AIR EMISSION PERMIT NO. 12300341-003

IS ISSUED TO

Water Gremlin Co

WATER GREMLIN CO
1610 Whitaker Avenue
White Bear Lake, Ramsey County, MN 55110

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

Permit Type	Application Date	Issue Date	Action #
Total Facility Operating Permit	September 23, 1999	July 20, 2000	001
Major Amendment	July 19, 2001	March 18, 2002	002
Major Amendment	April 07, 2006	See Below	003

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

Permit Amendment Issue Date: September 22, 2006

Expiration: Permit does not expire

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

for Brad Moore
Acting 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:

Water Gremlin is a manufacturer of fabricated lead metal products from purchases refined lead material. Products include fishing sinker weights and lead acid battery terminals. Battery terminal posts are the primary product, and account for a majority of production at the facility. Uncontrolled emissions from the facility are above the major source thresholds for the Part 70 permit program for Volatile Organic Compounds (VOC) and hazardous air pollutants, therefore the facility has taken limits on VOCs and Trichloroethylene (TCE) to be a synthetic minor source under the Part 70 program and to obtain a State Permit.

PERMIT ACTION 003 DESCRIPTION:

This is a major amendment to pre-approve future coaters that can be installed without further authorization required. These coaters will be permitted under pre-existing coating usage limits, and will cause no change in total facility PTE.

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Water Gremlin Co

Permit Number: 12300341 - 003

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

Subject Item: **Total Facility**

What to do	Why to do it
OPERATIONAL REQUIREMENTS	hdr
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, subps. 2 and 16(J)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subps. 14 and 16(J)
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
PERFORMANCE TESTING	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017.	Minn. R. ch. 7017
Performance Test Notifications and Submittals: Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.	Minn. R. 7017.2018; Minn. R. 7017.2030, subps. 1-4; Minn. R. 7017.2035, subps. 1-2
Limits set as a result of a performance test apply until superseded as specified by Minn. R. 7017.2025 following formal review of a subsequent performance test on the same unit and completion of permit reopening and reissuance. If limits serve to cause more stringent operating conditions, resulting changes to facility operation need to be made immediately. If limits serve to relax current operating conditions, resulting changes to facility operation must not be made prior to issuance of permit amendment with new limit incorporated.	Minn. R. 7017.2025
MONITORING	hdr
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment.	Minn. R. 7007.0800, subp. 4(D)

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Operation of Monitoring Equipment: Unless otherwise noted in Tables A and/or B, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
RECORDKEEPING	hdr
Recordkeeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007. 1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007. 0800, subp. 5(B)
REPORTING/SUBMITTALS	hdr
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. The cause of the deviation; 2. The exact dates of the period of the deviation, if the deviation has been corrected; 3. Whether or not the deviation has been corrected; 4. The anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 - 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Emissions Inventory Report: due on or before April 1 of each calendar year following permit issuance. To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 - 7019.3010
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 - 7002.0095

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Subject Item: **GP 001 Battery Terminal Coaters with Rework Tables and Associated Control Equipment**

Associated Items: CE 003 Fluidized Activated Carbon Bed

EU 001 Battery Terminal Post Coater

EU 002 Battery Terminal Post Coater

EU 003 Battery Terminal Post Coater

EU 004 Battery Terminal Post Coater

EU 005 Battery Terminal Post Coater

EU 006 Battery Terminal Post Coater

EU 007 Battery Terminal Post Coater

EU 008 Battery Terminal Post Coater

EU 009 Battery Terminal Post Coater

EU 010 Battery Terminal Post Coater

EU 011 Battery Terminal Post Coater

EU 012 Battery Terminal Post Coater

EU 013 Battery Terminal Post Coater

EU 014 Battery Terminal Post Coater

EU 015 Battery Terminal Post Coater

EU 016 Future Coater

EU 017 Future Coater

EU 018 Future Coater

EU 019 Future Coater

EU 020 Future Coater

EU 021 Future Coater

EU 022 2 Rework Tables

EU 027 Future Coater

EU 028 Future Coater

EU 029 Future Coater

EU 030 Future Coater

EU 031 Future Coater

EU 032 Future Coater

EU 033 Future Coater

EU 034 Future Coater

EU 035 Future Coater

EU 036 Future Coater

EU 037 Future Coater

EU 038 Future Coater

EU 039 Future Coater

EU 040 Future Coater

EU 041 Future Coater

EU 042 Future Coater

Facility Name: Water Gremlin Co

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Associated Items: EU 043 Future Coater

EU 044 Future Coater

EU 045 Future Coater

EU 046 Future Coater

EU 047 Future Coater

EU 048 Future Coater

EU 049 Future Coater

EU 050 Future Coater

EU 051 Future Coater

EU 052 Future Coater

EU 053 Future Coater

EU 054 Future Coater

EU 055 Future Coater

EU 056 Future Coater

EU 057 Future Coater

EU 058 Future Coater

EU 059 Future Coater

EU 060 Future Coater

EU 061 Future Coater

EU 062 Future Coater

EU 063 Future Coater

EU 064 Future Coater

EU 065 Future Coater

EU 066 Future Coater

EU 067 Future Coater

EU 068 Future Coater

EU 069 Future Coater

SV 004 Adsorber Stack (for CE 003)

What to do	Why to do it
The emission units designated as Future Coater in GP 001 may be installed at any time without prior authorization of or review by the MPCA. Any newly installed emission unit will be subject to all GP 001 requirements. At such time that any emission unit(s) designated as Future Coater in GP 001 is installed, the owner or operator shall notify the MPCA in the next emissions inventory submittal. Such notification shall constitute all reporting required in connection with installation of the emission unit(s).	Title I Condition: To avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 2
OPERATIONAL REQUIREMENTS	hdr
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.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
VOC Usage: less than or equal to 316,666 lbs/month using 12-month Rolling Average . Calculate a new 12-month rolling average of VOC Usage by the fifteenth day of each month for the previous 12-month period. VOC Usage shall be calculated based on purchase records of all VOC-containing materials and corresponding material composition.	Title I Condition: To avoid classification as a major source under 40 CFR Sections 52.21 and 70.2; Minn. R. 7007.0800, subp. 2

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Single HAP Usage: less than or equal to 31,666 lbs/month using 12-month Rolling Average . Calculate a new 12-month rolling average of Single HAP Usage by the fifteenth day of each month for the previous 12-month period. Single HAP Usage shall be calculated based on purchase records of all HAP-containing materials and corresponding material composition.	Title I Condition: To avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 2
Total HAP Usage: less than or equal to 80,000 lbs/month using 12-month Rolling Average . Calculate a new 12-month rolling average of combined total HAP Usage by the fifteenth day of each month for the previous 12-month period. Total HAP Usage shall be calculated based on purchase records of all HAP-containing materials and corresponding material composition.	Title I Condition: To avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 2
Material Content: VOC and HAP contents shall be determined by the Material Safety Data Sheet (MSDS) provided by the supplier for each material used. If a material content range is given on the MSDS, the highest number in the range shall be used in all compliance calculations. Other alternative methods approved by the MPCA may be used to determine the VOC and HAP contents. The Division Manager reserves the right to require the Permittee to determine the VOC and HAP contents of any material, according to EPA reference methods. If an EPA reference method is used for material content determination, the data obtained shall supersede the MSDS.	Title I Condition: To avoid classification as a major source under 40 CFR Section 70.2
RECORDKEEPING	hdr
Volatile Organic Compounds (VOC) Recordkeeping By the 15th of each month, the Permittee shall: 1. Record the total mass of each VOC-containing material from purchase records in the previous month and the VOC content of each material as determined by the Material Content requirement in this permit 2. Calculate the VOC usage for the previous month 3. Calcluate the average VOC usage for the previous 12 months (12-month Rollling Average)	Title I Condition: To avoid classification as a major source under 40 CFR Sections 52.21 and 70.2; Minn. R. 7007.0800, subp. 5
Single Hazardous Air Pollutant (Single HAP) Recordkeeping By the 15th of each month, the Permittee shall: 1. Record the total mass of each HAP-containing material from purchase records in the previous month and the HAP content of each material as determined by the Material Content requirement in this permit 2. Calculate the Single HAP usage for the previous month 3. Calcluate the average Single HAP usage for the previous 12 months (12-month Rollling Average)	Title I Condition: To avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 5
Total Hazardous Air Pollutant (Total HAP) Recordkeeping By the 15th of each month, the Permittee shall: 1. Record the total mass of each HAP-containing material from purchase records in the previous month and the HAP content of each material as determined by the Material Content requirement in this permit 2. Calculate the Total HAP usage for the previous month 3. Calcluate the average Total HAP usage for the previous 12 months (12-month Rollling Average)	Title I Condition: To avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subp. 5

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Subject Item: **GP 002 Lead Melting Pots and Associated Control Equipment**

Associated Items: CE 002 Electrostatic Precipitator - Low Efficiency

EU 023 Large Re-Melt Pot

EU 024 Small Re-Melt Pot

EU 025 Doe Run Melt Pot

EU 026 Collins Re-Melt Pot

SV 003

What to do	Why to do it
OPERATIONAL REQUIREMENTS	hdr
Particulate Matter < 10 micron: greater than or equal to 70 percent collection efficiency at all times during which the associated subject emission units are in operation.	Minn. R. 7011.0070, subp. 1
Fuel Usage: limited to natural gas	Minn. Stat. 116.007, subd. 4a; 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.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Operate the electrostatic precipitator at all times during which the emission units associated with GP 002 are in operation.	Minn. R. 7011.0075, subp. 1
Operate and maintain the electrostatic precipitator according to the control equipment manufacturer's specifications.	Minn. R. 7011.0075, subp. 2

Facility Name: Water Gremlin Co

Permit Number: 12300341 - 003

Subject Item: **CE 002 Electrostatic Precipitator - Low Efficiency**

Associated Items: EU 023 Large Re-Melt Pot

EU 024 Small Re-Melt Pot

EU 025 Doe Run Melt Pot

EU 026 Collins Re-Melt Pot

GP 002 Lead Melting Pots and Associated Control Equipment

What to do	Why to do it
Periodic Inspections: Once per month, or more frequently as required by the Operation and Maintenance Plan, the Permittee shall complete the ESP Maintenace Checklist, Cleaning Services, and Preventive Maintenance as described in the Operation and Maintenance Plan. If a problem is noted during an inspection, the permittee shall follow corrective actions as specified in the Operation and Maintenance Plan.	Minn. R. 7007.0800, subp. 14
The Permittee shall operate and maintain the ESP in accordance with the Operation and Maintenance Plan. The Permittee shall keep copies of the Operation and Maintenance Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14

Facility Name: Water Gremlin Co

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Subject Item: **CE 003 Fluidized Activated Carbon Bed**

Associated Items:

EU 001 Battery Terminal Post Coater

EU 002 Battery Terminal Post Coater

EU 003 Battery Terminal Post Coater

EU 004 Battery Terminal Post Coater

EU 005 Battery Terminal Post Coater

EU 006 Battery Terminal Post Coater

EU 007 Battery Terminal Post Coater

EU 008 Battery Terminal Post Coater

EU 009 Battery Terminal Post Coater

EU 010 Battery Terminal Post Coater

EU 011 Battery Terminal Post Coater

EU 012 Battery Terminal Post Coater

EU 013 Battery Terminal Post Coater

EU 014 Battery Terminal Post Coater

EU 015 Battery Terminal Post Coater

EU 016 Future Coater

EU 017 Future Coater

EU 018 Future Coater

EU 019 Future Coater

EU 020 Future Coater

EU 021 Future Coater

EU 022 2 Rework Tables

EU 027 Future Coater

EU 028 Future Coater

EU 029 Future Coater

EU 030 Future Coater

EU 031 Future Coater

EU 032 Future Coater

EU 033 Future Coater

EU 034 Future Coater

EU 035 Future Coater

EU 036 Future Coater

EU 037 Future Coater

EU 038 Future Coater

EU 039 Future Coater

EU 040 Future Coater

EU 041 Future Coater

EU 042 Future Coater

EU 043 Future Coater

Facility Name: Water Gremlin Co

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Associated Items:

EU 044 Future Coater

EU 045 Future Coater

EU 046 Future Coater

EU 047 Future Coater

EU 048 Future Coater

EU 049 Future Coater

EU 050 Future Coater

EU 051 Future Coater

EU 052 Future Coater

EU 053 Future Coater

EU 054 Future Coater

EU 055 Future Coater

EU 056 Future Coater

EU 057 Future Coater

EU 058 Future Coater

EU 059 Future Coater

EU 060 Future Coater

EU 061 Future Coater

EU 062 Future Coater

EU 063 Future Coater

EU 064 Future Coater

EU 065 Future Coater

EU 066 Future Coater

EU 067 Future Coater

EU 068 Future Coater

EU 069 Future Coater

GP 001 Battery Terminal Coaters with Rework Tables and Associated Control Equipment

What to do	Why to do it
The term "coating room" shall be defined as any area of the facility that is enclosed, operated under negative pressure, and whose air is ducted to CE 003 whenever any coating operation located in the room is in operation.	Title I Condition: To avoid classification as a major source under 40 CFR Sections 52.21 and 70.2
OPERATIONAL REQUIREMENTS	hdr
Operate a bead activated carbon adsorb/desorb/condenser emission control system at all times during which the associated emission units are in operation. Operation of the emission control system for HAP and Volatile Organic Compounds: greater than or equal to 95 percent control efficiency	Title I Condition: To avoid classification as a major source under 40 CFR Sections 52.21 and 70.2; Minn. R. 7007.0800, subp. 14
Adsorber Inlet Pressure Drop: greater than or equal to 2.0 inches of water column and less than or equal to 4.5 inches of water column	Title I Condition: To avoid classification as a major source under 40 CFR Sections 52.21 and 70.2; Minn. R. 7007.0800, subp. 4
Desorber Fluid Temperature: greater than or equal to 250 degrees F and less than or equal to 450 degrees F	Title I Condition: To avoid classification as a major source under 40 CFR Sections 52.21 and 70.2; Minn. R. 7007.0800, subp. 4
Maximum Allowable Aftercool Temperature: less than or equal to 120 degrees F	Title I Condition: To avoid classification as a major source under 40 CFR Sections 52.21 and 70.2; Minn. R. 7007.0800, subp. 4

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Carrier Gas Feed Pressure Pressure Drop: greater than or equal to 22 inches of water column and less than or equal to 40 inches of water column	Title I Condition: To avoid classification as a major source under 40 CFR Sections 52.21 and 70.2; Minn. R. 7007.0800, subp. 4
MONITORING AND RECORDKEEPING	hdr
Continuously monitor the pressure in each coating room as an indicator of capture efficiency using a pressure gauge at all times during which the bead activated carbon adsorb/desorb/condenser emission control system is in operation. A negative pressure is to be maintained at all times in each coating room. Each coating room shall be equipped with an alarm to notify operators if the coating room is not under negative pressure.	Title I Condition: To avoid classification as a major source under 40 CFR Sections 52.21 and 70.2; Minn. R. 7007.0800, subps. 4 and 5
Continuously monitor the inlet static pressure in the adsorber. The emission control system shall be equipped with an alarm to notify operators if the pressure moves outside of the normal range determined by the equipment manufacturer during installation and start-up.	Title I Condition: To avoid classification as a major source under 40 CFR Sections 52.21 and 70.2; Minn. R. 7007.0800, subps. 4 and 5
Continously monitor the desorber fluid temperature. The system shall be equipped with an alarm to notify operators if the temperature drops below the minimum temperature for efficient regeneration.	Title I Condition: To avoid classification as a major source under 40 CFR Sections 52.21 and 70.2; Minn. R. 7007.0800, subps. 4 and 5
Continuously monitor the temperature of the carbon exiting the desorber. The emission control system shall be equipped with an alarm to notify operators if the temperature of the carbon exceeds the maximum temperature for adsorption efficiency.	Title I Condition: To avoid classification as a major source under 40 CFR Sections 52.21 and 70.2; Minn. R. 7007.0800, subps. 4 and 5
Continuously monitor the carrier gas static pressure. The emission control system shall be equipped with an alarm to notify operators if the pressure moves outside of the normal range determined by the equipment manufacturer during installation and start-up.	Title I Condition: To avoid classification as a major source under 40 CFR Sections 52.21 and 70.2; Minn. R. 7007.0800, subps. 4 and 5
Record the following parameters at a minimum once each day of operation: - Pressure in each coating room - Inlet Static Pressure in the Adsorber - Desorber Fluid Temperature - Temperature of the Carbon exiting the Desorber - Carrier Gas Feed Pressure	Title I Condition: To avoid classification as a major source under 40 CFR Sections 52.21 and 70.2; Minn. R. 7007.0800, subp. 4
If the parameters documented are outside the allowed ranges, the Permittee must take immediate steps to return the parameters to within the allowed ranges in this permit.	Minn. R. 7007.0800, subp. 2
Monthly Inspections: Once per month, the Permittee shall complete a Monthly Inspection Checklist for the Fluidized Bed as described in the Operation and Maintenance Plan. If a problem is noted during an inspection, the permittee shall follow corrective actions as specified in the Operation and Maintenance Plan.	Title I Condition: To avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subps. 4 and 5
Annual Inspections: Once annually, during the Fluidized Bed shutdown, the permittee shall record inspection of the oxidizer components as described under the annual inspection guidelines in the Operation and Maintenance Plan. If a problem is noted during an inspection, the permittee shall follow corrective actions as specified in the Operation and Maintenance Plan.	Title I Condition: To avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subps. 4 and 5
The Permittee shall operate and maintain the Fluidized Bed in accordance with the Operation and Maintenance Plan. The Permittee shall keep copies of the Operation and Maintenance Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14
If the Permittee changes coating formulations to a previously unused HAP-based coating carrier, Permittee shall notify the Commissioner within 30 days of making such a change. Within 90 days of the change in coating carrier, the Permittee shall conduct performance testing of the emission control system to determine the destruction efficiency of the new HAP.	Minn. R. 7007.0800, subp. 2

TABLE B: SUBMITTALS

Facility Name: Water Gremlin Co

Permit Number: 12300341 - 003

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

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

Send any application for a permit or permit amendment to:

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

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:
- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

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

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

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

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

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

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

TABLE B: RECURRENT SUBMITTALS

Facility Name: Water Gremlin Co

Permit Number: 12300341 - 003

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 07/20/2000. 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 occur, the Permittee shall submit a report stating that no deviations occurred during the reporting period.	Total Facility
Compliance Certification	due 31 days after end of each calendar year starting 07/20/2000 (for the previous calendar year). To be submitted to the Commissioner on a form approved by the Commissioner. This report covers all deviations experienced during the calendar year.	Total Facility

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 12300341-003

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

1. General Information

1.1 Applicant and Stationary Source Location

Stationary Source/Address (SIC Code: **3364/3949**)	Mailing Address
1610 Whitaker Avenue White Bear Lake, Ramsey County	1610 Whitaker Avenue White Bear Lake, MN 55110
Corporate/Company Owner: Okabe Holdings U.S.A. (same address)	Contact: Dave Zinschlag Phone: (651) 209-9441

1.2 Description of the Facility

Water Gremlin is a manufacturer of fabricated lead metal products from purchases refined lead material. Products include fishing sinker weights and lead acid battery terminals. Battery terminal posts are the primary product, and account for a majority of production at the facility. Uncontrolled emissions from the facility are above the major source thresholds for the Part 70 permit program for Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP), therefore the facility has taken limits on VOCs and Trichloroethylene (TCE) to be a synthetic minor source under the Part 70 program and to obtain a State Permit. These limits are based on a control efficiency of 95 percent, compliance was shown by a performance test conducted April 10, 2002, which showed 98.85 percent control efficiency.

1.3 Description of the Activities Allowed by this Permit Action

This is a major amendment to pre-approve future coaters that can be installed and operated without further authorization required. These coaters will be permitted under pre-existing coating usage limits, and therefore will cause no change in total facility PTE.

1.4 Facility Emissions

Table 1. Total Facility Potential to Emit Summary

	PM (tpy)	PM_{10} (tpy)	SO_2 (tpy)	NO_x (tpy)	CO (tpy)	VOC (tpy)	Single HAP (tpy)
Total Facility Limited Potential Emissions	5.8	5.8	0.0	1.6	1.3	95.0	9.5
Total Facility Actual Emissions (2004)	0.0	0.0	0.0	0.0	0.0	4.16	HAPs not reported in emission inventory

Table 2. Facility Classification

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD		VOP, HAP	PM, PM_{10}, SO_2, NO_x, CO
Part 70 Permit Program		VOC, HAP	PM, PM_{10}, SO_2, NO_x, CO
Part 63 NESHAP		HAP	

2. Regulatory and/or Statutory Basis

New Source Review

The facility has limits to keep it a synthetic minor source under New Source Review regulations. No changes are authorized by this permit.

Part 70 Permit Program

The facility is a synthetic minor source under the Part 70 permit program.

New Source Performance Standards (NSPS)

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

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The facility has accepted limits on HAP usage such that it is a non-major source under 40 CFR pt. 63. Thus, no NESHAPs apply.

Minnesota State Rules

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

- Minn. R. 7011.0715 Standards of Performance for Post-1969 Industrial Process Equipment

Table 3. Regulatory Overview of Units Affected by the Modification/Permit Amendment

Unit	Applicable Regulations	Comments
GP 001	Minn. R. 7011.0715, subp. 1(A)	Industrial Process Equipment rule for PM: < 0.3 grains/dscf
	Minn. R. 7011.0715, subp. 1(B)	Industrial Process Equipment rule for Opacity: < 20 percent opacity

3. Technical Information

3.1 Periodic Monitoring

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

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

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

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

Table 4. Periodic Monitoring

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
Total Facility	Calibration of monitoring equipment		Things to be calibrated: - Coating Room Pressure Fluidized Bed Calibration Points: - Absorber Inlet - Carrier Gas Feed - Desorber Fluid Temp - Carbon Temp Exiting Desorber
CE 003	Maintain negative pressure in each coating room	Recordkeeping	To ensure a negative pressure is maintained in each coating room as an indicator of capture efficiency.

3.2 Permit Organization

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

3.3 Comments Received

Public Notice Period: August 19, 2006 – September 18, 2006
EPA 30-day Review Period: August 19, 2006 – September 18, 2006
There were no comments received during the 30-day review period.

4. Conclusion

Based on the information provided by Water Gremlin, the Minnesota Pollution Control Agency has reasonable assurance that the operation of the emission facility, as described in the Air Emission Permit No. 12300341-003, and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Trevor Shearen (permit writer/engineer)
Scott Parr (enforcement)
Curtis Stock (stack testing)
Dan Sullivan (peer reviewer)

Attachments: *none*