>Title I Condition: to avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2 to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 4 and 5</p> |
| <p>Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the panel filter equipment components. The Permittee shall maintain a written record of these inspections.</p> | <p>Minn. R. 7007.0800, subp. 4, 5, and 14</p> |
| <p>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.</p> | <p>Minn. R. 7007.0800, subp. 4, 5, and 14</p> |
| <p>Operation and Maintenance of Filters: The Permittee shall operate and maintain each panel filter in accordance with the O & M Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.</p> | <p>Minn. R. 7007.0800, subp. 14</p> |
| <p>Panel Filter Hood Certification and Evaluation: Each spray booth is not a total enclosure and therefore each spray booth panel filter system must conform to the hood requirements listed in Minn. R. 7011.0070, subp. 1. The Permittee shall certify this as specified in Minn. R. 7011.0070, subp. 3. The Permittee shall maintain a copy of the certification on site, as well as an annual record of fan rotation speed, fan power draw, or face velocity of each panel filter system, or other comparable air flow indication method.</p> | <p>Minn. R. 7007.0800, subp. 4, 5, and 14</p> |
| <p>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.</p> | <p>Minn. R. 7007.0800, subp. 4, 5, and 14</p> |
| <p>MONITORING</p> | <p>hdr</p> |

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/14/04

Facility Name: Industrial Painting Specialist

Permit Number: 16300120 - 003

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|---|--|
| Coating and Cleanup Material Content: VOC, HAPs, and Solids (PM and PM10) contents in coating materials shall be determined by the Material Safety Data Sheet (MSDS) or the Environmental Data Sheet (EDS) provided by the supplier for each material used. If a material content range is given on the MSDS or EDS, the highest number in the range shall be used in all compliance calculations. When using the MSDS/EDS as the basis for calculating particulate matter emissions, the assumption is made that PM consists entirely of PM10. | Minn. R. 7007.0800, subp. 4 and 5 |
| 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 MSDS/EDS data. | |
| RECORDKEEPING | hdr |
| Daily Recordkeeping: The Permittee shall record and maintain a record of the quantity of each VOC, solids, and HAP containing material purchased for use at the facility. Material purchases shall be logged into the record on the date the material is purchased. | Title I Condition: to avoid classification as a major source under 40 CFR Sections 52.21 and 63.2; Minn. R. 7007.0800, subp. 2 to avoid major source classification under 40 CFR 70.2; Minn. R. 7007.0800, subp. 4 and 5 |
| Monthly Recordkeeping -- VOC Emissions By the 15th of the month, the Permittee shall calculate and record the following: 1) The total purchases of VOC containing materials for the previous calendar month using daily purchase records. This record shall also include the VOC content of each material as determined by the Material Content requirement of this permit. 2) The VOC emissions for the previous month using the formulas specified in this permit. 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. | Minn. R. 7007.0800, subp. 4 and 5 |
| Monthly Calculation -- VOC Emissions. The Permittee shall calculate VOC emissions using the following equations: VOC (tons/month) = V - W V = (A1 x B1) + (A2 x B2) + (A3 x B3) + W = (C1 x D1) + (C2 x D2) + C3 x D3) + | Minn. R. 7007.0800, subp. 4 and 5 |
| Monthly VOC Emissions Calculation Continued: where: V = total VOC purchased in tons/month; A# = amount of each VOC containing material purchased, in tons/month; B# = weight percent VOC in A#, as a fraction; W = the amount of VOC shipped in waste, in tons/month; C# = amount, in tons/month, of each VOC containing waste material shipped. If the Permittee chooses to not take credit for waste shipments, this parameter would be zero; and D# = weight percent of VOC in C#, as a fraction. | Minn. R. 7007.0800, subp. 4 and 5 |
| Monthly Recordkeeping -- HAP Emissions By the 15th of the month, the Permittee shall calculate and record the following: 1) The total HAP containing materials purchased in the previous calendar month using the daily purchase records. This record shall also include the individual and total HAP contents of each HAP containing material purchased in the previous month, as determined by the Material Content requirement of this permit. 2) The total and individual HAP emissions for the previous month using the formulas specified in this permit. 3) The 12 month rolling sum total and individual HAP emissions for the previous 12 month period by summing the monthly emissions data for the previous 12 months. | Minn. R. 7007.0800, subp. 4 and 5 |
| Monthly Calculation -- HAP Emissions. The Permittee shall calculate each individual HAP and total HAP emissions using the following equations: HAP Emissions (tons/month) = H - W H = (A1 x B1) + (A2 x B2) + (A3 x B3) + W = (C1 x D1) + (C2 x D2) + (C3 x D3) + | Minn. R. 7007.0800, subp. 4 and 5 |

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/14/04

Facility Name: Industrial Painting Specialist

Permit Number: 16300120 - 003

| | |
|---|-----------------------------------|
| <p>Monthly HAP Emissions Calculation Continued:</p> <p>Where: H = the amount of each pollutant (either total HAP or each individual HAP), purchased, in tons/month. A# = Amount of each HAP containing material purchased in the previous month, in tons/month. B# = weight percent of each individual or total HAP in A#, as a fraction (e.g., 50% is 0.50). W = the amount of each pollutant (either total HAP or each individual HAP) shipped in waste, in tons/month. C# = amount, in tons/month, of each HAP containing waste material shipped. If the Permittee chooses to not take credit for waste shipments, this parameter would be zero. D# = weight percent of each individual or total HAP in C#, as a fraction.</p> | Minn. R. 7007.0800, subp. 4 and 5 |
| <p>Monthly Recordkeeping -- PM10 Emissions</p> <p>By the 15th of the month, the Permittee shall calculate and record the following:</p> <p>1) The total purchase of each solids containing material for the previous calendar month using the daily purchase records. This record shall also include solids contents of each material as determined by the Material Content requirement of this permit. 2) The PM10 emissions for the previous month using the formulas specified in this permit. 3) The 12 month rolling sum PM10 emissions for the previous 12 month period by summing the monthly PM10 emissions data for the previous 12 months.</p> | Minn. R. 7007.0800, subp. 4 and 5 |
| <p>Monthly Calculation -- PM10 Emissions.</p> <p>The Permittee shall calculate PM10 emissions from the spray booths using the following equations:</p> <p>PM10 (tons/month) = S(1-CE)(1-TE) - W S = (A1 x B1) + (A2 x B2) + (A3 x B3) + W = (C1 x D1) + (C2 x D2) + (C3 x D3) +</p> | Minn. R. 7007.0800, subp. 4 and 5 |
| <p>Monthly PM10 Emissions Calculation Continued:</p> <p>Where: S = total solids purchased in tons/month; CE = overall control efficiency, as a fraction. This shall be 0.74 for all spray booths; TE = transfer efficiency, as a fraction. This shall be 0.30, unless otherwise approved by the MPCA in writing. A# = amount of each solids containing material purchased, in tons/month; B# = weight percent solids in A#, as a fraction; W = the amount of solids shipped in waste, in tons/month; C# = amount, in tons/month, of each solids containing waste material shipped. If the Permittee chooses to not take credit for waste shipments, this parameter would be zero; and D# = weight percent of solids in C#, as a fraction.</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. 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

09/14/04

Facility Name: Industrial Painting Specialist

Permit Number: 16300120 - 003

Subject Item: GP 003 Ovens**Associated Items:** EU 001 Big Oven (SV 001)

EU 004 Small Oven (SV 004)

| What to do | Why to do it |
|--|-----------------------------------|
| 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. | Minn. R. 7011.0610, subp. 1(A)(1) |
| Opacity: less than or equal to 20 percent except for one six-minute period per hour of not more than 60 percent opacity for each emission unit in GP 001. | Minn. R. 7011.0610, subp. 1(A)(2) |
| Permitted Fuels: restricted to Natural Gas and Propane. | Minn. R. 7007.0800, subp. 2 |

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/14/04

Facility Name: Industrial Painting Specialist

Permit Number: 16300120 - 003

Subject Item: GP 004 Blast Booths**Associated Items:** CE 001 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 002 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 003 Big Blast Booth (SV 006/CE 001)

EU 006 Small Blast Booth (SV 007/CE 002)

| What to do | Why to do it |
|---|---|
| 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 blast booth stack/vent. | Minn. R. 7011.0715, subp. 1(A) |
| Opacity: less than or equal to 20 percent opacity. This limit applies individually to each blast booth stack/vent. | Minn. R. 7011.0715, subp. 1(B) |
| The Permittee shall operate and maintain each blast booth fabric filter so 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 classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 14 |
| The Permittee shall operate and maintain each blast booth fabric filter so that it achieves an overall control efficiency for Particulate Matter < 10 micron: greater than or equal to 74 percent control efficiency | Title I Condition: to avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2 to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 14 |
| Visible Emissions: The Permittee shall check each fabric filter vent for any visible emissions once each day of operation during daylight hours. If the daily visible emission check is not possible due to inclement weather, the Permittee shall read and record the pressure drop across the fabric filter when the blast booth is in operation instead of conducting a visible emission check. | Title I Condition: to avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2 to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 4 and 5 |
| Pressure Drop: greater than or equal to 3 inches of water column and less than or equal to 6 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 each day of operation during blast booth operation if a visible emission check is not possible due to inclement weather. | Title I Condition: to avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2 to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 14 |
| Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading as applicable, and whether or not any visible emissions were observed or the observed pressure drop was within the range specified in this permit | Title I Condition: to avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2 to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 5 |
| The Permittee shall operate and maintain the fabric filter at all times that any emission unit controlled by the fabric filter is in operation. | Title I Condition: to avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2 to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 14 |
| 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, eliminate visible emissions, 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 |
| 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. 7007.0800, subp. 4 |
| 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, subp. 4, 5 and 14 |
| The Permittee shall operate and maintain the fabric filter in accordance with the 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 B: SUBMITTALS

09/14/04

Facility Name: Industrial Painting Specialist
Permit Number: 16300120 - 003

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:

Permit Technical Advisor
Permit Section
Air Quality 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:

Supervisor
Compliance Determination Unit
Air Quality 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: RECURRENT SUBMITTALS

09/14/04

Facility Name: Industrial Painting Specialist

Permit Number: 16300120 - 003

| What to send | When to send | Portion of Facility Affected |
|------------------------------|---|------------------------------|
| Semiannual Deviations Report | due 30 days after end of each calendar half-year following Permit Issuance. 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. | Total Facility |
| Compliance Certification | due 31 days after end of each calendar year following Permit Issuance (for the previous calendar year). To be submitted to the Commissioner on a form approved by the Commissioner. This report covers all deviations experienced during the calendar year. | Total Facility |

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 16300120-003

This Technical Support Document (TSD) 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 determination to issue the permit.

1. General Information

1.1. Applicant and Stationary Source Location:

| Applicant/Address | Stationary Source/Address (SIC Code: 3479) |
|---|--|
| Industrial Painting Specialists 5858 152 nd Street North Hugo, Minnesota 55038 | 5858 152 nd Street North Hugo Washington County |
| Contact: Lisa Wilson, Purchasing Manager Phone: (651) 407-8000 Fax: (651) 407-5923 | |

1.2. Description of the Permit Action

This permit is a federally enforceable state total facility operating permit. This permit replaces an Option D Registration Permit the facility no longer qualifies for because in 2000 the actual facility 12-month rolling sum Hazardous Air Pollutants (HAP) emissions exceeded the 5 tons per year (tpy) single HAP and 12.5 tpy total HAP Option D cutoffs.

This facility is a metal painting job shop. Metal products are blast cleaned, painted in a spray booth, and cured in an oven. Emissions from the two paint booths are controlled by panel filters and emissions from the two blast booths are controlled by baghouses. Combustion emission unit fuels are limited to natural gas and propane.

1.3 Description of any Changes Allowed with this Permit Issuance

This permit action does not authorize or allow any changes to the emission units at this facility.

1.4 Permit History

| Permit Number and Issuance Date | Action Authorized |
|-----------------------------------|---|
| 16300120-001 December 17, 1998 | Option D Registration Permit |
| 16300120-002 July 22, 1999 | Option D Registration Permit for facility location change |

1.5. Facility Emissions:

Table 1. Total Facility Limited Potential to Emit Summary

| | PM tpy | PM ₁₀ tpy | SO ₂ tpy | NO _x tpy | CO tpy | VOC tpy | Single HAP tpy | All HAPs tpy |
|--|-----------|-------------------------|------------------------|------------------------|-----------|------------|---|--------------------|
| Total Facility Limited Potential Emissions | 90.53 | 90.52 | 0.04 | 10.59 | 5.53 | 90.38 | 9.12 | 22.62 |
| Total Facility Actual Emissions (2002) | 2.72 | 2.72 | NR | NR | NR | 25.9 | HAPs not reported in emission inventory | |

Table 2. Facility Classification

| Classification | Major/Affected Source | Synthetic Minor | Minor |
|------------------------|-----------------------|----------------------------|--|
| PSD | | PM, PM ₁₀ , VOC | SO ₂ , NO _x , CO, Pb |
| Part 70 Permit Program | | PM ₁₀ , VOC | SO ₂ , NO _x , CO |
| Part 63 NESHAP | | single and total HAPs | |

2. Regulatory and/or Statutory Basis

New Source Review (NSR)

This facility is a non-major source for NSR and will remain a non-major source due to permit limits and requirements.

Part 70 Permit Program

This facility is a non-major source for part 70 and will continue to remain a non-major source due to permit limits and requirements.

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)

This facility is a non-major source for HAP and has accepted limits on HAP usage to avoid major source status under 40 CFR pt. 63. Therefore, no NESHAPs apply.

Minnesota State Rules

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

- Minn. R. 7011.0515 Standards of Performance for New Indirect Heating Equipment

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

Table 3. Regulatory Overview of Facility

| EU, GP, or SV | Applicable Regulations | Comments: |
|----------------|--|--|
| Total Facility | Title I Condition Minn. R. 7007.0800, subp. 2 | Requirement to calculate potential uncontrolled emissions from insignificant activities and insignificant modifications made after permit issuance and verify that these potential emissions plus emissions allowed by this permit (Total Facility Limited Potential Emissions in Table 1), do not exceed any major source threshold. |
| GP 001 | Minn. R. 7011.0515 | Limits PM and opacity for natural gas/propane fired comfort heating equipment |
| GP 002 | Title I Conditions | Limits and requirements to restrict total facility emissions to less than New Source Review and part 63 major source status. Also the PM, PM ₁₀ , VOC, single HAP, total HAP limits contain language ('Pre-cap' language) that allows replacement, modification, or installation of additional coating equipment, so that the equipment will automatically be subject to these limits, in order to avoid the major permit amendment process for replacement, modification, or installation of additional coating equipment. Subject changes could then be made as insignificant activities, or according to the insignificant modification, minor amendment, or moderate amendment provisions of ch. 7007, as applicable. Emissions from any changes not needing a permit amendment must still be tracked as required by the Total Facility requirement described above in the first row of this table. |
| | Minn. R. 7007.0800 | Limits and requirements to restrict total facility emissions to less than part 70 major source status |
| | Minn. R. 7011.0715 | Standards of Performance for Post 1969 Industrial Process Equipment. |
| GP 003 | Minn. R. 7011.0610 | Limits PM and opacity for natural gas/propane fired direct ovens |
| GP 004 | Title I Conditions | Limits and requirements to restrict total facility emissions to less than New Source Review major source status |
| | Minn. R. 7007.0800 | Limits and requirements to restrict total facility emissions to less than part 70 major source status |

3. Technical Information

3.1 Potential to Emit Calculations: See attached Emission Calculations Spreadsheet for emission calculations, including assumptions and sources of emission factors.

3.2 Limited Emissions: PM, PM₁₀, and VOC, emissions from coating operations are limited to 90 tpy to avoid major source status for NSR and part 70. Also, single and total HAP emissions are limit to 9.0 tpy and 22.5 tpy, respectively, to avoid major source status for parts 63 and 70.

The potential PM, PM₁₀, VOC, and HAP emissions from combustion sources and blasting are very small. The potential emissions from these sources, along with the limited emissions from coating, still result in total permitted emissions that are less than the major source level for part 63, part 70, and NSR (see table 1 above). As a result, tracking emissions from blasting and combustion sources is not warranted or required.

3.3 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 |
|--------------------------------------|--|------------------------------|--|
| Indirect Heating Equipment GP 001 | PM: ≤ 0.4 lb/mmBtu Opacity: ≤ 20 % with | None | All units use natural gas or propane. Therefore, the likelihood of violating either of the emission limits is very small. The Permittee can demonstrate that these units |

| Emission Unit or Group | Requirement (basis) | Additional Monitoring | Discussion |
|------------------------------------|---|---|--|
| | exceptions (Minn. R. 7011.0515) | | will continue to operate such that emissions are well below the emission limits by only burning natural gas or propane. Since this is a permit condition, the semi-annual deviations report will document any deviations from this condition. Design based PTE for each unit, using AP-42, is 0.0078 compared to the rule limit of 0.4 lb/mmBtu. |
| Spray Booths: GP 002 | Title I limits for VOC, PM, PM ₁₀ , and HAPs (limits to avoid NSR and part 63) Minn. R. 7007.0800, subp. 2 to avoid part 70 | Recordkeeping: Daily records of coating purchase; On-going MSDS records of coating contents; Monthly calculations of emissions. | Purchase records will be generated on a daily basis with monthly determination of monthly and 12-month totals, to ensure that these requirements will be met. Credit can be taken for waste materials collected and shipped off-site (dispensed - waste = emissions). |
| Spray Booths: GP 002 | Minn. R. 7011.0715 PM and opacity limits | Ensure proper operation and maintenance of panel filters, as well as inspections and corrective actions if necessary | Control Equipment O & M, monitoring, recordkeeping, and corrective action requirements ensure that these applicable requirements will be met. |
| Direct Heating Equipment GP 003 | Minn. R. 7011.0610 | None | See discussion for GP 001 |
| Blast Booths GP 004 | Minn. R. 7011.0715 PM and opacity limits | Ensure proper operation and maintenance of fabric filters, as well as inspections and corrective actions if necessary | Control Equipment O & M, monitoring, recordkeeping, and corrective action requirements ensure that these applicable requirements will be met. |

3.4 Insignificant Activities

Insignificant activities are limited to welding. This is listed in the Appendix of the permit.

3.5 Comments Received

No comments were received during the public notice.

4. Conclusion

Based on the information provided by Industrial Painting Specialists, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 16300120-003 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Marshall Cole (permit writer/engineer)
Robert Berg (enforcement)
Toni Volkmeier (peer reviewer)

Attachments: 1. Emission Calculation Spreadsheets