

AIR EMISSION PERMIT NO. 17100058- 001

IS ISSUED TO

INDUSTRIAL FINISHING INC.

511 7th Street South
Delano, Wright County, MN 55328-9125

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 Application Type	Application Date
Total Facility Operating Permit	06/15/1995

This permit authorizes the Permittee to operate and construct 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: State; Limits to Avoid Pt 70/Limits to Avoid NSR

Issue Date: December 5, 2002

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

Ann M. Foss
Major Facilities Section Manager
Majors and Remediation Division

for Karen A. Studders
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:

The Permittee owns and operates a coating facility that consists of a paint booth, several small natural gas combustion units, and insignificant activities (listed in Appendix I). The stationary source consists of both Industrial Finishing and Industrial Louvers, which is comprised of only insignificant activities.

The main emissions are Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP), with lesser amounts of Particulate Matter and Particulate Matter less than 10 microns (PM/PM₁₀) and various other pollutants from the combustion of natural gas. The Facility currently has panel filters on the paint booth to control the PM/PM₁₀ emissions.

This permit contains requirements that limit emissions of VOCs, HAPs, and PM/PM₁₀ to avoid major source classification under NSR (40 CFR § 52.21), the federal operation permits program (40 CFR pt. 70) and the National Emissions Standards for Hazardous Air Pollutants (NESHAPs, 40 CFR pt. 63). The permit also authorizes certain changes at the facility.

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/05/02

Facility Name: Industrial Finishing

Permit Number: 17100058 - 001

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
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and 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
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
Record keeping: 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)
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)
The Permittee shall keep records of fuel purchases for the facility on a monthly basis.	Minn. R. 7007.0800, subp. 5
REPORTING/SUBMITTALS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/05/02

Facility Name: Industrial Finishing

Permit Number: 17100058 - 001

<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
<p>Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.</p>	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
<p>Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.</p>	Minn. R. 7007.1150 through Minn. R. 7007.1500
<p>Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).</p>	Minn. R. 7007.1400, subp. 1(H)
<p>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.</p>	Minn. R. 7019.3000 through Minn. R. 7019.3010
<p>Emission Fees: due 60 days after receipt of an MPCA bill.</p>	Minn. R. 7002.0005 through Minn. R. 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/05/02

Facility Name: Industrial Finishing

Permit Number: 17100058 - 001

Subject Item: GP 001 Total Facility VOC Limits**Associated Items:** EU 001 Paint Spray Booth

EU 006 New Spray Booth

What to do	Why to do it
A. LIMITS AND AUTHORIZATIONS	hdr
<p>Volatile Organic Compounds: less than or equal to 50 tons/year using 12-month Rolling Sum to be calculated by the 10th day of each month for the previous 12-month period as described later in this permit.</p> <p>All non-combustion VOC emissions from all equipment other than those listed in Appendix I shall be included in this calculation. VOC contents for each VOC-containing material shall be determined as described under the Material Content requirement in GP 001. The calculation of VOCs used may take into account recovered/recycled VOCs as described under the Waste Credit requirement in GP 001.</p>	Title I Condition: Limit to avoid classification as major source and modification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2
<p>HAPs - Total: less than or equal to 18 tons/year using 12-month Rolling Sum to be calculated by the 10th day of each month for the previous 12-month period.</p> <p>All non-combustion HAP emissions from all equipment other than those listed in Appendix I shall be included in this calculation. HAP contents for each HAP-containing material (i.e. coatings, gun cleaner,...) shall be determined as described under the Material Content requirement in GP 001. The calculation of HAPs used may take into account recovered/recycled HAPs as described under the Waste Credit requirement in GP 001.</p>	Title I Condition: Limit to avoid major source classification under 40 CFR Section 70.2; and to avoid major source classification under 40 CFR Section 63.2
<p>HAP-Single: less than or equal to 7.0 tons/year using 12-month Rolling Sum to be calculated by the 10th day of each month for the previous 12-month period.</p> <p>All non-combustion HAP emissions from all equipment other than those listed in Appendix I shall be included in this calculation. HAP contents for each HAP-containing material (i.e. coatings, gun cleaner,...) shall be determined as described under the Material Content requirement in GP 001. The calculation of HAP usage may take into account recovered/recycled HAPs as described under the Waste Credit requirement in GP 001.</p>	Title I Condition: Limit to avoid major source classification under 40 CFR Section 70.2; and to avoid major source classification under 40 CFR Section 63.2
<p>The Permittee may replace the existing spray booth (EU 001) with a new unit, may install one new spray booth (EU 006), and may replace or purchase additional spray equipment in either booth, provided that:</p> <ol style="list-style-type: none"> 1. The VOC and HAP emissions are tracked and calculated directly from material usage or purchases; 2. The total maximum spray capacity of each booth remains below 22.5 gal/hr; and 3. The permit contains all applicable requirements for the change. <p>All changes must meet the requirements of GP 001. If a proposed change triggers an applicable requirement that is not contained in this permit, the change must be permitted using the appropriate procedure in Minn. R. ch. 7007.</p>	Title I Condition: Limit to avoid classification as a major source and modification under 40 CFR 52.21; and to avoid major source classification under 40 CFR 70.2 and 40 CFR 63.2
Spray Gun Technology: The Permittee shall only use electrostatic spray technology.	Minn. R. 7007.0800, subp. 2
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 separately to each emissions unit in GP 001.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity . This limit applies separately to each emissions unit in GP 001.	Minn. R. 7011.0715, subp. 1(B)
B. MONITORING AND RECORDKEEPING	hdr
<p>Monthly Recordkeeping: By the 10th day of each month, the Permittee shall calculate, record, and maintain the total quantity of all coatings and other VOC and HAP-containing materials used during the previous calendar month. This shall be based on production records, written usage logs, and/or delivery/purchase records.</p>	Title I Condition: Monitoring for limit to avoid classification as a major source and modification under 40 CFR 52.21; and to avoid major source classification under 40 CFR 70.2 and 40 CFR 63.2
<p>Monthly Recordkeeping -- VOC Emissions.</p> <p>By the 10th of the month, the Permittee shall calculate and record the following:</p> <ol style="list-style-type: none"> 1) The total usage of VOC-containing materials for the previous calendar month using the monthly records. This record shall also include the VOC and solids contents 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

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/05/02

Facility Name: Industrial Finishing

Permit Number: 17100058 - 001

<p>Monthly Calculation -- VOC Emissions. The Permittee shall calculate VOC emissions using the following equations:</p> $\text{VOC (tons/month)} = V - W$ $V = (A1 \times B1) + (A2 \times B2) + (A3 \times B3) + \dots$ $W = (C1 \times D1) + (C2 \times D2) + (C3 \times D3) + \dots$	Minn. R. 7007.0800, subp. 4 and 5
<p>Monthly VOC Emissions Calculation Continued:</p> <p>where:</p> <p>V = total VOC used in tons/month;</p> <p>A# = amount of each VOC-containing material used, in tons/month;</p> <p>B# = weight percent VOC in A#, as a fraction (e.g., 50% is 0.50);</p> <p>W = the amount of VOC shipped in waste, in tons/month;</p> <p>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</p> <p>D# = weight percent of VOC in C#, as a fraction.</p>	Minn. R. 7007.0800, subp. 4 and 5
<p>Monthly Recordkeeping - HAP Emissions. By the 10th of the month, the Permittee shall calculate and record the following using the formulas specified in this permit:</p> <p>1). The total HAP-containing materials used in the previous calendar month using the monthly records. This record shall also include the individual HAP contents of each HAP-containing material used in the previous month, as determined by the Material Content requirement of this permit.</p> <p>2). The total and individual HAP emissions for the previous month using the formulas specified in this permit.</p> <p>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.</p>	Minn. R. 7007.0800, subp. 4 and 5
<p>Monthly Calculation -- Volatile HAP Emissions. The Permittee shall calculate the emissions of each individual volatile HAP using the following equations:</p> $\text{Volatile HAP Emissions (tons/month)} = H - W$ $H = (A1 \times B1) + (A2 \times B2) + (A3 \times B3) + \dots$ $W = (C1 \times D1) + (C2 \times D2) + (C3 \times D3) + \dots$	Minn. R. 7007.0800, subp. 4 and 5
<p>Monthly Volatile HAP Emissions Calculation Continued:</p> <p>Where:</p> <p>H = the amount of the individual volatile HAP used, in tons/month.</p> <p>A# = Amount of each material containing the individual volatile HAP used in the previous month, in tons/month.</p> <p>B# = weight percent of each individual volatile HAP in A#, as a fraction (e.g., 50% is 0.50).</p> <p>W = the amount of the individual volatile HAP shipped in waste, in tons/month.</p> <p>C# = amount, in tons/month, of waste material shipped containing the individual volatile HAP. If the Permittee chooses to not take credit for waste shipments, this parameter would be zero.</p> <p>D# = weight percent of each individual volatile HAP in C#, as a fraction.</p>	Minn. R. 7007.0800, subp. 4 and 5
<p>Monthly Calculation -- Particulate HAP Emissions. The Permittee shall calculate the emissions of each individual particulate HAP using the following equations:</p> $\text{Particulate HAP (tons/month)} = S(1-TE) - W$ $S = (A1 \times B1) + (A2 \times B2) + (A3 \times B3) + \dots$ $W = (C1 \times D1) + (C2 \times D2) + (C3 \times D3) + \dots$	Minn. R. 7007.0800, subp. 4 and 5
<p>Monthly Particulate HAP Emissions Calculation Continued:</p> <p>Where:</p> <p>S = the amount of each individual particulate HAP used in tons/month;</p> <p>TE = transfer efficiency, as a fraction. This shall be 0.65, unless otherwise approved by the MPCA in writing.</p> <p>A# = Amount of each material containing the individual particulate HAP sprayed in the previous month, in tons/month;</p> <p>B# = weight percent of each individual particulate HAP in A#, as a fraction;</p> <p>W = the amount of each individual particulate HAP shipped in waste, in tons/month;</p> <p>C# = amount, in tons/month, of waste material shipped containing each particulate HAP. If the Permittee chooses to not take credit for waste shipments, this parameter would be zero; and</p> <p>D# = weight percent of each individual particulate HAP in C#, as a fraction.</p>	Minn. R. 7007.0800, subp. 4 and 5
<p>Total HAP Calculation. The Permittee shall calculate the total HAP emissions each month by summing the emissions of each individual HAP for the given month (both volatile and particulate HAP).</p>	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/05/02

Facility Name: Industrial Finishing

Permit Number: 17100058 - 001

Material Content: VOC and HAPs contents of 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. Other alternative methods approved by the MPCA may be used to determine the VOC and HAPs contents. The Commissioner reserves the right to require the Permittee to determine the VOC and HAP 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.	Minn. R. 7007.0800, subp. 4 and 5
Waste Credit: If the Permittee elects to obtain credit for HAPs and/or VOC shipped in waste materials, the Permittee shall either use item 1 or 2 to determine the VOC and/or total and individual HAP content for each credited shipment. 1) The Permittee shall analyze a composite sample of each waste shipment to determine the weight content of VOC, total HAP, and each individual HAP, excluding water. 2) The Permittee may use supplier data for raw materials to determine the VOC 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 and total and individual HAP content of any of the materials.	Minn. R. 7007.0800, subp. 4 and 5
Recordkeeping of Changes: The Permittee shall keep records on site of any changes made as authorized by this permit. Specifically, the Permittee shall revise the GI-04, GI-05A, and GI-05B forms prior to making any change. The Permittee shall also maintain written documentation of the spray technology for each spray gun.	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/05/02

Facility Name: Industrial Finishing

Permit Number: 17100058 - 001

Subject Item: GP 002 Air Make Up Units**Associated Items:** EU 003 Air Make-up Unit 1

EU 004 Air Make-up Unit 2

EU 005 Air Make-up Unit 3

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 separately to each unit in GP 002. The potential to emit of each unit is 0.007 lb/MMBtu, based on allowable fuels and equipment capacity.	Minn. R. 7011.0515, subp. 1 or Minn. R. 7011.0510, subp. 1, as applicable
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 separately to each unit in GP 002.	Minn. R. 7011.0515, subp. 2, or Minn. R. 7011.0510, subp. 2, as applicable
Fuel Type: natural gas only, by design.	Minn. R. 7005.0100, subp. 35a

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/05/02

Facility Name: Industrial Finishing

Permit Number: 17100058 - 001

Subject Item: EU 002 Drying Oven**Associated Items:** SV 002

What to do	Why to do it
Total Particulate Matter: less than 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.	Minn. R. 7011.0610, subp. 1(A)(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.	Minn. R. 7011.0610, subp. 1(A)(2)
Fuel Type: natural gas only, by design.	Minn. R. 7005.0100, subp. 35a

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/05/02

Facility Name: Industrial Finishing

Permit Number: 17100058 - 001

Subject Item: CE 001 Mat or Panel Filter**Associated Items:** EU 001 Paint 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 Total Particulate Matter: greater than or equal to 67 percent capture efficiency	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000
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 67 percent control efficiency	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2
The Permittee shall operate and maintain the panel filters any time that any process equipment controlled by the panel filters is(are) in operation.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2
Daily Inspections: Once each operating day, the Permittee shall visually inspect the condition of each panel filter with respect to alignment, saturation, tears, holes and any other condition that may affect the filter's performance. The Permittee shall maintain a daily written record of filter inspections.	Title I Condition: Monitoring for Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 4 and 5
Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5, and 14
Corrective Actions: If the filters or any of their components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subp. 4, 5, and 14
Operation and Maintenance of Filters: The Permittee shall operate and maintain each filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14
Hood Evaluation: The Permittee shall maintain a copy of the hood evaluation on site, as well as an annual record of fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow indication method.	Minn. R. 7007.0800, subp. 4, 5, and 14

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/05/02

Facility Name: Industrial Finishing

Permit Number: 17100058 - 001

Subject Item: CE 002 Mat or Panel Filter**Associated Items:** EU 006 New 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 Total Particulate Matter: greater than or equal to 74 percent control efficiency	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000
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 74 percent control efficiency	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2
The Permittee shall operate and maintain the panel filters any time that any process equipment controlled by the panel filters is(are) in operation.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2
Daily Inspections: Once each operating day, the Permittee shall visually inspect the condition of each panel filter with respect to alignment, saturation, tears, holes and any other condition that may affect the filter's performance. The Permittee shall maintain a daily written record of filter inspections.	Title I Condition: Monitoring for Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21; to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 4 and 5
Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5, and 14
Corrective Actions: If the filters or any of their components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subp. 4, 5, and 14
Operation and Maintenance of Filters: The Permittee shall operate and maintain each filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14
Hood Certification and Evaluation: The control device hood must conform to the requirements listed in Minn. R. 7011.0070, subp. 1, and 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 hood, or other comparable air flow indication method.	Minn. R. 7007.0800, subp. 4, 5, and 14

TABLE B: SUBMITTALS

12/05/02

Facility Name: Industrial Finishing
Permit Number: 17100058 - 001

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

12/05/02

Facility Name: Industrial Finishing

Permit Number: 17100058 - 001

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

APPENDIX I
Facility Name: Industrial Finishing Inc.
Permit Number: 17100058-001

Insignificant Activities and General Applicable Requirements

The table below lists the insignificant activities that are currently at the facility and their associated general applicable requirements.

Minn. R. 7007.1300, subp.	Rule Description of the Activity	General Applicable Requirement
3(A)	Fuel use: space heaters fueled by, kerosene, natural gas, or propane. <i>The Permittee's current total capacity is 495,000 Btu/hr.</i>	Minn. R. 7011.0515
3(I)	Individual emissions units at a stationary source, each of which have a potential to emit the following pollutants in amounts less than: 1. 4,000 lbs/year of carbon monoxide; and 2. 2,000 lbs/year each of nitrogen oxide, sulfur dioxide, particulate matter, particulate matter less than ten microns, volatile organic compounds (including hazardous air pollutant-containing VOC), and ozone. <i>The Permittee currently has chrome conversion diptanks, a paint test area, and a batch distillation unit that qualify under this subpart.</i>	Minn. R. 7011.0715 (PM and opacity)

TECHNICAL SUPPORT DOCUMENT
For
Industrial Finishing Inc.
AIR EMISSION PERMIT NO. 17100058-001

This technical support document is for all the interested parties of the permit and to meet the requirements that have been set forth by the federal regulations and Minn. R. (40 CFR Section 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 permit. No written comments were submitted on the draft permit during public notice. The Facility did call with some verbal feedback regarding the appropriate gun transfer efficiency. This lead to some minor revisions to correct the transfer efficiency (mainly used in the permit calculations).

1. General Information

1.1. Applicant and Stationary Source Location:

Stationary Source/Address (SIC Code: 3479)
Industrial Finishing Inc.
511-7 th Street South
Delano, MN 55328-9125
Mr. George Schlechter 763-972-2981

1.2. Description of the Facility

The Permittee has coating operations in Delano, Minnesota. Industrial Louvers, also located in the same building but under different ownership, is considered part of the same stationary source for all air permitting programs. Industrial Finishing is a support facility for Industrial Louvers. In addition, all operations are run under the same management, including environmental management.

Industrial Finishing is an existing facility and consists of a paint booth, several small natural gas units, and insignificant activities. Industrial Louvers consists of assembly operations that all qualify as insignificant activities. This permit covers all activities at the source.

The main emissions are volatile organic compounds (VOC), hazardous air pollutants (HAP), with lesser amounts of particulate matter and particulate matter less than 10 microns (PM/PM₁₀) and various other pollutants from the combustion of natural gas. The paint booth has particulate emissions controls.

1.3 Description of any Changes Allowed with this Permit Issuance

This permit authorizes the replacement and modification of the current paint booth as well as the installation of one additional spray booth.

1.4 Permit History

This facility has never had an air emissions permit. The existing operations have relatively low actual emissions, but the total HAP emissions are very close to the Registration Permit Option D limits. In addition, the existing spray booth hood has a capture efficiency of less than 80%, so it does not qualify under the control equipment rule (Minn. R. 7011.0070, subp. 1). For these reasons, this facility must obtain an individual state operating permit.

1.5 Facility Emissions

Table 1. Total Facility Potential to Emit Summary
See Attachment 2 of this TSD for more specifics

Pollutant	Spray Booths (tpy)	Combustion (tpy)	Total Facility (tpy)
Particulate Matter (PM)	22.2	0.21	22.4
PM less than 10 microns (PM ₁₀)	22.2	0.21	22.4
Nitrogen Oxides (NO _x)	0	2.72	2.72
Sulfur Oxides (SO _x)	0	0.016	0.016
Volatile Organic Compounds (VOC)	50	0.15	50.15
Carbon Monoxide (CO)	0	2.29	2.29
Total HAPs	18	0.05	18.1

tpy = tons per year

Table 2. Facility and Permit Classification

Program	Major Source	*Synthetic Minor	*Minor
Prevention of Significant Deterioration		VOC, PM/PM ₁₀	SO ₂ , NO ₂ , CO
Nonattainment Area Review	NA	NA	NA
Part 70 Permit Program		HAP, VOC, PM ₁₀	SO ₂ , NO ₂ , CO
Part 63 National Emissions Standards for Hazardous Air Pollutants (NESHAP)		X	

* Refers to potential emissions that are less than those specified as major by 40 CFR 52.21, 40 CFR pt. 51 Appendix S, 40 CFR pt. 70, and 40 CFR pt. 63.

2. Regulatory Overview of the Facility

The Facility has taken limits to avoid major source classification for New Source Review (40 CFR § 52.21), the federal operating permits program (40 CFR pt. 70), and the NESHAP program (40 CFR pt. 63). This is a state operating permit.

Table 3 gives a summary of the significant sources of emissions and the applicable regulations and standards. See Attachment 1 of this TSD for a complete listing of the permit limits and their basis.

Table 3. Regulatory Overview of Facility

Level*	Applicable Regulations	Comments:
GP 001 (VOC Usage Limits)	40 CFR § 52.21; 40 CFR § 70.2 40 CFR §§ 70.2 and 63.2 Minn. R. 7011.0715	Prevention of Significant Deterioration (PSD) and Part 70. Limits taken to avoid major source classification under PSD and Part 70 for all noncombustion emissions of VOC. It is a rolling limit due to substantial and unpredictable variations in operation. This permit also pre-authorizes the replacement and modification of the spray booth and the installation of a new spray booth. National Emissions Standards for Hazardous Air Pollutants for Source Categories (NESHAP). Limits taken on HAPs to avoid major source classification under the NESHAPs. Standards of Performance for Industrial Process Equipment
GP 002 (air make up units)	Minn. R. 7007.0515	Standards of Performance for Indirect Heating Equipment. Natural gas only. The direct heating equipment rule might seem to apply to the air make up units. However, none of these units are used for “processing a material”, the other criteria necessary to be direct heating equipment (e.g., process oven or dryer). Since the intent of the indirect heating rule is to limit emissions from combustion, this rule applies.
EU 002 (oven)	Minn. R. 7011.0610	Minnesota Standard of Performance for Direct Heating Equipment. Natural gas only.
CE 001	40 CFR § 52.21; 40 CFR § 70.2	PSD and Part 70. Control efficiency and other operating parameter requirements to limit the PM/PM ₁₀ PTE to avoid major source classification under PSD and Part 70.
CE 002	40 CFR § 52.21; 40 CFR § 70.2	PSD and Part 70. Control efficiency and other operating parameter requirements to limit the PM/PM ₁₀ PTE to avoid major source classification under PSD and Part 70.

*Level -- EU = emission unit, GP = group, TF = total facility, SV = stack/vent, CE = control equipment

3. Technical Information

3.1. Pre-authorized Changes

The permit authorizes the replacement and modification of the current spray booth with a booth of the same or lesser capacity. In addition, the permit authorizes the installation of one additional spray booth of the same or lesser capacity. The Permittee has no immediate plans to install this unit, but asked for the flexibility to do so.

The permitted allowable emissions take into account maximum gun capacity, maximum VOC and solids contents of coatings, VOC and HAP limits, and particulate control requirements. All applicable requirements and necessary monitoring are in the permit. The authorized changes will not cause an emissions increase under Minn. R. 7007.1200,

subp. 3 (calculating emissions increases for non-Title I changes); so they are not modifications and can be made without the need for an amendment.

3.2. Potential to Emit Calculations

Attachment 2 to this TSD contains detailed spreadsheets and supporting information prepared by the MPCA.

Coating

There are two MPCA spreadsheets that are used to calculate PTE from the spray booths. All are based on a mass balance approach – spray capacity times highest content coating to obtain maximum hourly emissions of the given pollutant. These hourly PTEs are overly conservative in that they assume all guns are operating any given hour, using the highest content coating for each pollutant – this is not physically possible since any given gun cannot be applying multiple coatings at the same time.

Attachment 2 of this document summarizes the potential to emit for various HAPs. These HAPs and their PTEs are based on the current and projected coatings and formulations for this facility. The facility can change materials at any time, so long as the new materials continue to meet the various permit limits. While the numbers and chemicals in the attachment are intended to project the maximum possible emissions of all the HAPs the facility will likely emit, the facility is not restricted to these coatings and formulations; therefore, the HAPs and PTEs of those HAPs may change after permit issuance.

Combustion

The combustion potential emissions are calculated based on equipment capacity, allowable fuels, and EPA published emissions factors (AP-42).

3.3. Spray Booth Hood

A hood evaluation was completed for the existing spray booth. Per Minnesota Rules, those that meet the design requirements in Minn. R. 7011.0070 are assumed to have 80% capture for PM/PM₁₀. If the hood does not meet the design requirements, the Permittee is allowed to propose an alternative hood capture efficiency (so long as that particular unit is not subject to the Minnesota Control Equipment Rule in Minn. R. ch. 7011). This was the case for the existing spray booth. For this hood, the Permittee has proposed a capture efficiency based on a linear relationship between the hood airflow and the hood capture efficiency. This approach has been approved by the MPCA in several other permits. An analysis was completed by MPCA staff showing different possible relationships (e.g., linear, exponential, etc.) and the linear relationship was approved as the average results. For this permit, this proposal has been approved as well.

However, the spray booth particulate emissions are limited by the total facility VOC limit, so the specific capture efficiency has little effect on the applicability of regulations

to the facility or on the given unit, and no on-going compliance tracking of particulate emissions is required. To simplify the permit tracking requirements, the particulate HAP calculations required by the permit do not give credit for the PM controls. However, control efficiencies can be used when reporting actual emissions for emissions inventory purposes.

3.4. 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 for the remaining applicable requirements, the MPCA considered the following:

- the initial compliance method;
- the format of the applicable requirement;
- the likelihood of violating the applicable requirement;
- whether add-on controls are necessary to meet the emission limit;
- 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.

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. Emission Units Subject to Periodic Monitoring

EU/ GP/ CE	Emission limit (Basis)	Additional Monitoring	Discussion
Total Facility VOC: GP 001	VOC \leq 50 tons per year, on a 12 month rolling basis (limit to avoid NSR and Part 70)	Recordkeeping: On-going MSDS records of coating contents; Monthly records of usage or purchases and calculations of emissions.	<p>Due to the small quantity of each material used, the Permittee has stated that records would be very difficult to generate on a daily basis. In addition, the VOC permit limit is 50% of the regulatory threshold. For this reason, monthly records are adequate. Records and calculations must be completed by the 10th – a bit earlier than the standard (15th) since no daily records are required.</p> <p>Credit can be taken for waste materials collected and shipped off-site (dispensed – waste = emissions).</p> <p>Current actual VOC emissions are roughly 13 tons per year.</p>

EU/ GP/ CE	Emission limit (Basis)	Additional Monitoring	Discussion
limits on pre-authorized equipment gun technology	<p>HAP \leq 18 tpy for total HAP and 7 tpy for individual HAP (limit to avoid Part 70 and Part 63)</p> <p>PM/PM₁₀: Booths required to be controlled by panel filters (limits to avoid NSR + meet Minn. R. 7011.0715)</p> <p>capacity less than or equal to current unit</p> <p>electrostatic spray</p> <p>PM: \leq 0.0495 gr/dscf, each booth</p> <p>Opacity: \leq 20 % (Minn. R. 7011.0715)</p>	<p>Same records used for VOC tracking</p> <p>see CE 001 and CE 002 for monitoring</p> <p>On-going record of equipment</p> <p>record of gun technology</p> <p>None</p>	<p>The permit uses the default PM transfer efficiency as the default in the PM-HAP calculations, even though the transfer may be higher. This is to simplify tracking requirements – otherwise the Permittee would need to correlate which materials were sprayed using which guns with specific MPCA- approved transfer efficiencies. This would be fairly burdensome, and since the PM-HAP emissions are quite small, unnecessary.</p> <p>Other limits at CE 001 and CE 002 (and associated monitoring) ensure that this applicable requirement is being met. These other operational limits give these booths PTEs of roughly 20-24 lb/hr of PM each. Applicable rule limit at maximum airflow is 36.9 lb/hr, for each booth.</p>
Indirect Heating Equipment: GP 002	<p>PM: \leq 0.4 lb/MMBtu</p> <p>Opacity: \leq 20 % with exceptions (Minn. R. 7011.0515)</p>	Recordkeeping: Fuel purchase records	All units use natural gas; therefore, the likelihood of violating either of the emission limits is very small. The Permittee can demonstrate that these units will continue to operate such that emissions are well below the emission limits by only burning natural gas. Design based PTE for each unit, using AP-42, is 0.0072 compared to the rule limit of 0.4 lb/MMBtu.
Direct Heating Equipment: EU 002	<p>\leq 0.1 gr/dscf</p> <p>Opacity: \leq 20 % with exceptions (Minn. R. 7011.0610)</p>	Recordkeeping: Fuel purchase records	The unit uses natural gas and therefore the likelihood of violating either of the emission limits is very small. Design based PTE is less than 1% of the allowable rate.
Existing Panel Filter: CE 001	PM/PM ₁₀ : Control Efficiency of 67%	Recordkeeping, O&M, inspections	Monitoring based on the Minnesota Performance Standard for Control

EU/ GP/ CE	Emission limit (Basis)	Additional Monitoring	Discussion
	(limit to avoid NSR + Minn. R. 7011.0715)		Equipment is adequate to have a reasonable assurance of compliance (daily and periodic inspections, corrective actions, O&M, and hood design records). The existing spray booth hood has been evaluated for capture efficiency and was determined to get an overall capture of 73%. The permit requires an annual evaluation the hood.
New Panel Filter: CE 002	PM/PM ₁₀ : Control Efficiency of 74% (limit to avoid NSR + Minn. R. 7011.0715)	Recordkeeping, O&M, inspections	Monitoring based on the Minnesota Performance Standard for Control Equipment is adequate to have a reasonable assurance of compliance (daily and periodic inspections, corrective actions, O&M, and hood design records). This new booth must meet the hood design requirements needed to obtain an 80% capture efficiency.

3.5. Deviations from Delta Guidance

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements. One area where the permit deviates from guidance is in the use of groups for requirements that apply to individual pieces of equipment. This is done in order to streamline the permit.

3.6. Insignificant Activities

The Permittee listed several current insignificant activities in the permit application and supplemental submittals, as noted in Table 6. The permit is required to include periodic monitoring for all emissions units, including insignificant activities, per EPA guidance. The insignificant activities at this Facility are only subject to general applicable requirements. Using the criteria outlined earlier in this TSD, the following table documents the justification why no additional periodic monitoring is necessary for the current insignificant activities, and likely future ones, that might be located at this site. See Attachment 2 of this TSD for PTE information for the insignificant activities.

Table 6. Insignificant Activities

Insignificant Activity	General Applicable Emission limit	Discussion
Space heaters fueled by kerosene, natural gas or propane	PM, variable depending on airflow Opacity \leq 20% with exceptions (Minn. R. 7011.0610)	For these units based on the fuels used and published emissions factors, it is highly unlikely that they could violate the applicable requirement. These units are vented inside a building, so testing is not feasible.

Insignificant Activity	General Applicable Emission limit	Discussion
Individual units that have potential emissions of less than 2.28 lb/hr of various criteria pollutants and less than certain thresholds of HAPs.	PM, variable depending on airflow Opacity \leq 20% (Minn. R. 7011.0715)	These units consist of diptanks, paint testing, and a distillation unit. Based on calculations provided by the Permittee (see Attachment 2), it is highly unlikely that they could violate the applicable requirement. In addition, these units are all operated and vented inside a building, so testing for PM or opacity is not feasible.

4. Conclusion

Based on the information provided by Industrial Finishing Inc., the MPCA has reasonable assurance that the proposed operation of the emission Facility, as described in the Air Emission Permit No. 17100058-001 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Permit Team: Peggy Bartz, Permit Engineer
Betsy Randt, Enforcement

Attachments:

- 1 CD-01 Forms
- 2 Emissions Calculations
- 3 Emission Units Description

ATTACHMENT 1
COMPLIANCE PLAN
(Form CD-01, paper copy only)

ATTACHMENT 2
EMISSIONS CALCULATIONS

ATTACHMENT 3
FACILITY DESCRIPTION
(paper copy only)

Industrial Finishing Spray Booths PTE

EU 006: New Spray Booth

The permit authorizes a new spray booth of the same size as EU 001. For control, the new booth must have a hood capture of 80%, so the PM and PM-HAP PTE would be less than for EU 001. The VOC and VOC-HAP PTEs are the same as for EU 001.

Particulate PTE

				Controlled PM/PM ₁₀ PTE (lb/hr)				
gun capacity (gal/hr)	overall control efficiency	Solids Sprayed (lb/hr)	Uncontrolled, Unlimited PM/PM ₁₀ PTE (lb/hr)	Directly Vented Through Stack	Indirectly Vented Through other openings	Total	Uncontrolled PM/PM ₁₀ PTE (tpy)	Controlled PM/PM ₁₀ PTE (tpy)
22.5	0.736	211.50	74.03	4.7376	14.81	19.54	324.23	85.60

Particulate HAP PTE

	Solids Sprayed (lb/hr)	Uncontrolled, Unlimited PTE (lb/hr)	Uncontrolled Unlimited PTE (tpy)	Controlled PM/PM ₁₀ PTE (lb/hr)	Controlled PM/PM ₁₀ PTE (tpy)	Max Content (lb/gal)	Adjusted Limited PTE (tpy)
Antimony Cmpds	40.95	14.3	62.8	5.85	25.6	1.82	7.0
Cadmium Cmpds	27.68	9.69	42.4	3.95	17.3	1.23	7.0
Chromium Cmpds	41.40	14.5	63.5	5.91	25.9	1.84	7.0
Cobalt Cmpds	41.40	14.5	63.5	5.91	25.9	1.84	7.0
Lead Cmpds	0.45	0.16	0.69	0.06	0.28	0.02	0.06
Nickel Cmpds	40.95	14.3	62.8	5.85	25.6	1.82	7.0

	PM	PM-HAP
	%	%
Capture	80.00	80.00
Control	92.00	74.00
Transfer	65.00	65.00

PM-HAP control is based on EPA guidance on % for lead control.

*taking into account the maximum gallons of paint that can be used under the VOC cap.