

**AIR EMISSION PERMIT NO. 00000301- 001
IS ISSUED TO**

Wolkerstorfer Company Inc.
348 First Street Southwest
New Brighton, Ramsey County, Minnesota 55112

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
Total Facility Operating Permit	06/15/95
Major Modification	10/25/95
Major Modification	11/16/95

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 and with all general conditions listed in Minn. R. 7007.0800, subp. 16. Any changes or modifications to the stationary source must be performed in compliance with this permit and 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; Syn Min PSD/NSR/Part 70

Issue Date: September 5, 1996

Expiration: 10 years from date of issuance
All Title I Conditions do not expire.

Michael J. Sandusky
Acting Division Manager
Air Quality Division

for Peder A. Larson
Acting Commissioner
Minnesota Pollution Control Agency

BJN:vab

TABLE OF CONTENTS

Notice to the Permittee

Permit Shield

Facility Description

Table A: Limits and Other Requirements

Table B: Submittals

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	(612)296-6300
Outside Metro Area	1-800-657-3864
TTY	(612)282-5332

The rule 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. 70007.1800, 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. Any requirements which have been determined not to apply are listed in Table A of this permit.

The permit shield, however does not apply to: Minn. R. ch. 7030 (Noise Pollution Control).

FACILITY DESCRIPTION:

Wolkerstorfer Co., Inc. is a metal finishing job shop which operates two boilers, two metal plating lines, wet process lines, and paint booths with associated drying ovens. The facility uses pollution control equipment on the metal plating lines, wet process lines and paint booths. They have taken limits to avoid being a major source for PSD, Part 70, and Part 63.

The new total facility permit will contain provisions which pre-authorize the replacement, movement, and addition of certain VOC, HAP, PM and PM₁₀ sources under usage limits. The facility will be using a 12-month rolling sum method to show compliance with the limits set in the permit.

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolkerstorfer Company Inc

Permit Number: 12300292 - 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
Insignificant Activities: The Permittee shall evaluate the emissions from changes made under Minn. R. 7007.1300 on an annual basis to ensure that no applicable thresholds are crossed. The Permittee shall not make any change that causes emissions to exceed permit thresholds in Minn. R. ch. 7007 without first obtaining the appropriate permit amendment.	Title I Condition: Limit to avoid classification as major source under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2; to avoid major source classification under 40 CFR Section 63.2.
The Permittee shall determine the change in emissions for the previous calendar year due to equipment changes in GP 001 and GP 003 on an annual basis. The Permittee shall not make any change that causes emissions to exceed permit thresholds in Minn. R. ch. 7007 without first obtaining the appropriate permit amendment. The emissions determination shall be submitted with the annual Compliance Certification listed in Table B (due January 30).	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2; and to avoid major source classification under 40 CFR Section 63.2
The Permittee may add new stacks under GP 001, GP 002 and GP 003 anytime before permit expiration. The Permittee shall maintain records on site of stack parameters for any stack additions to GP 001, GP 002 and GP 003 using the latest MPCA application forms.	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2; and to avoid major source classification under 40 CFR Section 63.2
The Permittee shall submit an annual report due January 30 of each year that documents all equipment added under GP 001, GP 002 and GP 003 during the last calendar year using the latest MPCA application forms. The report shall be submitted with the annual Compliance Certification listed in Table B.	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2; and to avoid major source classification under 40 CFR Section 63.2
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.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Shutdowns: Notify the Commissioner at least 24 hours in advance of shutdown of any process or control equipment if the shutdown would cause an increase in the emission of air contaminants. At the time of notification, notify the Commissioner of the cause of the shutdown and the estimated duration. Notify the Commissioner again when the shutdown is over.	Minn. R. 7019.1000, subp. 1
Breakdowns: Notify the Commissioner immediately of a breakdown of more than one hour duration of any process or control equipment if the breakdown causes an increase in the emission of air contaminants. At the time of notification or as soon thereafter as possible, the permittee shall also notify the Commissioner of the cause of the breakdown and the estimated duration. Notify the Commissioner again when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued.	Minn. R. 7007.0800, subp. 4(D)
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, such as for system breakdowns, repairs, calibration checks, and zero and span adjustments (as applicable). Monitoring records should reflect any such periods of process shutdown.	Minn. R. 7007.0800, subp. 4(D)
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
Oral Notification of Deviations Endangering Human Health or the Environment: Within 24 hours of discovery, orally notify the Commissioner of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7007.0800, subp. 6(A)

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolkerstorfer Company Inc

Permit Number: 12300292 - 001

Discovery of Deviations Endangering Human Health or the Environment Report (written): due two working days after discovery of deviation, submit a written description of any deviation endangering human health or the environment to the Commissioner. Include the following information in this written description: cause of the deviation; exact dates of the period of the deviation; if the deviation has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7007.0800, subp. 6(A)
Application for Permit Amendment: If you need a permit amendment, submit 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
Emission Fees: due 60 days after receipt of an MPCA bill	Minn. R. 7002.0005 through Minn. R. 7002.0095
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
Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises, to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.	Minn. R. 7007.0800, subp. 9(A)
Record keeping: 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)
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 strip-chart 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)
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)
Performance Testing: Conduct any performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. ch. 7030 at all times during the operation of any emission units. This is a state only requirement and is not federally enforceable.	Minn. R. ch. 7030

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolkerstorfer Company Inc

Permit Number: 12300292 - 001

Subject Item: GP 001 Direct Heating Equipment

Associated Items: EU 003 Bake Oven #1
EU 004 Bake Oven #2
EU 005 Bake Oven #3
EU 006 Bake Oven #4
EU 007 Teflon Bake Oven
EU 008 Plating Bake Ovens #1,2
EU 042 Spindle Line
EU 046 Conveyor Line Convection Oven

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions as described in Minn. R. 7011.0730 Table 1 or Minn. R. 7011.0735 Table 2.	Minn. R. 7011.0610, subp. 1(A)(1)
Opacity: less than or equal to 20 percent opacity ; except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0610, subp. 1(A)(2)
Fuel Type: Natural gas or propane only, maintain records of fuel type used on site.	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21
The Permittee may replace or move direct heating equipment units in GP 001. All replacement units must meet all permit requirements of the units they replace. The Permittee may add new direct heating units to GP 001. All other permit limits must be met.	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolkerstorfer Company Inc

Permit Number: 12300292 - 001

Subject Item: GP 002 Material Application Equipment

Associated Items: EU 010 Teflon Paint Booth
EU 011 Truck Booth #1
EU 012 Truck Booth #2
EU 013 Spray Paint Booth #1
EU 014 Spray Paint Booth #2A
EU 015 Spray Paint Booth #2B
EU 016 Touch-up Booth
EU 040 Spray Booth - Remelle
EU 043 E-Coat Paint Tank
EU 044 Conveyor Line Wet Booth #1
EU 045 Conveyor Line Wet Booth #2

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions as described in Minn. R. 7011.0730 Table 1 and Minn. R. 7011.0735 Table 2.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Volatile Organic Compounds: less than or equal to 85 tons/year (usage) based on a 12-month rolling sum to be calculated by the 15th day of each month for the previous 12-month period. All emission units or stacks added to GP 002 as allowed in this permit shall be included in this calculation. VOC contents for each VOC-containing material (i.e. coatings, gun cleaner,...) shall be determined as described under the Material Content requirement in GP 002. The calculation of VOCs emitted may take into account recovered/recycled VOCs as described under the Recovery requirement in GP 002.	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2; and to avoid major source classification under 40 CFR Section 63.2
Particulate Matter < 10 micron: less than or equal to 75 tons/year (usage) based on a 12-month rolling sum to be calculated by the 15th day of each month for the previous 12-month period. All emission units or stacks added to GP 002 as allowed in this permit shall be included in this calculation. Solids contents for each coating shall be determined as described under the Material Content requirement in GP 002.	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2; and to avoid major source classification under 40 CFR Section 63.2
Total Particulate Matter: less than or equal to 75 tons/year (usage) based on a 12-month rolling sum to be calculated by the 15th day of each month for the previous 12-month period. All emission units or stacks added to GP 002 as allowed in the permit shall be included in this calculation. Solids contents of each coating shall be determined as described under the Material Content requirement in GP 002.	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2; and to avoid major source classification under 40 CFR Section 63.2
HAPs - Total: less than or equal to 23.5 tons/year (usage) based on a 12-month rolling sum to be calculated by the 15th day of each month for the previous 12-month period. All emission units or stacks added to GP 002 as allowed in this permit shall be included in this calculation. HAP contents of each coating shall be determined as described under the Material Content requirement in GP 002. The calculation of total HAPs emitted may take into account recovered/recycled HAPs as described under the Recovery requirement in GP 002.	Limit to avoid major source classification under 40 CFR Section 70.2; and to avoid major source classification under 40 CFR Section 63.2
Single HAP: less than or equal to 9.25 tons/year (usage) based on a 12-month rolling sum to be calculated by the 15th day of each month for the previous 12-month period. All emission units or stacks added to GP 002 as allowed in this permit shall be included in this calculation. HAPs content of each coating shall be determined as described under the Material Content requirement in GP 002. The calculation of single HAPs emitted may take into account recovered/recycled VOCs as described under the Recovery requirement in GP 002.	Limit to avoid major source classification under 40 CFR Section 70.2; and to avoid major source classification under 40 CFR Section 63.2
The Permittee may replace listed emission units, move emission units or add new emission units to those listed in GP 002, provided VOC, HAP, PM, and PM less than 10 microns emissions are tracked directly from material usage. All replaced or added units must meet the requirements for GP 002.	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2; and to avoid major source classification under 40 CFR Section 63.2

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolkstorfer Company Inc

Permit Number: 12300292 - 001

<p>Material Content: VOC, HAPs, and Solids (PM and PM < 10 microns) contents in coating materials shall be determined by the Material Safety Data Sheet (MSDS) provided by the supplier for each material used. When using the MSDS as the basis of determining compliance with particulate limits, the conservative assumption is made that PM consists entirely of PM less than 10 microns. Other alternative methods approved by the MPCA may be used to determine the VOC, HAPs, and Solids contents. The Division Manager reserves the right to require the Permittee to determine the VOC, HAP, and Solids contents of any material, according to EPA reference methods. If an EPA reference method is used for material content determination, the data obtained shall supercede the MSDS.</p>	<p>Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2; and to avoid major source classification under 40 CFR Section 63.2</p>
<p>Recovery/Recycling:</p> <ol style="list-style-type: none">1. Analyze composite sample of waste material using a gas chromatograph or other method approved by the Director, once per calendar quarter for percent solvent recovery and composition. Sample shall be composited over a calendar quarter.2. The value used for percent recovery shall be the value determined during the previous calendar quarter.3. The value used for HAP composition shall be the value determined during the previous calendar quarter.4. The weight of the composite sample shall be determined each calendar quarter.	<p>Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2; and to avoid major source classification under 40 CFR Section 63.2</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolkerstorfer Company Inc

Permit Number: 12300292 - 001

Subject Item: GP 003 Decorative Chrome Tanks

Associated Items: EU 019 Chrome #1

EU 020 Chrome #2

SV 017

What to do	Why to do it
The Permittee may replace or move listed emission units, or add new emission units similar to those listed in GP 003. All replaced or added units must meet the requirements for GP 003.	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2; and to avoid major source classification under 40 CFR Section 63.2
The Permittee shall use a chemical fume suppressant containing a wetting agent at all times.	40 CFR Section 63.342(d)(2)
Surface Tension: less than or equal to 45 dynes/cm (surface tension of the electroplating or anodizing bath) at any time during operation of the decorative chrome tanks.	40 CFR Section 63.342(d)(2)
Monitor and record the surface tension of the electroplating or anodizing bath once every 4 hours during operation of the tank with a stalagmometer or a tensiometer. A decrease in monitoring frequency is allowed following the procedures in paragraphs 40 CFR Section 63.34 (c)(5)(ii)(B) and (C). Once a bath solution is drained from the decorative chrome tank and a new solution is added, the original monitoring schedule of once every 4 hours must be resumed, with a subsequent decrease in monitoring frequency allowed.	40 CFR Section 63.343(c)(5)
The Permittee shall prepare and implement an Operation and Maintenance (O&M) plan by January 27, 1997. The O&M plan shall 1) specify the O&M criteria for the facility and include a standardized checklist to document the operation and maintenance of the equipment; 2) specify procedures to be followed to ensure that malfunctions due to poor maintenance or other preventable conditions do not occur; and 3) contain systematic procedures for identifying malfunctions and implementing corrective actions to address the malfunction. The Permittee shall revise the initial O&M plan if it fails to adequately address a malfunction within 45 days after such an event occurs.	40 CFR Section 63.342(f)(3)
Notify: due 2 days after Discovery of Deviation any period of malfunction which is not consistent with the O&M plan. The Permittee must record the action taken and follow up the notification by a letter within 7 working days after the end of the event.	40 CFR Section 63.342(f)(3)
The Permittee shall comply with the recordkeeping and reporting requirements associated with the O&M plan.	40 CFR Section 63.342(f)(3)
The Permittee shall keep the written O&M plan on record to be made available for inspection. If the plan has been revised, previous versions shall be made available for inspection for the 5 years after each revision to the plan.	40 CFR Section 63.342(f)(3)
The Permittee shall operate and maintain all decorative chrome tanks in accordance with the O&M plan.	40 CFR Section 63.342(f)(1)
Work Practice Standards: The Permittee shall document that the inspection and maintenance required by the work practice standards have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.	40 CFR Section 63.346(b)
Maintain records of all maintenance performed on the decorative chrome tanks and on the monitoring equipment.	40 CFR Section 63.346(b)
Maintain records of the occurrence, duration, and cause (if known) of each malfunction of process and monitoring equipment.	40 CFR Section 63.346(b)
Maintain records of actions taken during periods of malfunction when such actions are inconsistent with the O&M plan.	40 CFR Section 63.346(b)
Maintain records of monitoring data that are used to demonstrate compliance with the surface tension standard including the date and time the data are collected.	40 CFR Section 63.346(b)
Document the date and time of commencement and completion of each period of excess emission, that occurs: 1. during malfunction of the process or monitoring equipment; and 2. during periods other than malfunction of the process or monitoring equipment	40 CFR Section 63.346(b)
Maintain records of the total process operating time of the decorative chrome tanks during the reporting period.	40 CFR Section 63.346(b)

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolkerstorfer Company Inc

Permit Number: 12300292 - 001

Maintain records of the date and time that fume suppressants are added to the electroplating or anodizing bath.	40 CFR Section 63.346(b)
The Permittee shall prepare an annual summary report to document the ongoing compliance status of the decorative chrome tanks. The report shall be retained on site.	40 CFR Section 63.347(h)
Notify: due 30 days after Compliance Certification Status date of January 25, 1997. The Permittee shall submit notification of compliance status including applicable emissions limitations and the methods used to determine compliance by February 24, 1997.	40 CFR Section 63.347(e)
Notify: due before Anticipated Date of Initial Startup . A notification of compliance status is required each time that a decorative chrome tank becomes subject to the requirements of this subpart.	40 CFR Section 63.347(e)
The Permittee shall correct malfunctions as soon as practical in accordance with the O&M plan.	40 CFR Section 63.342(f)(1)
The O&M plan requirements are enforceable independent of emissions limitations or other requirements in relevant standards.	40 CFR Section 63.342(f)(1)
Notify: due before Start Of Construction or Reconstruction. Notification of intent to construct or reconstruct a decorative chrome plating tank is due as soon as practicable prior to the action. Submit the necessary information as listed in the appropriate requirement in Table B, GP 003.	40 CFR Section 63.5(a)(2)
<p>Notification information required for construction or reconstruction:</p> <ol style="list-style-type: none"> 1. The Permittee's name and address; 2. A notification of intention to construct or make any physical or operational change to the decorative chrome tanks; 3. The address of the source; 4. An identification of the relevant standard that is the basis of the notification; 5. The expected commencement, completion, and anticipated startup dates; 6. The type and quantity of HAPs emitted by the source; 7. The control efficiency for each HAP; 8. Construction Only - A description of the following technical information: proposed nature, size, design, operating design capacity, and method of operation; identification of each emission point for each HAP and a description of pollution control systems; and 9. Reconstruction Only - A brief description of the decorative chrome tanks and the components that are to be replaced. 	40 CFR Section 63.5(a)(2)

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolkstorfer Company Inc

Permit Number: 12300292 - 001

Subject Item: SV 001**Associated Items:** EU 001 Boiler #1

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.4 lbs/million BTU heat input	Minn. R. 7011.0515, subp.1
Sulfur Dioxide: less than or equal to 2 lbs/million BTU heat input	Minn. R. 7011.0515, subp. 1
Opacity: less than or equal to 20 percent opacity ; except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0515, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolkstorfer Company Inc

Permit Number: 12300292 - 001

Subject Item: SV 002**Associated Items:** EU 002 Boiler #2

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.4 lbs/million BTU heat input	Minn. R. 7011.0515, subp.1
Sulfur Dioxide: less than or equal to 2 lbs/million BTU heat input	Minn. R. 7011.0515, subp. 1
Opacity: less than or equal to 20 percent opacity ; except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0515, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolknerstorfer Company Inc

Permit Number: 12300292 - 001

Subject Item: SV 016**Associated Items:** EU 017 Passivate Solution

EU 018 Electropolish Solution

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emission as stated in Minn. R. 7011.0730 Table 1 or Minn. R. 7011.0735 Table 2.	Minn. R. 7011.0715, subp. 1(A)

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolkerstorfer Company Inc

Permit Number: 12300292 - 001

Subject Item: SV 017**Associated Items:** EU 019 Chrome #1

EU 020 Chrome #2

EU 021 Nitric Acid

EU 022 Mixed Acid Actane

EU 023 Sulfuric Acid

EU 024 Electroless Nickel

EU 025 Electroless Nickel

EU 026 Electroless Nickel

EU 027 Hydrochloric Acid

EU 028 Alkaline Cleaners

EU 029 Black Oxide

EU 030 Black Oxide

EU 031 Black Oxide

EU 032 Black Oxide

GP 003 Decorative Chrome Tanks

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions as stated in Minn. R. 7011.0730 Table 1 or Minn. R. 7011.0735 Table 2.	Minn. R. 7011.0715, subp. 1(A)

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolkerstorfer Company Inc

Permit Number: 12300292 - 001

Subject Item: SV 018**Associated Items:** EU 033 Acid Salt

EU 034 Dow 21 Chromate Conversion

EU 035 Dow 20 Chromate Conversion

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions as stated in Minn. R. 7011.0730 Table 1 or Minn. R. 7011.0735 Table 2.	Minn. R. 7011.0715, subp. 1(A)

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolkerstorfer Company Inc

Permit Number: 12300292 - 001

Subject Item: SV 019**Associated Items:** EU 036 Gas Heater - Black Oxide

EU 037 Gas Heater - Black Oxide

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.4 lbs/million BTU heat input	Minn. R. 7011.0515, subp.1
Opacity: less than or equal to 20 percent opacity ; except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0515, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolkerstorfer Company Inc

Permit Number: 12300292 - 001

Subject Item: SV 020**Associated Items:** EU 038 Gas Heater - Black Oxide

EU 039 Gas Heater - Black Oxide

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.4 lbs/million BTU heat input	Minn. R. 7011.0515, subp.1
Opacity: less than or equal to 20 percent opacity ; except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0515, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolkerstorfer Company Inc

Permit Number: 12300292 - 001

Subject Item: CE 007 Wet Scrubber-High Efficiency w/o Lime**Associated Items:** EU 017 Passivate Solution

EU 018 Electropolish Solution

What to do	Why to do it
The Permittee shall operate the wet scrubber according to manufacturer's specifications at all times when EU 017 and EU 018 are in operation. The operation of the control equipment is not necessary in order for the process to meet applicable emission limits. However, the operation of this control equipment allows the Permittee to take credit for its operation.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolkerstorfer Company Inc

Permit Number: 12300292 - 001

Subject Item: CE 008 Wet Scrubber-High Efficiency w/o Lime**Associated Items:** EU 019 Chrome #1

EU 020 Chrome #2

EU 021 Nitric Acid

EU 022 Mixed Acid Actane

EU 023 Sulfuric Acid

EU 024 Electroless Nickel

EU 025 Electroless Nickel

EU 026 Electroless Nickel

EU 027 Hydrochloric Acid

EU 028 Alkaline Cleaners

EU 029 Black Oxide

EU 030 Black Oxide

EU 031 Black Oxide

EU 032 Black Oxide

What to do	Why to do it
The Permittee shall operate the wet scrubber according to manufacturer's specifications at all times when EU 019 through EU 032 are in operation. The operation of the control equipment is not necessary in order for the process to meet applicable emission limits. However, the operation of this control equipment allows the Permittee to take credit for its operation.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/05/96

Facility Name: Wolkerstorfer Company Inc
Permit Number: 12300292 - 001

Subject Item: **CE 009 Wet Scrubber-High Efficiency w/o Lime**

Associated Items: EU 033 Acid Salt
 EU 034 Dow 21 Chromate Conversion
 EU 035 Dow 20 Chromate Conversion
 GP 005 Delete Group

What to do	Why to do it
The Permittee shall operate the wet scrubber according to manufacturer's specifications at all times when EU 033, EU 034 and EU 035 are in operation. The operation of the control equipment is not necessary in order for the process to meet applicable emission limits. However, the operation of this control equipment allows the Permittee to take credit for its operation.	Minn. R. 7007.0800, subp. 2

TABLE B: SUBMITTALS

09/05/96

Facility Name: Wolkertorfer Company Inc
Permit Number: 12300292 - 001

Table B lists the submittals you must send to the Commissioner. Table B is divided into two sections, for source-specific submittal requirements and for submittals required of all permittees. Source-specific submittals are further organized as either one-time only or recurrent requirements. You may also be subject to additional reporting requirements contained in the compliance schedule located in Table C of this permit. All submittals must be postmarked or received by the date specified in the table, and certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Submittals which must be provided on standardized forms approved by the Commissioner are noted in Tables B and C.

Send any application for a permit or permit amendment to: Permit Information Coordinator, Permit Section, Air Quality Division, Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4914. Also send the Permit Information Coordinator notices of: accumulated insignificant activities, installation of control equipment, replacement of an emissions unit, and changes that contravene a permit term.

Send all other submittals to: Compliance Tracking Coordinator, Compliance Determination Unit, Air Quality Division, Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

09/05/96

Facility Name: Wolkerstorfer Company Inc

Permit Number: 12300292 - 001

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Notice of Shut Down of Noncompliant Emission Unit(s)	due 14 days after Shut Down of Noncompliant Emission Unit(s) . Submit the name and number of each unit and the anticipated date of initial startup of each unit.	GP003
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup . Submit the name and number of each unit and the actual date of initial startup each unit.	Total Facility
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup . Submit the name and number of each unit and the actual date of initial startup of each unit.	GP003
Notification of the Anticipated Date of Initial Startup	due 30 days before Anticipated Date of Initial Startup . Submit the name and number of each unit and the anticipated date of initial startup each unit.	Total Facility
Notification of the Date Construction Began	due 30 days after Start Of Construction . Submit the name and number of each unit and the date construction of each unit began.	GP003
Notification of the Date Construction Began	due 30 days after Start Of Construction Submit the name and number of each unit and the date construction of each unit began.	Total Facility
Notification of the date of Equipment Removal/Dismantlement	due 15 days after Equipment Removal and/or Dismantlement . Submit the name and number of each unit and the date the unit was removed and/or dismantled.	Total Facility

TABLE B: RECURRENT SUBMITTALS

09/05/96

Facility Name: Wolkstorfer Company Inc

Permit Number: 12300292 - 001

What to send	When to send	Portion of Facility Affected
Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance (July 30 and January 30 for the previous 6-month period) if the conditions of excess emissions as defined in 40 CFR Section 63.347(h)(2) are met. The Permittee may request a reduction in reporting frequency in accordance with 40 CFR Section 63.347(h)(3).	GP003
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance (i.e. July 30th and January 30th). The report must be submitted even if there were no deviations for the reporting period.	Total Facility
Compliance Certification	due 30 days after end of each calendar year following Permit Issuance for the previous calendar year. To be submitted on a form approved by the Commissioner.	Total Facility
Emissions 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	Total Facility

TECHNICAL SUPPORT DOCUMENT
For Wolkerstorfer Company, Inc. (1689)
DRAFT AIR EMISSION PERMIT NO. 12300292-001

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

1. General Information

1.1. Applicant and Stationary Source Location:

Applicant/Address	Stationary Source/Address (SIC Code: 3479)
Mr. Joseph Wolkerstorfer	Wolkerstorfer Company, Inc.
348 1st St. SW	same
New Brighton, MN 55112	

1.2. Description Of The Permit Action

Facility Description: The facility is a metal-plating and coating facility. They have taken limits to avoid being a major source for PSD, Part 70, and Part 63. The facility submitted their Title V application June 15, 1995, in accordance with their deadline. No information was claimed to be confidential, either in written correspondence or in telephone conversations.

Permit Action: This is a total facility permit which incorporates past modifications. In addition to re-issuing the permit for the existing facility, this action will authorize the installation and operation of a new spray booth (with particulate filter) and oven. The new total facility permit will contain provisions which pre-authorize the replacement, movement, and addition of certain VOC, HAP, PM and PM₁₀ sources under usage limits.

The facility will be using a 12-month rolling sum method to show compliance with the limits set in the permit. The facility is a metal-finishing shop which receives parts, performs some type of process to achieve the desired finish and returns the parts to the customer. Day-to-day fluctuations in workload as well as some very general cyclical patterns in the volume of the work received make it impractical to perform a daily average calculation.

Environmental Review is not required for the installation of the new emission units as the allowable emissions with limits are less than 100 tons per year for criteria pollutants

Applicability of Federal Regulations and Requirements

1. The facility is not one of the listed 27 facilities. Unrestricted they would be major for PSD. They will be accepting limits to avoid major source classification for PSD, Part 70, NESHAPs and Section 112.

2. NSPS: There are no applicable New Source Performance Standards.

3. NESHAP: The facility is subject to area source requirements for Part 63 NESHAP for Decorative Chrome Plating (promulgated 1/25/95). Future applicable NESHAPs include Industrial Boilers (11/15/2000), Steel Pickling, HCl process (11/15/97).

1.3. Emissions of the Facility

The facility has proposed federally enforceable usage limits on Volatile Organic Compounds (VOC), Hazardous Air Pollutants (HAP), and Particulate Matter (PM and PM₁₀). They have also proposed to utilize pollution control equipment for PM/PM₁₀. They do this to avoid major source classification under all federal air permitting programs (40 CFR 70, 40 CFR 63, and 40 CFR 52.21); therefore the proposed permit is a state operating permit (Minn. R. 7007.0850, subp.2).

Table 1. Potential to Emit Summary and Attainment Status:

Pollutant	Potential to Emit of Entire Facility (tons per year)	Attainment or Unclassified?
Particulate Matter (PM)	92.29	y
Particulate Matter less than 10 micron (PM ₁₀)	92.16	y
Sulfur Dioxide (SO ₂)	23.62	y
Nitrogen Oxides (NO _x)	12.15	y
Volatile Organic Compounds (VOCs)/Ozone	85.42	y
Carbon Monoxide (CO)	2.28	n
Lead	0	y
Hazardous Air Pollutants (add as needed)	9.28/23.53	na

Emissions Summary (by emission unit)

Emission Units	PM	PM-10	SO _x	CO	NO _x	VOC	HAP-s	HAP-t
1 - 9, 36 - 39, 42, 46: Combustion	1.00	0.865	21.62	2.28	11.60	0.415	na	na
10 - 16, 40, 41, 44, 45 : Coating	75	75	-	-	-	85	9.25	23.5
17 - 35: Plating...	16.29	16.29	2.0	0	0.55	0	0.03	0.03
43, 47, 48: pwd. coat	0	0	0	0	0	0	0	0
Summary:	92.29	92.16	23.62	2.28	12.15	85.42	9.28	23.53

Emission Units	PM	PM-10	SO _x	CO	NO _x	VOC	HAP
1, 2 - Boilers	0.675	0.540	21.6	1.69	7.24	0.259	na
3- 9, 42, 46: Group 1	0.325	0.325	0.02	0.59	4.36	0.156	na
36-39: Heaters	0.04	0.04	0	0.088	0.416	0.016	na

Table 2. Facility Classification

Classification	Major	Synthetic Minor	Minor	N/A
Prevention of Significant Deterioration		x		
Non Attainment Area (list pollutant)			CO	
Operating Permit Program		x		

2. Regulatory and/or Statutory Basis of Emission Limit

Summary of Emission Limit and Regulatory and/or Statutory Basis of the Emission Limit

Control Equip. I.D.: 007-009 Emission Unit: 017-035

Emission Limit and/or Special Conditions: See CD forms for limits and basis

Comments: The wet scrubbers for the plating tanks will be operated at all times. The control efficiency will be used to determine actual emissions for the purposes of the emission inventory. The control efficiency was not applied to determine potential emissions, and therefore the applicable requirements.

Total Facility Requirements

Emission Limit and/or Special Conditions: See CD forms for limits and basis

Comments: All general requirements and some site specific conditions are listed at the total facility level. The site specific requirements are listed first.

1. *Insignificant Activities:* Title V requires that insignificant activities (Minn. R. 7007.1300) be included when they affect applicability. The Permittee has allowed sufficient room for insignificant activities expected at the facility between their limits and the thresholds such that specific tracking and reporting to the MPCA is not required. They are obligated to track insignificant activities according to the rule and send notification when appropriate. If the insignificant activities accumulated such that they could affect applicability, they would need to apply for an amendment to lower the cap or incorporate the activities into the cap.

- Listed Insignificant Activities
S/V 24, 25, 26, 27, 28 and CE 4,5,6,7 are associated with insignificant activities
- Powder coating is an insignificant activity that will not affect applicability determinations.

2. *Flexibility:* The permit has flexibility included which allows the Permittee to move, add, and replace equipment as long as the emissions from the facility stay below permit limits and federal thresholds. This is an expiring state permit (10-year duration). When the permit is reissued, the permit will be revised to represent the most recent equipment and stack configurations.

The Permittee is required to evaluate the emissions from Group 1 and Group 3 on an annual basis and compare the emissions to applicable thresholds. There are no specific limits set for the emission units in these groups as the potential emissions are very small (see table below) when compared to threshold values.

Emission Units	PM	PM ₁₀	SO _x	CO	NO _x	VOC	HAP-single	HAP-total
Group 1	0.285	0.285	0.02	0.50	3.94	0.14	NA	NA
Group 3	0.03	0.03	0	0	0	0	0.03	0.03

Group 001: Direct Heating Equipment Emission Unit: 003-008, 042, 046

Emission Limit and/or Special Conditions: See CD forms for limits and basis

Comments: There are no emissions from EU 009 which is an electric oven. Any volatilization which takes place within the oven, or emitted from the stack are accounted for in mass balance equations within Group 002.

1. Flexibility provisions which pre-authorize changes and additions within the group.
2. Natural gas or propane only.
3. The Direct Heating Equipment Rule applies, Minn. R. 7011.0610. It is not limiting for any pollutant; therefore, we are including the variable language for this rule.

Compliance Method: Documentation on site that only natural gas and propane will be used. The unrestricted PTE of direct heating equipment, along with any future direct heating equipment that is reasonable to consider that may be added would not trigger any new applicable requirements. They would have to grow by over 500% to near any limit - and this is considering emissions as PTE, not as actual emissions. This is especially unreasonable in light of the company's policy of switching to powder coating whenever possible (3 new lines already).

Group 002: Material Application Equipment Emission Units: 010-016, 040, 044, 045

Emission Limit and/or Special Conditions: See CD forms for limits and basis

Comments:

1. Flexibility provisions which pre-authorize changes and additions within the group. They are a "job-shop" with variable and unknown production. They also operate on very tight time-frames.
2. Limits taken for VOCs, HAPs, PM and PM₁₀. The facility specifically chose tighter limits than necessary to encourage pollution prevention activities at the facility.
3. The Industrial Process Equipment Rule applies, Minn. R. 7011.0715. It is not limiting for any pollutant in this permit; therefore, we are including the variable language for this rule.

TABLE 2

10 stacks, with a range of exhaust rates from 4,200 to 16,000 acfm at ambient temp.

Limit: $0.100 \text{ gr/dscf} \times 1 \text{ lb/7000 gr} \times 1 \text{ ton/2000 lb} \times 4,200 \text{ acf/min} \times 60 \text{ min/hr} \times 8760 \text{ hr/yr}$
 $= 15.77 \text{ ton/year} \times 10 \text{ stacks} = 157.7 \text{ ton/year}.$

Limit: $0.08 \text{ gr/dscf} \times 1 \text{ lb/7000 gr} \times 1 \text{ ton/2000 lb} \times 16,000 \text{ acf/min} \times 60 \text{ min/hr} \times 8760 \text{ hr/yr}$
 $= 48.05 \text{ ton/year} \times 10 \text{ stacks} = 480.5 \text{ ton/year}.$

TABLE 1

$9.04 \text{ gal/hr (max. capacity of spray gun)} \times 13.51 \text{ lb/gal} = 122 \text{ lb/hr} = \text{process weight rate}$

$100 \text{ PRR} = 0.55 \text{ ER}; 500 \text{ PRR} = 1.53 \text{ ER} \Rightarrow 122.13 \text{ PRR} = 0.604 \text{ ER}$

$* 500 - 122.13 / 500 - 100 = 0.945 \text{ (0.055)}$

$* 0.98 \times 0.055 = 0.539$

$* 1.53 - 0.55 = 0.98$

$* 0.539 + 0.55 = 0.604$

$0.604 \text{ lb/hr} \times 8760 / 2000 = 2.65 \text{ tpy} \times 11 \text{ booths} \times 54 \text{ ports} = 1574 \text{ tpy}$

4. Control equipment (i.e. panel filters) for the spray booths will be needed to ensure compliance with the PM limits. They will have 80% capture and 92% control. The Remele booth is totally enclosed, the rest operate as hoods. This is consistent with manufacturer's testing information.
5. Powder Coating is a listed insignificant activity. Emission calculations are not required for applicability (too small to affect applicability determination).
6. The facility will be recovering/recycling VOCs and HAPs from gun cleaners and thinners. They will be testing the recovered material and factoring this into their emissions. Analysis of the waste material will be by gas chromatograph with FID detector. The facility will prepare a composite sample (consisting of a sample from each barrel shipped) each quarter, and use the results of the testing for calculating reductions in VOC and HAP emissions.

Group 003: Decorative Chrome Tanks Emission Units: 019 and 020

Emission Limit and/or Special Conditions: See CD forms for limits and basis

Comments: Pre-authorization to add new decorative chrome tanks in accordance with the NESHAP requirements. No restrictions on emissions as they are too small to affect applicability determination. The PTE also doesn't reflect the existence of the wet scrubber.

E-mail dated 4/20/95 from Phyllis Strong: Decorative chrome tanks and chrome anodizing tanks that use fume suppressants added to the bath to meet a surface tension of 45 dynes/cm are exempt from Title V Permitting.

S/V 001 and 002 Emission Units: 001 and 002, Boilers

Emission Limit and/or Special Conditions: See CD forms for limits and basis

Comments: No NSPS is applicable to the boilers.

Minn. R. 7011.0515, Indirect heating equipment rule applies

- Fuels: Boilers 1 & 2 use Natural gas, propane and Distillate Oil grades 1 and 2
Heaters 36 - 39 use natural gas only, no SO₂ limits
- Located within MSP region, MMBtu of all units = 21.5 < 100 => 0.4 lb PM/MMBtu for all fuels, 2.0 lb SO₂/MMBtu for liquid fuels, rest is N.A.
- Boiler 1: 2.0 lb SO₂/MMBtu x 6.3 MMBtu = 12.6 lb/hr SO₂ (limited by PTE)
- Boiler 2: 2.0 x 4.5 = 9.0 lb/hr SO₂ (limited by PTE)
- Opacity: shall not exceed 20 % with qualifications
- Compliance with PM limit, SO₂ limit and opacity would be based upon performance testing, if requested by the Division Manager

S/V 016-018 Emission Units: 017-035, Plating Tanks

Emission Limit and/or Special Conditions: See CD forms for limits and basis

Comments: Only applicable rule is the Industrial Process Equipment Rule.

Emission calculations based on % loss of make-up method. Determined amount of make-up materials added for all bath compounds, scaled up for PTE, applied appropriate gassing rate.

The control equipment for the tanks was not used in the determination of applicable requirements or the PTE. It will be used for purposes of the emission inventory. If testing would be required, they would choose not to use it for the purposes of the emission inventory.

S/V 019 and 020 Emission Units: 036-039, Gas Heaters.

Emission Limit and/or Special Conditions: See CD forms for limits and basis

Comments: Only applicable rule is the Industrial Process Equipment Rule.

3. Conclusion

Based on the information provided by Wolkerstorfer Company, Inc., the MPCA has reasonable assurance that the proposed construction and operation of the emission facility, as described in the Air Emission Permit No. 12300292-001 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Attachments:

Need further information?

1. General Information (GI) forms
2. Compliance Demonstration (CD) forms
(together summarize the permit application)

Permit Engineer: Bonnie J. Nelson, P.E.
Telephone No.: 612-282-5846