

AIR EMISSION PERMIT NO. 08500032- 007

IS ISSUED TO

Hutchinson Technology, Inc. - Hutchinson
40 W Highland Park Drive NE
Hutchinson, McLeod County, MN 55350-9784

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	Permit Action Number
Total Facility Operating Permit	05/15/1995	03/04/2002	001
Administrative Amendment	08/08/2002	09/04/2002	002
Major Amendment	11/15/2002	06/03/2003	003
Major Amendment	11/04/2003 and 12/18/2003	05/04/2004	004
Administrative Amendment	3/16/2004	05/06/2004	005
Major Amendment	05/12/2004	10/06/2004	006
Major Amendment	08/11/2005	See below	007

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: Federal; Part 70/Limits to Avoid NSR
Issue Date: March 4, 2002
Expiration: March 4, 2007
All Title I Conditions do not expire.

This Major Amendment Permit Action:

Authorization to Construct and Operate (40 CFR 52.21) Issuance Date: November 7, 2005
Authorization to Construct and Operate (40 CFR 52.21) Effective Date: November 16, 2005
Final Permit Issuance Date: November 16, 2005

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

for Sheryl A. Corrigan
Commissioner
Minnesota Pollution Control Agency

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NOTICE TO THE PERMITTEE:

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	(651) 296-6300
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Outside Metro Area	1-800-657-3864
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TTY	(651) 282-5332
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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:

Hutchinson Technology, Inc. (HTI) is a manufacturer of suspension assemblies for all sizes of computer disk drives. The suspension assembly holds the read/write head at extremely small distances above the spinning disks. HTI currently holds about 50 percent of the world market, with its only competitors being in Asia. Two types of suspension assemblies are made, conventional and TSA (suspensions incorporating integrated electrical leads). The TSA product is now the core product manufactured by the HTI.

The high tech market HTI is in can prove to be very volatile. Sales of all types of suspension assemblies from HTI have increased and decreased at rates greater than 10 percent per year over the last five years. Most products in this industry usually only have lifetimes of about three years. Because of this volatility, HTI needs to have a permit that is as flexible as possible so that it can respond quickly to changing market demands.

The significant emission sources at the facility are all evaporative and include: the photoetching solutions, and the many different cleaning solvents used throughout all areas of the plant. About 75 percent of the Volatile Organic Compound (VOC) emissions at the facility are emitted during the application of the photoresist solution by either the two roller coaters or the two dip coaters. The roller coaters are vented through a hood to a thermal oxidizer while the dip coaters are vented to a process boiler.

Other emission units at the facility are controlled as well. The air from the plasma etching solutions is vented to a scrubber to remove HF. Other evaporative sources such as the clean lines and strippers have spray nozzles in the exhaust vents that spray water countercurrent to the exhaust gas flow. Testing has not been done to determine the control efficiencies of the spray nozzles, so the control efficiency is not claimed by the facility. The HF scrubber, the thermal oxidizer and boiler control efficiency have all been tested and their control efficiencies have been claimed in the permit.

There are Metal Hydroxide Sludge Dryers that are listed in the permit as only having natural gas combustion emissions. It was discovered that these units may also generate Particulate Matter (PM), and these emissions are through the process of drying sludge. HTI believes the PM emissions are less than 1 ton per year per sludge dryer.

PERMIT ACTION 007 (Major Amendment):

This is a major amendment to the existing Title V permit. Limited potential emissions from the facility do not change after the modification. The main purpose of this major permit amendment is to authorize installation and operation of a new CE 007 Thermal Oxidizer with a higher capacity to replace the existing CE 001 Direct Flame Afterburner. The Thermal Oxidizer controls Volatile Organic Compounds (VOC's) and HAP emissions from the Roller Coaters with a control efficiency of greater than 95 percent. A new EU 185 Roller Coater #4 is also being installed. This emission unit emits VOC and HAP emissions, most of which are controlled. The thermal oxidizer replacement will be done over a period of 10 working days, during which time the Permittee is allowed to operate the Roller Coaters uncontrolled with maximum emissions of 0.08 tons per day of VOC's and 0.001 tons per day of HAPs.

This facility continues to be a non-major source under New Source Review (40 CFR 52.21) and National Emissions Standard for Hazardous Air Pollutants (40 CFR 63.2). The synthetic minor limits (flex cap) for criteria pollutants and HAPs in the permit are retained (look in the Facility Specific Requirements part under Total Facility).

THIS IS A MAJOR AMENDMENT TO AN EXISTING TITLE V PERMIT

PERMIT ACTION 006 (Major Amendment):

The **main purpose of this permit amendment** is to authorize installation and operation of a new process line with operations such as: coating, developing, etching, layering, plating, and strippers. These emission units emit VOC and HAP emissions, most of which are controlled.

This facility continues to be a non-major source under New Source Review (40 CFR 52.21) and National Emissions Standard for Hazardous Air Pollutants (40 CFR 63.2). The synthetic minor limits (flex cap) for criteria pollutants and HAPs in the permit are retained (look in the Facility Specific Requirements part under Total Facility).

In addition to the changes mentioned above, this permit incorporates a temperature change for CE 001; the new temperature is 1,499 degrees F.

THIS IS A MAJOR AMENDMENT TO AN EXISTING TITLE V PERMIT

PERMIT ACTION 005 (Administrative Amendment):

This administrative amendment extends the testing deadline for CE003 (Direct Flame Afterburner) an additional 90 days as allowed by Minn. R. 7007.1400, subp. 1(H).

PERMIT ACTION 004 (Major Amendment):

Existing facility limits on HAPs and VOCs will not be increased as a result of this permit action. This permit amendment incorporates the following changes:

1. Applicability Determination received 8/8/02: The Permittee will use Henry's Law to calculate Butyl Carbitol (Glycol Ethers) emissions and Raoult's Law to calculate monoethanolamine (MEA) emissions.
2. Major modification received 11/4/03: Increase maximum temperature for EU018 and EU080 and all GP003 sumps; increase MEA concentration in EU018 and EU080; remove EU119 from GP003; and add EU162 to GP003.
3. Major modification received 12/18/03: Increase emission factor for hydrogen fluoride (HF) GP006 plasma etchers, and administrative clarifications.

PERMIT ACTION 003 (Major Amendment):

The **main purpose of this permit amendment** is to authorize insignificant modifications at the source that contribute Hazardous Air Pollutant (HAP) emissions. The total facility allowable HAPs does not change.

This permit amendment also incorporates the following changes:

- 1) Plasma Etcher Scrubbing System Operational/Monitoring Requirement Correction;
- 2) Addition of Permit Language for Sludge Dryers;
- 3) Correction of Plasma Etcher HAP Emission Factor for Hydrogen Fluoride

PERMIT ACTION 001 is the Title V permit; 002 is the Administrative Amendment

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

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
REPLACEMENT OF POLLUTION CONTROL EQUIPMENT (THERMAL OXIDIZER)	hdr
Volatile Organic Compounds: less than 0.08 tons per day during the transition period of replacement of pollution control equipment (CE 001 Direct Flame Afterburner with CE 007 Thermal Oxidizer). The maximum number of days of operation of the Roller Coaters without any pollution control equipment is limited to 10 working days.	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2
Volatile Organic Compounds (VOC) Record Keeping during Transition Period: Beginning the second day of the transition, by the end of each day, the Permittee shall: 1) Record the total mass of each VOC-containing material from usage records in the previous day and the VOC content of each material as described under GP 001 in this permit. 2) Calculate the VOC usage for the previous day. 3) Calculate the total VOC usage for the total number of working days of the transition period.	Title I Condition: Record keeping to avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 5
Cresols: less than 0.001 tons/day during the transition period of replacement of pollution control equipment (CE 001 Direct Flame Afterburner with CE 007 Thermal Oxidizer). The maximum number of days of operation of the Roller Coaters without any pollution control equipment is limited to 10 working days.	Title I Condition: Limit to avoid classification as a major source under 40 CFR Part 63; Minn. R. 7007.0800, subp. 2
Cresols Record Keeping during Transition Period: Beginning the second day of the transition, by the end of each day, the Permittee shall: 1) Record the total mass of each Cresol-containing material from usage records in the previous day and the Cresol content of each material as described under GP 001 for HAP-containing materials in this permit. 2) Calculate the Cresol usage for the previous day. 3) Calculate the total Cresol usage for the total number of working days of the transition period.	Title I Condition: Record keeping to avoid classification as a major source under 40 CFR Part 63; Minn. R. 7007.0800, subp. 5
COMPLIANCE WITH NAAQS AND MAAQS	hdr
The Permittee shall comply, and upon written request demonstrate compliance, with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080.	40 CFR pt. 50; Minn. Stat. Sec. 116.07, subds. 4a and 9; Minn. R. 7007.0100, subps. 7A, 7L and 7M; Minn. R. 7007.0800, subps. 1, 2, and 4; Minn. R. 7009.0010-7009.0080
GENERAL REQUIREMENTS	hdr
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, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
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 day before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche or CD Copy: due 105 day 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. 7017.2030, subp. 1-4; Minn. R. 7017.2018 and Minn. R. 7017.2035, subp. 1-2

TABLE A: LIMITS AND OTHER REQUIREMENTS

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Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as specified by Minn. R. 7017.2025 following formal review of a subsequent performance test on the same unit.	Minn. R. 7017.2025
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
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
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
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emissions of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emission units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500

TABLE A: LIMITS AND OTHER REQUIREMENTS

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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)
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)
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 federally enforceable.	Minn. R. 7030.0010 - 7030.0080
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
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)
Emissions Inventory Report: due 91 days after end of each calendar year starting 03/04/2002 (April 1). To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3010
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
FACILITY SPECIFIC REQUIREMENTS	hdr
This permit establishes limits on the facility to keep it a non-major source under New Source Review. The Permittee shall not make any changes at the source that would make the source a major source under New Source Review until a major permit amendment has been issued. This includes changes that might otherwise qualify as insignificant modifications and minor or moderate amendments.	Title I Condition: emission unit restriction to avoid major source status under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2
Environmental Review: the Permittee shall not begin construction of any single project or projects that are connected or phased, which will cause a total increase in actual emissions of greater than 99 tons per year for any criteria pollutant, without first getting a permit amendment to authorize the project. Connected and phased have meanings as defined in Minn. R. 4410.0200 subps. 9b and 60. The Permittee shall not begin construction of any project which is listed in Minn. R. 4410.4300 or Minn. R. 4410.4400 without first obtaining a permit amendment to authorize the project. Such project(s) may require the completion of an Environmental Assessment Worksheet or an Environmental Impact Statement prior to issuance of the amendment.	Minn. R. 4410.4300 and Minn. R. 4410.4400
Labeling Requirements: the Permittee shall label all emission units at the stationary source that are in groups (GP) 001-007 with their respective EU and GP numbers within 60 days after permit issuance. The EU and GP number labels on each emission unit shall be permanent and readily visible from a distance. The letters shall be at least 3 inches in height. Upon installation of emission units listed under GP 008-010, EU 163, EU 167, and EU 172, the Permittee shall label all emission units with their respective EU and GP numbers.	Minn. R. 7007.0800, subp. 2
Equipment Inventory List: the Permittee shall maintain a written list that identifies all emission units at the facility and the group (i.e. GP 001-010, EU 163, EU 167, and EU 172 or insignificant) that the emission unit belongs. The list shall include the EU and GP numbers, the emission unit name, the type of equipment, and the date(s) of installation and modification/reconstruction.	Minn. R. 7007.0800, subp. 5
Submit: due 91 days after end of each calendar year starting 03/04/2002 (April 1) the Equipment Inventory List.	Minn. R. 7007.0800, subp. 6
Updating the Equipment Inventory List: the list shall be updated to include any new, modified, or changed equipment before installing any new equipment, or making a change or modification (as defined at Minn. R. 7007.0100, subp. 14) to existing equipment. A dated, written record of the following four (4) determinations shall be made before each modification or change: 1) Determine Pollution Prevention measures applicable to the proposed modification or change; 2) Determine if any other applicable requirements would be triggered, other than those included in this permit; 3) Examine the MSDS for all new materials used on site for VOC and/or HAP content, and determine whether all emissions from the new material can be tracked by any of the methods specified in the Groups in this permit. 4) Determine whether all applicable total facility 12-month rolling sum limits for VOC, HAP, PM, PM10, NOx, CO, SO2, single HAP, and total HAP will be met.	Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

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<p>(continued) If the answer is "yes" to item number two, or "no" to either items number three or four, then you must obtain the appropriate amendment to this permit (as described at Minn. R. 7007.1150 through 1500) before you commence construction on the modification or change.</p> <p>If the change involves a change that qualifies as an insignificant modification (Minn. R. 7007.1250), only the first two (2) determinations above must be made and recorded.</p>	<p>Minn. R. 7007.0800, subp. 5</p>
<p>Addition/Modification of Emission Units: The Permittee may add emission units to the stationary source that are either: 1) described in GP 001 through GP 010, EU 163, EU 167, and EU 172, or 2) qualify as an insignificant modification (as described in Minn. R. 7007.1250). When adding new emission units to GP 001 through GP 010, EU 163, EU 167, and EU 172, the emissions from these emission units must be able to be calculated according to the procedure for the appropriate Group (as described in this permit and its appendices). The addition of new emission units which do not fit into an existing Group, and are not insignificant modifications, must follow the permit amendment procedures at Minn. R. 7007.1150 through 1500. The specific emission units at this stationary source may be modified, but the changed stationary source must meet all conditions in this permit at all times.</p>	<p>Title I Condition: emission unit restriction to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2</p>
<p>Insignificant Modifications Recordkeeping: The potential emissions of all criteria pollutants emitted from emission units which are added and qualify as insignificant modifications (Minn. R. 7007.1250) must be recorded and kept on file at the facility. A list of insignificant emission units must be included as a part of the equipment inventory list. The cumulative total of potential criteria emissions from all insignificant modifications must be determined each time a subsequent insignificant modification is made. If the addition of new emission units cause the cumulative total of emissions from all insignificant modifications, for ANY criteria pollutant to be greater than: 1) four times the amount listed in Minn. R. 7007.1250, subp. 1(B)(2), on annual basis, or 2) 15 tons per year for Total Particulate Matter, the Permittee shall apply for a major amendment to this permit to adjust the allocation of emissions for ALL criteria pollutants under their respective Total Facility Caps.</p>	<p>Title I Condition: emission unit restriction to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5</p>
<p>(continued) After the adjustment is made, and the amendment is issued, the cumulative totals for potential emissions from insignificant activities for ALL criteria pollutants will be reset to zero and will begin accumulating again with the next insignificant modification.</p>	<p>Title I Condition: emission unit restriction to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5</p>
<p>Emissions Monitoring and Recordkeeping: by the 15th day of each month calculate and record: 1) emissions of each pollutant from each Group for the previous month, using the methods described in this permit and Appendix A of this permit; 2) total facility monthly emissions of each pollutant by summing the monthly emissions of each pollutant from each Group (calculated above in item 1); 3) 12-month rolling sum emissions for each pollutant by summing the total facility monthly emissions of each pollutant (calculated above in item 2) and add it to the total from the previous 11 months. To calculate a 12-month rolling sum during the first eleven months after permit issuance, use historical operating records to determine monthly emissions of each pollutant for each month in the 12-month rolling sum period prior to permit issuance.</p>	<p>Title I Condition: recordkeeping to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subps. 4 and 5</p>
<p>Total Particulate Matter: less than or equal to 249 tons/year using 12-month Rolling Sum for the total facility. This total shall be allocated as such: 234 tons per year for GP 001-010, EU 163, EU 167, and EU 172, and 15 tons per year for Insignificant Modifications.</p>	<p>Title I Condition: limit taken to avoid classification as a major source and a major modification under 40 CFR Section 52.21</p>
<p>Particulate Matter < 10 micron: less than or equal to 249 tons/year using 12-month Rolling Sum for the total facility. This total shall be allocated as such: 234 tons per year for GP 001-010, EU 163, EU 167 and EU 172, and 15 tons per year for Insignificant Modifications.</p>	<p>Title I Condition: limit taken to avoid classification as a major source and a major modification under 40 CFR Section 52.21</p>
<p>Nitrogen Oxides: less than or equal to 249 tons/year using 12-month Rolling Sum for the total facility. This total shall be allocated as such: 209 tons per year for GP 001-010, EU 163, EU 167 and EU 172, and 40 tons per year for Insignificant Modifications.</p>	<p>Title I Condition: limit taken to avoid classification as a major source and a major modification under 40 CFR Section 52.21</p>
<p>Sulfur Dioxide: less than or equal to 249 tons/year using 12-month Rolling Sum for the total facility. This total shall be allocated as such: 209 tons per year for GP 001-010, EU 163, EU 167 and EU 172, and 40 tons per year for Insignificant Modifications.</p>	<p>Title I Condition: limit taken to avoid classification as a major source and a major modification under 40 CFR Section 52.21</p>
<p>Carbon Monoxide: less than or equal to 249 tons/year using 12-month Rolling Sum for the total facility. This total shall be allocated as such: 149 tons per year for GP 001-010, EU 163, EU 167 and EU 172, and 100 tons per year for Insignificant Modifications.</p>	<p>Title I Condition: limit taken to avoid classification as a major source and a major modification under 40 CFR Section 52.21</p>
<p>Volatile Organic Compounds: less than or equal to 225 tons/year using 12-month Rolling Sum for the total facility. This total shall be allocated as such: 185 tons per year for GP 001-007, 008, 009, EU 167 and EU 172, and 40 tons per year for Insignificant Modifications.</p>	<p>Title I Condition: limit taken to avoid classification as a major source and a major modification under 40 CFR Section 52.21</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

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<p>HAP-Single: less than or equal to 4.9 tons/year using 12-month Rolling Sum for the total facility. This total shall be allocated as such: 4.4 tons per year for GP 001-007, 009, 010, EU 163, and 0.5 tons per year for Insignificant Modifications (beginning with this permit amendment).</p> <p>The Permittee must keep records of all insignificant modifications at the facility and the related HAP emissions.</p>	<p>Title I Condition: limit taken to avoid classification as a major source and a major modification under 40 CFR Section 63.2</p>
<p>HAPs - Total: less than or equal to 19.9 tons/year using 12-month Rolling Sum for the total facility. This total shall be allocated as such: 17.9 tons per year for GP 001-007, 009, 010, EU 163, and 2.0 tons per year for all Insignificant Modifications (beginning with this permit amendment).</p> <p>The Permittee must keep records of all insignificant modifications at the facility and the related HAP emissions..</p>	<p>Title I Condition: limit taken to avoid classification as a major source and a major modification under 40 CFR Section 63.2</p>
<p>Recordkeeping: maintain a record of the material safety data sheets (MSDS) for each VOC- or HAP- containing material currently used at the facility. Maintain a record of the material safety data sheets (MSDS) for each VOC- or HAP- containing material previously used at the facility for a period of 5 years from the date the material was last used.</p>	<p>Title I Condition: recordkeeping to avoid classification as a major source and a major modification under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

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Subject Item: GP 001 Photoresist Coaters**Associated Items:** EU 001 Dipper 1

EU 002 Dipper 2

EU 003 Roller Coater 1

EU 088 Roller Coater 2

EU 184 Roller Coater #3

EU 185 Roller Coater #4

What to do	Why to do it
CE 001 Direct Flame Afterburner will be replaced with CE 007 Thermal Oxidizer. Upon completion of CE 007 installation, the Permittee must comply with the pollution control requirements listed under CE 007 in this permit, and any permit conditions related to CE 001 will no longer be applicable. There are 10 working days allowed for this transition, during which the Permittee may operate Roller Coaters uncontrolled. The maximum amount of VOC and HAP usage is limited to 0.08 and 0.001 tons per day, respectively.	hdr
GP 001 emission units are limited to coaters that use materials containing VOC and HAP (e.g. photoresist).	Title I Condition: emission unit restriction to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Daily Recordkeeping: Record separately for each dip coater and each roller coater, the volume of each VOC- and HAP-containing material added to the coater, when the material is taken from the central storage area. On any day that coater waste is shipped off-site, record the volume of the shipment. By the 15th day of the month calculate and record the mass of VOC and each HAP in the coater waste shipments for the previous month. Note: In order to calculate the mass of VOC and HAP in coater waste shipped off-site, the VOC and HAP content of the coater waste material must be equivalent to the VOC and HAP content in the virgin material (wastes with different VOC and HAP content can not be mixed together).	Title I Condition: recordkeeping to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5
(continued) If different wastes were mixed, the Permittee must sample from each drum and analyze the waste to determine VOC and HAP content (according to EPA or ASTM methods), in order to receive credit for the mass of VOC and HAP in recycled/recovered waste; or, the Permittee must use the lowest MSDS values of VOC and HAP of the materials that comprise mixed wastes.	Title I Condition: recordkeeping to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5
Monthly Recordkeeping: by the 15th day of each month calculate and record the following data separately for the roller coaters and for the dip coaters: 1) the total quantity of each type of VOC- and HAP-containing material used during the previous month; 2) the uncontrolled emissions during the previous month of VOC, Toluene, and Xylene (and any other HAP listed on the MSDS), based on the quantity of each type of VOC- and HAP-containing material used during the previous month, and the maximum percentage of each VOC and HAP component (stated on the relevant MSDS); 3) the mass of VOC and each HAP in coater waste shipped during the previous month; In addition, by the 15th day of each month calculate and record:	Title I Condition: recordkeeping to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

<p>(continued)</p> <p>4) GP 001 VOC and individual HAP emissions during the previous month based on: the uncontrolled emissions (determined in item two), minus waste shipped (determined in item three)</p> <p>5) apply 84% VOC control efficiency to the emissions from the roller coaters</p> <p>6) apply 42% VOC control efficiency to the emissions from the dip coaters</p> <p>For items 5) and 6) use the control efficiency values stated, or the values from the most recent performance test.</p> <p>See Appendix A for additional information on these emission calculations.</p> <p>During any bypass of control equipment, record the material usage during the bypass and then do not apply the control efficiency for this amount of material usage when doing the emission calculations.</p>	<p>Title I Condition: recordkeeping to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5</p>
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TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

Subject Item: GP 002 Conventional Strippers

Associated Items: EU 016 Blueline Stripper

EU 018 Vertical Stripper 2

EU 019 Vertical Stripper 3

EU 080 Vertical Stripper 4

EU 081 Vertical Stripper 6

EU 084 Vertical Stripper 9

What to do	Why to do it
GP 002 emission units are limited to units that utilize materials containing VOC and HAP.	Title I Condition: emission unit restriction to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
GLYCOL ETHER (includes Butyl Carbitol) EMISSION FACTORS EU016, EU019, EU 081 and EU084: The glycol ether emission factor is 0.0254 lb/operating-hr per stripper EU018 and EU080: The glycol ether emission factor is 0.0633 lb/operating-hr per stripper MEA EMISSION FACTORS EU016: The MEA emission factor is 0.24 lb/operating-hr per stripper EU018 and EU080: The MEA emission factor is 1.3885 lb/operating-hr per stripper EU019, EU081 and EU084: The MEA emission factor is 0.1314 lb/operating-hr per stripper These emission factors apply unless otherwise recalculated per procedure below.	Minn. R. 7007.0800, subp. 2
Glycol Ether Concentration for all Emission Units: less than or equal to 0.006 mole fraction in bath solution. MEA concentration for EU018 and EU080: less than or equal to 0.036 mole fraction in bath solution MEA concentration for EU016, EU019, EU081 and EU084: less than or equal to 0.0049 mole fraction in bath solution These concentrations apply unless otherwise changed per procedure below.	Title I Condition: limit to avoid major source status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 2
Temperature: less than or equal to 145 degrees F ; as a 5-day rolling average of readings taken once each operating day, for EU 018 and EU 080 non-HCl stripper sumps. Temperature of the chemical sump is read by a thermocouple.	Title I Condition: limit to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Temperature: less than or equal to 125 degrees F ; as a 5-day rolling average of readings taken once each operating day, for EU 016, EU019, EU081 and EU 084 non-HCl stripper sumps. Temperature of the chemical sump is read by a thermocouple.	Title I Condition: limit to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Recordkeeping: once each day, record the hours each emission unit was operated during the previous day. By the 15th day of each month, calculate and record: 1) GP 002 operating hours for the previous month; 2) GP 002 VOC and individual HAP emissions using monthly operating hours calculated in item one, and emission factors specified in GP 002.	Title I Condition: recordkeeping to avoid classification as a major source under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5
Any of the following events requires the Permittee to recalculate the GP 002 emissions factors: 1) the temperature of any of the non-HCl stripper sumps exceeding the permitted limit for the Emission Unit as listed in GP 002; 2) any change (i.e. to the ductwork or fan) that increases airflow above the bath; 3) the mole fraction concentration of the VOC/HAP component in the bath solution exceeding the permitted concentration for the Emission Unit as listed in GP 002. The emission factor shall be recalculated on the date the event occurs.	Title I Condition: to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

<p>Emission Factor Recalculation: When necessary the Permittee shall recalculate GP 002 emission factor as follows:</p> <ol style="list-style-type: none"> 1) determine the vapor pressure of the pure VOC/HAP component at the sump temperature using data from the MSDS and/or standard chemical engineering reference texts 2) For MEA emission factor: Use Raoult's Law to determine the partial pressure of the VOC/HAP component at the concentration used in the sumps 3) For Glycol Ether emission factor: Use Henry's Law to determine the partial pressure of the VOC/HAP component at the concentration used in the sumps 4) calculate the mole fraction of the VOC/HAP component in the overlying air 5) calculate the new emission factor by using the design airflow and the molar volume of an ideal gas at the sump temperature 6) maintain records of these calculations on site. 	<p>Title I Condition: to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 5</p>
<p>Corrective Action: if any 5-day rolling average sump temperature exceeds the maximum permitted value, take corrective action according to the O&M Plan, to reduce the temperature to at least the permitted maximum value. Record all corrective actions taken when completed.</p>	<p>Title I Condition: monitoring to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subps. 5 and 14</p>
<p>Monitoring and Recordkeeping: when each sump solution is made, calculate and record the glycol ether, MEA, and HCl concentration in units of mole fraction for glycol ether and MEA, and percent by weight for HCl.</p>	<p>Title I Condition: recordkeeping to avoid classification as a major source under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 4; Minn. R. 7007.0800, subp. 5</p>
<p>Monitoring: the Permittee shall install the necessary monitoring equipment for measuring and recording the temperature as required by this permit, if not already present. The monitoring equipment must be installed, in use, and properly maintained when the cleanlines are in operation.</p>	<p>Title I Condition: monitoring to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 4</p>
<p>Monitoring: once each day, observe and record the temperature in the sump, during operation of GP 002 emission unit(s), and calculate and record the 5-day rolling average temperature, as described in Appendix A of this permit.</p>	<p>Title I Condition: monitoring to avoid classification as a major source under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 4</p>
<p>Recordkeeping: the Permittee shall maintain a hard copy on site of the daily and 5-day rolling average temperatures.</p>	<p>Title I Condition: recordkeeping to avoid classification as a major source under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

Subject Item: GP 003 TSA (Trace) Strippers**Associated Items:** EU 082 Vertical Stripper 7

EU 083 Vertical Stripper 8

EU 162 Vertical Stripper #15

What to do	Why to do it
GP 003 emission units are limited to units that utilize materials containing VOC and HAP.	Title I Condition: emission unit restriction to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
The MEA emission factor is 1.7062 lb/operating-hr per stripper.	Minn. R. 7007.0800, subp. 2
MEA: less than or equal to 0.0332 mole fraction in bath solution.	Title I Condition: limit to avoid major source status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 2
Temperature: less than or equal to 149 degrees F ; as a 5-day rolling average of readings taken once each operating day, for each of the non-HCl stripper sumps. Temperature of the chemical sump is read by a thermocouple.	Title I Condition: limit to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Recordkeeping: once each day, record the hours each emission unit was operated during the previous day. By the 15th day of each month, calculate and record: 1) GP 003 operating hours for the previous month; 2) GP 003 VOC and individual HAP emissions using monthly operating hours calculated in item one, and emission factors specified in GP 003.	Title I Condition: recordkeeping to avoid classification as a major source under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5
Any of the following events requires the Permittee to recalculate the GP 003 emissions factors: 1) the temperature of any of the non-HCl stripper sumps exceeding the permitted limit for GP 003; 2) any change (i.e. to the ductwork or fan) that increases airflow above the bath; 3) a mole fraction concentration of the VOC/HAP component in the bath solution exceeding the permitted concentration for GP 003. The emission factor shall be recalculated on the date the event occurs.	Title I Condition: to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Emission Factor Recalculation: When necessary the Permittee shall recalculate GP 003 emission factor as follows: 1) determine the vapor pressure of the pure VOC/HAP component at the sump temperature using data from the MSDS and/or standard chemical engineering reference texts 2) use Raoult's Law to determine the partial pressure of the VOC/HAP component at the concentration used in the sumps 3) calculate the mole fraction of the VOC/HAP component in the overlying air 4) calculate the new emission factor by using the design airflow and the molar volume of an ideal gas at the sump temperature 5) maintain records of these calculations on site.	Title I Condition: to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 5
Corrective Action: if the 5-day rolling average sump temperature exceeds the maximum permitted value, take corrective action according to the O&M Plan, to reduce the temperature to at least the permitted maximum value. Record all corrective actions taken when completed.	Title I Condition: monitoring to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subps. 5 and 14
Monitoring and Recordkeeping: when each sump solution is made, calculate and record the MEA and HCl concentration in units of mole fraction and percent by weight, respectively.	Title I Condition: recordkeeping to avoid classification as a major source under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 4; Minn. R. 7007.0800, subp. 5
Monitoring: the Permittee shall install the necessary monitoring equipment for measuring and recording the temperature as required by this permit, if not already present. The monitoring equipment must be installed, in use, and properly maintained when the cleanlines are in operation.	Title I Condition: monitoring to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 4
Monitoring: once each day, observe and record the temperature in the sump, during operation of GP 003 emission unit(s), and calculate and record the 5-day rolling average temperature, as described in Appendix A of this permit.	Title I Condition: monitoring to avoid classification as a major source under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 4
Recordkeeping: the Permittee shall maintain a hard copy on site of the daily and 5-day rolling average temperatures.	Title I Condition: recordkeeping to avoid classification as a major source under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson
Permit Number: 08500032 - 007

Subject Item: GP 005 Combustion Equipment

Associated Items: EU 029 O.B. Gas Heater (10 B.)
EU 030 O.B. Gas Heater (20 B.)
EU 031 Shipping Recieving Heater
EU 032 O.B. Hot Water Boiler
EU 033 4-Bay Warehouse Heater
EU 034 4-Bay Hot Water Boiler
EU 035 4-Bay Steam Boiler
EU 036 4-Bay HVAC-3
EU 037 4-Bay HVAC-8
EU 038 Equipcenter Gas Generator
EU 039 Equipcenter Water Boiler
EU 040 Equipcenter Water Heater
EU 041 Equipcenter Shipping, Rec. Heaters
EU 042 Cooling Tower Heater (Changed to electric 7-95.)
EU 043 Baby Rupp (MA-11)(Vented inside building)
EU 044 Sludge Drier
EU 045 MA-6
EU 046 MA-9
EU 047 HVAC-1
EU 048 MA-3 (Vented inside building)
EU 049 HVAC-7
EU 050 HVAC-4
EU 051 HVAC-5
EU 052 HVAC-6
EU 053 MA-10 (Vented inside building)
EU 054 MA-12
EU 055 Back-up Generator
EU 056 Penthouse (MA-4)(Vented inside building)
EU 057 Penthouse Steam Boiler #3
EU 058 Penthouse Steam Boiler #4
EU 059 Shredder Room Heater
EU 060 Shipping, Receiving Heaters
EU 061 Water Boiler WB-01
EU 062 Water Boiler (L48)
EU 063 Water Boiler (Aldrich)
EU 064 Mezzanine Steam Boiler (SB-01)
EU 065 Mezzanine Water Boiler
EU 066 Mezzanine Water Heater
EU 067 '93 Shipping, Rec. Heaters

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

Associated Items: EU 068 '93 Cart Hotel Heater

EU 069 '93 Water Boiler (HWB-1)

EU 070 '93 Water Boiler (HWB-2)

EU 071 '93 Steam Boiler (SB-1)

EU 072 '93 Water Heater (WH-1)

EU 141 Hot Water Boiler (B-1)

EU 142 Hot Water Boiler (B-2)

EU 143 Steam Boiler (B-3)

EU 144 Steam Boiler (B-4)

EU 145 Natural Gas Generator

What to do	Why to do it
GP 005 emission units are limited to combustion units. Fuel usage is limited to distillate fuel oil, natural gas, LPG, and gasoline.	Title I Condition: emission unit restriction to avoid major source status under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2
Indirect Heating Equipment Rated Heat Input: the rated heat input of all indirect heating equipment at the facility in total shall be less than 250 million Btu/hr.	Title I Condition: emission unit restriction to avoid major source status under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2Minn. R. 7007.0800, subp. 2
Recordkeeping: the Permittee shall monitor and record the amount of each type of fuel used at the facility by maintaining monthly fuel usage records on site. By the 15th day of each month, calculate and record: 1) GP 005 usage of each fuel type during the previous month; 2) GP 005 emissions of SO ₂ , NO _x , and CO as specified in Appendix A of this permit.	Title I Condition: recordkeeping to avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 5
Recordkeeping: the Permittee shall include a calculation of the rated heat input of all indirect heating equipment at the facility with the annual submittal of the Equipment Inventory List.	Minn. R. 7007.0800, subp. 5
EXISTING INDIRECT HEATING EQUIPMENT "existing indirect heating equipment" means indirect heating equipment on which construction, modification, or reconstruction did not commence after January 31, 1977.	hdr
Total Particulate Matter: less than or equal to 0.6 lbs/million Btu heat input	Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent opacity , except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0510, subp. 2
NEW INDIRECT HEATING EQUIPMENT "new indirect heating equipment" means indirect heating equipment on which construction, modification, or reconstruction commenced after January 31, 1977.	hdr
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 for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0515, subp. 2
STANDARDS OF PERFORMANCE FOR FOSSIL-FUEL-BURNING DIRECT HEATING EQUIPMENT.	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot unless required to further reduce emissions to meet the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0610, subp. 1(A)(1)
Opacity: less than or equal to 20 percent opacity , except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
STANDARDS OF PERFORMANCE FOR STATIONARY INTERNAL COMBUSTION ENGINES	hdr
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input	Minn. R. 7011.2300, subp. 2
Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

Subject Item: GP 006 Plasma Etchers**Associated Items:** EU 089 Plasma Etcher 1

EU 090 Plasma Etcher 2

EU 100 Plasma Etcher 12

EU 101 Plasma Etcher 13

EU 104 Plasma Etcher 16

EU 105 Plasma Etcher 17

EU 106 Plasma Etcher 18

EU 107 Plasma Etcher 19

EU 108 Plasma Etcher 20

EU 109 Plasma Etcher 21

EU 110 Plasma Etcher 22

EU 111 Plasma Etcher 23

EU 112 Plasma Etcher 24

EU 113 Plasma Etcher 25

EU 114 Plasma Etcher 26

EU 115 Plasma Etcher 27

EU 130 Plasma Etcher 28

EU 131 Plasma Etcher 29

EU 132 Plasma Etcher 30

EU 133 Plasma Etcher 31

EU 134 Plasma Etcher 32

EU 135 Plasma Etcher 33

EU 136 Plasma Etcher 34 - clean

EU 137 Plasma Etcher 35

EU 138 Plasma Etcher 36 - clean

EU 139 Plasma Etcher 37 - clean

EU 140 R&D Plasma Etcher

EU 153 Plasma Etcher 38

EU 154 Plasma Etcher 39

EU 155 Plasma Etcher 40

EU 156 Plasma Etcher 41

EU 157 Plasma Etcher 42

EU 158 Plasma Etcher 43

EU 159 Plasma Etcher 44

EU 160 Plasma Etcher 45

EU 161 Plasma Etcher 46

EU 175 Plasma Etcher 55

EU 176 Plasma Etcher 57

EU 177 Plasma Etcher 58

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

Associated Items: EU 178 Plasma Etcher 67

EU 179 Plasma Etcher 78

EU 180 Plasma Etcher 79

What to do	Why to do it
GP 006 emission units are limited to plasma etchers that emit HF, NOx, and CO.	Title I Condition: emission unit restriction to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Recordkeeping: once each day, record the hours each plasma etcher was operated during the previous day. By the 15th day of each month calculate and record: 1) GP 006 operating hours for the previous month; 2) GP 006 HF, NOx, and CO emissions for the previous month using operating hours calculated in item one, and GP 006 emission factors.	Title I Condition: recordkeeping to avoid classification as a major source under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5
The NOx emission factor for the plasma etchers is 0.18 lb/plasma etcher-hr. The CO emission factor for the plasma etchers is 0.32 lb/plasma etcher-hr. The HF emission factor for the plasma etchers is 0.319 lb/plasma etcher-hr.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

Subject Item: GP 007 Miscellaneous Equipment**Associated Items:** EU 027 Flammable Solvent Precision Parts Cleaner

What to do	Why to do it
GP 007 emission units are emission units not included in Groups 001-006 and use VOC- and/or HAP-containing materials.	Title I Condition: emission unit restriction to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
<p>Daily Recordkeeping: Record separately for each emission unit in GP 007, the volume of each VOC- and HAP-containing material when the material is taken from the inventory on hand stock.</p> <p>On the day of waste shipment, record the volume of the shipment. By the 15th day of the month calculate and record the mass of VOC and each HAP in the waste shipments for the previous month.</p> <p>Note: In order to calculate the mass of VOC and HAP in waste shipped off-site, the VOC and HAP content of the waste material must be equivalent to the VOC and HAP content in the virgin material (wastes with different VOC and HAP content can not be mixed together).</p>	Title I Condition: recordkeeping to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5
(continued) If different wastes were mixed, the Permittee must sample each drum and analyze the waste to determine VOC and HAP content (according to EPA or ASTM methods), in order to receive credit for the mass of VOC and HAP in recycled/recovered waste, or, the Permittee must use the lowest MSDS values of VOC and HAP of the materials that comprise mixed wastes.	Title I Condition: recordkeeping to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5
<p>Monthly Recordkeeping: by the 15th day of each month calculate and record the following data for GP 007:</p> <ol style="list-style-type: none"> 1) the total quantity of each type of VOC- and HAP-containing material used during the previous month; 2) the emissions during the previous month of VOC and HAP listed on the MSDS, based on the quantity of each type of VOC- and HAP-containing material used during the previous month, and the maximum percentage of each VOC and HAP component (stated on the relevant MSDS); 3) the mass of VOC and each HAP in waste shipped during the previous month; 4) GP 007 VOC and individual HAP emissions during the previous month based on the emissions (determined in item two), minus waste shipped (determined in item three). 	Title I Condition: recordkeeping to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

Subject Item: GP 008 Coating**Associated Items:** CE 001 Direct Flame Afterburner w/Heat Exchanger

CE 005 Thermal Oxidizer

CE 007 Thermal Oxidizer

EU 164 TSA Coat 1

EU 165 TSA Coat 2

EU 166 TSA Coat 3

EU 167 TSA Develop 1

EU 173 TSA Strip 2

SV 057 RTO1 Exhaust

SV 072 RTO2 Exhaust

SV 073 RTO3 Exhaust

What to do	Why to do it
VOC limits for this Group are under Total Facility Requirements. Control Equipment Requirements are listed under CE 001, CE 005 and CE 007. The Permittee is required to keep daily and monthly records of VOC emissions from emission units listed under this group, and include the monthly total with the 12-month rolling sum of VOC emissions for the facility. See Appendix A for additional information on emission calculations.	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson
Permit Number: 08500032 - 007

Subject Item: GP 009 TSA Etchers 1 and 2

Associated Items: CE 004 Wet Scrubber - High Efficiency
CE 006 Wet Scrubber - High Efficiency
EU 169 TSA Etch 1
EU 170 TSA Etch 2
SV 006
SV 071 E-157/E-158

What to do	Why to do it
VOC and HAP limits for this Group are under Total Facility Requirements. Control Equipment Requirements are listed under CE 004 and CE 006. The Permittee is required to keep daily and monthly records of VOC and HAP emissions from emission units listed under this group, and include the monthly total with the 12-month rolling sum of VOC and HAP emissions for the facility. See Appendix A for additional information on emission calculations.	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

Subject Item: GP 010 TSA Metalizer and Ni/Au Plate**Associated Items:** CE 004 Wet Scrubber - High Efficiency

EU 168 TSA Metalizer 2

EU 174 TSA Ni/Au Plate

SV 071 E-157/E-158

What to do	Why to do it
HAP limits for this Group are under Total Facility Requirements. Control Equipment requirements are listed under CE 004. The Permittee is required to keep daily and monthly records of HAP emissions from emission units listed under this group, and include the monthly total with the 12-month rolling sum of individual and combined HAP emissions for the facility. See Appendix A for additional information on emission calculations.	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

Subject Item: CE 001 Direct Flame Afterburner w/Heat Exchanger**Associated Items:** EU 003 Roller Coater 1

EU 088 Roller Coater 2

EU 173 TSA Strip 2

EU 184 Roller Coater #3

GP 008 Coating

What to do	Why to do it
CE 001 Direct Flame Afterburner will be replaced by CE 007 Thermal Oxidizer. Upon completion of the CE 007 installation, the Permittee must comply with the pollution control equipment requirements listed under CE 007 in this permit, and any permit conditions related to CE 001 will no longer be applicable. There are 10 working days allowed for this transition, during which the Permittee may operate the Roller Coaters uncontrolled. The maximum emissions of VOC's and Cresols is 0.08 and 0.001 tons per day, respectively.	hdr
OPERATIONAL REQUIREMENTS	hdr
Control Efficiency: For emission calculations the Permittee can use the following values, or the values from the most recent performance test: 84% for the boiler based on a capture efficiency of 89% and a destruction efficiency of 95% for VOC.	Title I Condition: control efficiency requirement to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Operational Requirement: Route all captured emissions from the roller coaters to the thermal oxidizer at all times except for breakdowns or malfunction or when the roller coaters are being cleaned. Time periods when emissions are not routed to the thermal oxidizer shall be treated as uncontrolled in the emission calculations for the facility.	Title I Condition: operating requirement to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Recordkeeping - Control Equipment Bypasses: Record the date and start and stop times of each thermal oxidizer bypass period. Record the volume of coating material used during the bypass period. Report all bypasses in the facility's semiannual deviation report, and as required by Minn. R. 7019.1000. Apply a capture efficiency of 0% during a bypass period when conducting monthly emissions calculations.	Title I Condition: recordkeeping to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5; Minn. R. 7007.0800, subp. 6
Temperature: greater than or equal to 1499 degrees F using 3-hour Rolling Average while the roller coaters are operated. This minimum temperature may change if a new minimum is set pursuant to Minn. R. 7017.2025, subp. 3, based on the average temperature recorded during the most recent performance test where compliance for VOC emissions was demonstrated.	Title I Condition: monitoring to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 14
Corrective Action: if the 3-hour rolling average temperature falls below the required minimum value, take corrective action according to the O&M Plan, to restore the temperature to at least the required minimum value as soon as possible. Record all corrective actions taken when completed. If the temperature falls below the required minimum value, all emissions during this time shall be considered uncontrolled and a control efficiency of 0% shall be used in the monthly emissions calculations.	Title I Condition: monitoring to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subps. 5 and 14
TESTING	hdr
Initial Performance Test: due 365 days after 03/04/2002 to determine the VOC capture and destruction efficiencies of the thermal oxidizer control system for use in calculating emissions as described above. Subsequent tests shall be before the end of each 24 months after the Initial Performance Test.	Title I Condition: testing to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7017.2020, subp. 1
Performance Test: due 90 days before Startup of material used in the roller coaters that contains any HAP for which a destruction efficiency test hasn't been conducted under Minn. R. 7017.2020-7017.2060. Until a performance test is conducted, a control efficiency can not be used for the new HAP when calculating monthly emissions.	Title I Condition: testing to avoid major source status under 40 CFR Section 63.2; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Performance Test and all tests required to establish a HAP destruction efficiency.	Minn. R. 7017.2030, subp.4
TEMPERATURE MONITORING	hdr
Monitoring: the Permittee shall install the necessary monitoring equipment for measuring and recording the temperature at the combustion chamber outlet. The monitoring equipment must be installed, operated, and properly maintained when the roller coaters are in operation. The temperature monitoring device must be accurate to within +/- 10 degrees Fahrenheit, and the recordkeeping system must be capable of tracking and recording a 3-hour rolling average or a raw temperature in a retrievable and readable manner for a period of 5 years.	Title I Condition: monitoring to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson
Permit Number: 08500032 - 007

Recordkeeping: the Permittee shall maintain either a continuous hard copy readout of the inlet temperature, electronic copy, or maintain a hard copy of manual readings taken at least once every 15 minutes. The Permittee shall also calculate and record 3-hour rolling averages of these readings, as described in Appendix A of this permit.	Title I Condition: monitoring to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5
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TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson
Permit Number: 08500032 - 007

Subject Item: CE 002 Packed-Gas Adsorption Column

Associated Items: EU 089 Plasma Etcher 1
EU 090 Plasma Etcher 2
EU 100 Plasma Etcher 12
EU 101 Plasma Etcher 13
EU 104 Plasma Etcher 16
EU 105 Plasma Etcher 17
EU 106 Plasma Etcher 18
EU 107 Plasma Etcher 19
EU 108 Plasma Etcher 20
EU 109 Plasma Etcher 21
EU 110 Plasma Etcher 22
EU 111 Plasma Etcher 23
EU 112 Plasma Etcher 24
EU 113 Plasma Etcher 25
EU 114 Plasma Etcher 26
EU 115 Plasma Etcher 27
EU 130 Plasma Etcher 28
EU 131 Plasma Etcher 29
EU 132 Plasma Etcher 30
EU 133 Plasma Etcher 31
EU 134 Plasma Etcher 32
EU 135 Plasma Etcher 33
EU 136 Plasma Etcher 34 - clean
EU 137 Plasma Etcher 35
EU 138 Plasma Etcher 36 - clean
EU 139 Plasma Etcher 37 - clean
EU 140 R&D Plasma Etcher
EU 153 Plasma Etcher 38
EU 154 Plasma Etcher 39
EU 155 Plasma Etcher 40
EU 156 Plasma Etcher 41
EU 157 Plasma Etcher 42
EU 158 Plasma Etcher 43
EU 159 Plasma Etcher 44
EU 160 Plasma Etcher 45
EU 161 Plasma Etcher 46
EU 175 Plasma Etcher 55
EU 176 Plasma Etcher 57
EU 177 Plasma Etcher 58

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

Associated Items: EU 178 Plasma Etcher 67

EU 179 Plasma Etcher 78

EU 180 Plasma Etcher 79

EU 181 Plasma Etcher 80

EU 182 Plasma Etcher XX

EU 183 Plasma Etcher YY

What to do	Why to do it
OPERATIONAL REQUIREMENTS	hdr
Control Efficiency: For emission calculations the Permittee can use a control efficiency of 99% for HF, or the value from the most recent performance test.	Title I Condition: control efficiency requirement to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Operational Requirement: Route all emissions from the plasma etchers to the scrubber at all times except for breakdowns or malfunctions.	Title I Condition: control equipment requirement to avoid major source status under 40 CFR Section 63.2
Recordkeeping - Control Equipment Bypasses: Record the date and start and stop time of each scrubber bypass period. Report all scrubber bypasses in the facility's semiannual deviation report, and as required by Minn. R. 7019.1000. Apply a control efficiency of 0% during a bypass period when conducting monthly emissions calculations.	Minn. R. 7007.0800, subp. 5; Minn. R. 7007.0800, subp. 6
Scrubbing Liquid pH: greater than or equal to 9 pH units after treatment by the caustic portion of the scrubbing system.	Title I Condition: monitoring to avoid major source status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 4
Recirculated Liquid Flow Rate: greater than or equal to 4 gallons/minute	Title I Condition: monitoring to avoid major source status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 4
Upstream Water Spray Valves: inspect these valves once per calendar quarter to ensure they are in the open position. Make a record of each inspection.	Title I Condition: monitoring to avoid major source status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 4
Monitoring and Recordkeeping: the Permittee shall obtain and record the liquid flow rate and scrubbing liquid pH once each day during operation.	Title I Condition: monitoring and recordkeeping to avoid major source status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 4; Minn. R. 7007.0800, subp. 5
Corrective Action: if any of the parameters monitored on the scrubber falls outside the range, take the appropriate corrective action as stated in the O&M Plan. Record all corrective actions taken when completed. If any of the scrubber parameters fall outside their required ranges, all emissions during this time shall be considered uncontrolled and a control efficiency of 0% shall be used in the monthly emissions calculations.	Title I Condition: monitoring to avoid major source status under 40 CFR Section 63.2; Minn. R. 7007.0800, subps. 5 and 14
TESTING	hdr
Performance Test: due before 48 months starting 03/04/2002 to determine the HF emission factor, per plasma etcher, after control, for use in calculating emissions as described above.	Title I Condition: testing to avoid major source status under 40 CFR Section 63.2; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Performance Test	Minn. R. 7017.2030, subp.4
MONITORING	hdr
Monitoring: the Permittee shall install the necessary monitoring equipment for measuring the Scrubbing Liquid pH and the liquid flow rate. The monitoring equipment must be installed, operated, and properly maintained when the plasma etchers are in operation. Records must be kept for a period of 5 years.	Title I Condition: monitoring to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 4
The monitoring equipment must be installed, in use, and properly maintained when the plasma etchers are in operation. Calibrate the monitoring equipment annually, or as required by the manufacturing specification.	Title I Condition: monitoring to avoid major source status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

Subject Item: CE 003 Direct Flame Afterburner w/Heat Exchanger**Associated Items:** EU 001 Dipper 1

EU 002 Dipper 2

What to do	Why to do it
OPERATIONAL REQUIREMENTS	hdr
Control Efficiency: For emission calculations the Permittee can use the following value, or the values from the most recent performance test: 42% for VOC.	Title I Condition: control efficiency requirement to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Recordkeeping - Control Equipment Bypasses: Record the date and start and stop times of any period where the entire boiler control system was bypassed (e.g. through the normally locked out bypass stack, not through the normally used bypass stack whereby part of the gas flow not demanded by the boiler is routed to the atmosphere). Record the volume of coating material used during the bypass period. Report all bypasses in the facility's semiannual deviation report, and as required by Minn. R. 7019.1000. Apply a capture efficiency of 0% during a bypass period when conducting monthly emissions calculations.	Title I Condition: control efficiency requirement to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Boiler Firing Rate Capacity: greater than or equal to 400 actual cubic feet/minute	Title I Condition: monitoring to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 14
Corrective Action: if the boiler firing rate setting falls below 400 actual cubic feet per minute, take corrective action according to the O&M Plan as soon as possible, to restore the boiler firing rate to at least the required minimum value. Record all corrective actions taken when completed. If the boiler firing rate falls below the required minimum value all emissions during this time shall be considered uncontrolled and a control efficiency of 0% shall be used in the monthly emissions calculations.	Title I Condition: monitoring to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subps. 5 and 14
TESTING	hdr
Performance Test: due before 06/04/2004 to determine the VOC control (i.e. capture and destruction) efficiencies of the boiler system for use in calculating emissions as described above. All tests shall be done under low boiler load conditions. Performance test completed April 27, 2004.	Title I Condition: testing to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7017.2020, subp. 1
Performance Test: due 90 days before Startup of material used in the dipcoaters that contains any HAP for which a destruction efficiency test hasn't been conducted under Minn. R. 7017.2020-7017.2060. Until a performance test is conducted, a control efficiency can not be used for the new HAP when calculating monthly emissions.	Title I Condition: testing to avoid major source status under 40 CFR Section 63.2; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Performance Test and all tests required to establish a HAP destruction efficiency.	Minn. R. 7017.2030, subp.4
TEMPERATURE MONITORING	hdr
Monitoring: the Permittee shall install the necessary monitoring equipment for measuring and recording the firing rate of the boiler. The monitoring equipment must be installed, operated, and properly maintained when the dip coaters are vented to the boiler. The recordkeeping system must be capable of tracking and recording a continuous reading of the boiler firing rate in a retrievable and readable manner for a period of 5 years.	Title I Condition: monitoring to avoid major source status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 4
Performance Test: due 90 days before Startup of material used in the dip coaters that contains any HAP for which a destruction efficiency test hasn't been conducted under Minn. R. 7017.2020-7017.2060. Until a performance test is conducted, a control efficiency can not be used for the new HAP when calculating monthly emissions.	Title I Condition: testing to avoid major source status under 40 CFR Section 63.2; Minn. R. 7017.2020, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

Subject Item: CE 004 Wet Scrubber - High Efficiency**Associated Items:** EU 163 TSA Clean 1

EU 168 TSA Metalizer 2

EU 169 TSA Etch 1

EU 174 TSA Ni/Au Plate

GP 009 TSA Etchers 1 and 2

GP 010 TSA Metalizer and Ni/Au Plate

What to do	Why to do it
OPERATIONAL REQUIREMENTS	hdr
Hydrochloric acid: greater than or equal to 95 percent control efficiency	Title I Condition: control efficiency requirement to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Operational Requirement: Route all emissions from the above listed emission units to the scrubber at all times except for breakdowns or malfunctions.	Title I Condition: control equipment requirement to avoid major modification status under 40 CFR Section 63.2
Recordkeeping - Control Equipment Bypasses: Record the date and start and stop time of each scrubber bypass period. Report all scrubber bypasses in the facility's semiannual deviation report, and as required by Minn. R. 7019.1000. Apply a control efficiency of 0% during a bypass period when conducting monthly emissions calculations.	Minn. R. 7007.0800, subp. 5; Minn. R. 7007.0800, subp. 6
Scrubbing Liquid pH: greater than or equal to 9 pH units after treatment by the caustic portion of the scrubbing system.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 4
Recirculated Liquid Flow Rate: greater than or equal to 4 gallons/minute	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 4
Upstream Water Spray Valves: inspect these valves once per calendar quarter to ensure they are in the open position. Make a record of each inspection.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 4
Monitoring and Recordkeeping: the Permittee shall obtain and record the liquid flow rate and scrubbing liquid pH once each day during operation.	Title I Condition: monitoring and recordkeeping to avoid major modification status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 4; Minn. R. 7007.0800, subp. 5
Corrective Action: if any of the parameters monitored on the scrubber falls outside the range, take the appropriate corrective action as stated in the O&M Plan. Record all corrective actions taken when completed. If any of the scrubber parameters fall outside their required ranges, all emissions during this time shall be considered uncontrolled and a control efficiency of 0% shall be used in the monthly emissions calculations.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 63.2; Minn. R. 7007.0800, subps. 5 and 14
TESTING	hdr
Initial Performance Test: due 180 days after Equipment Installation of emission units to determine the HCl emission factor, after control, for emission calculations use.	Title I Condition: testing to avoid major modification status under 40 CFR Section 63.2; Minn. R. 7017.2020, subp. 1
MONITORING	hdr
Monitoring: the Permittee shall install the necessary monitoring equipment for measuring the Scrubbing Liquid pH and the liquid flow rate. The monitoring equipment must be installed, operated, and properly maintained when the plasma etchers are in operation. Records must be kept for a period of 5 years.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 4
The monitoring equipment must be installed, in use, and properly maintained when the plasma etchers are in operation. Calibrate the monitoring equipment annually, or as required by the manufacturing specification.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

Subject Item: CE 005 Thermal Oxidizer**Associated Items:** EU 164 TSA Coat 1

EU 165 TSA Coat 2

EU 166 TSA Coat 3

EU 167 TSA Develop 1

EU 172 TSA Strip 1

GP 008 Coating

What to do	Why to do it
Control efficiency for Volatile Organic Compounds: greater than or equal to 95 percent control efficiency	Title I Condition: control efficiency requirement to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Operational Requirement: Route all captured emissions from the emission units to the thermal oxidizer at all times except for breakdowns or malfunction or when the emission units are being cleaned. Time periods when emissions are not routed to the thermal oxidizer shall be treated as uncontrolled in the emission calculations for the facility.	Title I Condition: operating requirement to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Temperature: greater than or equal to 1400 degrees F using 3-hour Rolling Average while the roller coaters are operated. This minimum temperature may change if a new minimum is set pursuant to Minn. R. 7017.2025, subp. 3, based on the average temperature recorded during the most recent performance test where compliance for VOC emissions was demonstrated.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 14
Recordkeeping - Control Equipment Bypasses: Record the date and start and stop times of each thermal oxidizer bypass period. Record the volume of coating material used during the bypass period. Report all bypasses in the facility's semiannual deviation report, and as required by Minn. R. 7019.1000. Apply a capture efficiency of 0% during a bypass period when conducting monthly emissions calculations.	Title I Condition: recordkeeping to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5; Minn. R. 7007.0800, subp. 6
Corrective Action: if the 3-hour rolling average temperature falls below the required minimum value, take corrective action according to the O&M Plan, to restore the temperature to at least the required minimum value as soon as possible. Record all corrective actions taken when completed. If the temperature falls below the required minimum value, all emissions during this time shall be considered uncontrolled and a control efficiency of 0% shall be used in the monthly emissions calculations.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subps. 5 and 14
TESTING	hdr
Initial Performance Test: due 180 days after Equipment Installation of emission unit to determine VOC Control Efficiency.	Title I Condition: testing to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7017.2020, subp. 1
Performance Test: due 90 days before Startup of material used in the roller coaters that contains any HAP for which a destruction efficiency test hasn't been conducted under Minn. R. 7017.2020-7017.2060. Until a performance test is conducted, a control efficiency can not be used for the new HAP when calculating monthly emissions.	Title I Condition: testing to avoid major modification status under 40 CFR Section 63.2; Minn. R. 7017.2020, subp. 1
TEMPERATURE MONITORING	hdr
Monitoring: the Permittee shall install the necessary monitoring equipment for measuring and recording the temperature at the combustion chamber outlet. The monitoring equipment must be installed, operated, and properly maintained when the roller coaters are in operation. The temperature monitoring device must be accurate to within +/- 10 degrees Fahrenheit, and the recordkeeping system must be capable of tracking and recording a 3-hour rolling average or a raw temperature in a retrievable and readable manner for a period of 5 years.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 4
Recordkeeping: the Permittee shall maintain either a continuous hard copy readout of the inlet temperature, electronic copy, or maintain a hard copy of manual readings taken at least once every 15 minutes. The Permittee shall also calculate and record 3-hour rolling averages of these readings, as described in Appendix A of this permit.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

Subject Item: CE 006 Wet Scrubber - High Efficiency**Associated Items:** EU 170 TSA Etch 2

GP 009 TSA Etchers 1 and 2

What to do	Why to do it
OPERATIONAL REQUIREMENTS	hdr
Control Efficiency for Hydrochloric acid: greater than or equal to 95 percent control efficiency	Title I Condition: control efficiency requirement to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Operational Requirement: Route all emissions from emission units listed above to the scrubber at all times except for breakdowns or malfunctions.	Title I Condition: control equipment requirement to avoid major source status under 40 CFR Section 63.2
Recordkeeping - Control Equipment Bypasses: Record the date and start and stop time of each scrubber bypass period. Report all scrubber bypasses in the facility's semiannual deviation report, and as required by Minn. R. 7019.1000. Apply a control efficiency of 0% during a bypass period when conducting monthly emissions calculations.	Minn. R. 7007.0800, subp. 5; Minn. R. 7007.0800, subp. 6
Scrubbing Liquid pH: greater than or equal to 9 pH units after treatment by the caustic portion of the scrubbing system.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 4
Recirculated Liquid Flow Rate: greater than or equal to 4 gallons/minute	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 4
Upstream Water Spray Valves: inspect these valves once per calendar quarter to ensure they are in the open position. Make a record of each inspection.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 4
Monitoring and Recordkeeping: the Permittee shall obtain and record the liquid flow rate and scrubbing liquid pH once each day during operation.	Title I Condition: monitoring and recordkeeping to avoid major modification status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 4; Minn. R. 7007.0800, subp. 5
Corrective Action: if any of the parameters monitored on the scrubber falls outside the range, take the appropriate corrective action as stated in the O&M Plan. Record all corrective actions taken when completed. If any of the scrubber parameters fall outside their required ranges, all emissions during this time shall be considered uncontrolled and a control efficiency of 0% shall be used in the monthly emissions calculations.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 63.2; Minn. R. 7007.0800, subps. 5 and 14
TESTING	hdr
Initial Performance Test: due 180 days after Equipment Installation of emission unit to determine Control Efficiency of HCl emissions.	Title I Condition: testing to avoid major modification status under 40 CFR Section 63.2; Minn. R. 7017.2020, subp. 1
MONITORING	hdr
Monitoring: The Permittee shall install the necessary monitoring equipment for measuring the Scrubbing Liquid pH and the liquid flow rate. The monitoring equipment must be installed, operated, and properly maintained when the plasma etchers are in operation. Records must be kept for a period of 5 years.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 4
The monitoring equipment must be installed, in use, and properly maintained when the plasma etchers are in operation. Calibrate the monitoring equipment annually, or as required by the manufacturing specification.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 63.2; Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

Subject Item: CE 007 Thermal Oxidizer**Associated Items:** EU 003 Roller Coater 1

EU 088 Roller Coater 2

EU 173 TSA Strip 2

EU 184 Roller Coater #3

EU 185 Roller Coater #4

GP 008 Coating

What to do	Why to do it
CE 001 Direct Flame Afterburner will be replaced by CE 007 Thermal Oxidizer. Upon completion of the CE 007 installation, the Permittee must comply with the pollution control equipment requirements listed under CE 007 in this permit, and any permit conditions related to CE 001 will no longer be applicable.	hdr
There are 10 working days allowed for this transition, during which the Permittee may operate the Roller Coaters uncontrolled. The maximum emissions of VOC's and Cresols is 0.08 and 0.001 tons per day, respectively.	
Control efficiency for Volatile Organic Compounds: greater than or equal to 95 percent control efficiency	Title I Condition: control efficiency requirement to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Operational Requirement: Route all captured emissions from the emission units to the thermal oxidizer at all times except for breakdowns or malfunction or when the emission units are being cleaned. Time periods when emissions are not routed to the thermal oxidizer shall be treated as uncontrolled in the emission calculations for the facility.	Title I Condition: operating requirement to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 2
Temperature: greater than or equal to 1400 degrees F using 3-hour Rolling Average while the roller coaters are operated. This minimum temperature may change if a new minimum is set pursuant to Minn. R. 7017.2025, subp. 3, based on the average temperature recorded during the most recent performance test where compliance for VOC emissions was demonstrated.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 52.21 and 63.2; 40 CFR Section 64; Minn. R. 7007.0800, subp. 14
Recordkeeping - Control Equipment Bypasses: Record the date and start and stop times of each thermal oxidizer bypass period. Record the volume of coating material used during the bypass period. Report all bypasses in the facility's semiannual deviation report, and as required by Minn. R. 7019.1000. Apply a capture efficiency of 0% during a bypass period when conducting monthly emissions calculations.	Title I Condition: recordkeeping to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subp. 5; Minn. R. 7007.0800, subp. 6
Corrective Action: if the 3-hour rolling average temperature falls below the required minimum value, take corrective action according to the O&M Plan, to restore the temperature to at least the required minimum value as soon as possible. Record all corrective actions taken when completed. If the temperature falls below the required minimum value, all emissions during this time shall be considered uncontrolled and a control efficiency of 0% shall be used in the monthly emissions calculations.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7007.0800, subps. 5 and 14
TESTING	hdr
Initial Performance Test: due 90 days after Equipment Installation EU 185 Roller Coater #4 to determine VOC capture and destruction efficiencies of the thermal oxidizer control system for use in calculating emissions as described above. Subsequent tests shall be before the end of each 24 months after the Initial Performance Test.	Title I Condition: testing to avoid major modification status under 40 CFR Section 52.21 and 63.2; Minn. R. 7017.2020, subp. 1
Performance Test: due 90 days before Startup of material used in the roller coaters that contains any HAP for which a destruction efficiency test hasn't been conducted under Minn. R. 7017.2020-7017.2060. Until a performance test is conducted, a control efficiency can not be used for the new HAP when calculating monthly emissions.	Title I Condition: testing to avoid major modification status under 40 CFR Section 63.2; Minn. R. 7017.2020, subp. 1
TEMPERATURE MONITORING	hdr
Monitoring: the Permittee shall install the necessary monitoring equipment for measuring and recording the temperature at the combustion chamber outlet. The monitoring equipment must be installed, operated, and properly maintained when the roller coaters are in operation. The temperature monitoring device must be accurate to within +/- 10 degrees Fahrenheit, and the recordkeeping system must be capable of tracking and recording a 3-hour rolling average or a raw temperature in a retrievable and readable manner for a period of 5 years.	Title I Condition: monitoring to avoid major modification status under 40 CFR Section 52.21 and 63.2; 40 CFR Section 64; Minn. R. 7007.0800, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

Recordkeeping: the Permittee shall maintain either a continuous hard copy readout of the inlet temperature, electronic copy, or maintain a hard copy of manual readings taken at least once every 15 minutes. The Permittee shall also calculate and record 3-hour rolling averages of these readings, as described in Appendix A of this permit.	Title I Condition: record keeping to avoid major modification status under 40 CFR Section 52.21 and 63.2; 40 CFR Section 64 Minn. R. 7007.0800, subp. 5
BURNER MONITORING AND RECORDKEEPING	hdr
Monitoring and Recordkeeping Requirement: Perform annual burner inspection and keep records of the inspection at the facility.	40 CFR Section 64

TABLE B: SUBMITTALS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson
Permit Number: 08500032 - 007

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

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

Send any application for a permit or permit amendment to:

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

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

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

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

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

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

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

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

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Notification of the Actual Date of Initial Startup	due 2 days after Initial Startup (2 working days) begins.	CE007
Notification of the date of Equipment Removal/Dismantlement	due 2 days after Equipment Removal and/or Dismantlement (2 working days) begins.	CE001
Performance Test Notification (written)	due 30 days before Performance Test	CE002
Performance Test Notification (written)	due 30 days before Performance Test and all tests required to establish a HAP destruction efficiency.	CE001, CE003, CE005, CE007
Performance Test Plan	due 30 days before Performance Test	CE002
Performance Test Plan	due 30 days before Performance Test and all tests required to establish a HAP destruction efficiency.	CE001, CE003
Performance Test Report - Microfiche Copy	due 105 days after Performance Test	CE002, CE004
Performance Test Report - Microfiche Copy	due 105 days after Performance Test and all tests required to establish a HAP destruction efficiency.	CE001, CE003
Performance Test Report	due 45 days after Performance Test	CE002
Performance Test Report	due 45 days after Performance Test	CE004
Performance Test Report	due 45 days after Performance Test and all tests required to establish a HAP destruction efficiency.	CE001
Performance Test Report	due 45 days after Performance Test and all tests required to establish a HAP destruction efficiency.	CE003

TABLE B: RECURRENT SUBMITTALS

11/16/05

Facility Name: Hutchinson Technology Inc - Hutchinson

Permit Number: 08500032 - 007

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 03/04/2002 . 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.	Total Facility
Compliance Certification	due 30 days after end of each calendar year starting 03/04/2002 (for the previous calendar year). To be submitted on a form approved by the Commissioner. The report covers all deviations experienced during the calendar year.	Total Facility

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 08500032-007

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

1. General Information

1.1. Applicant and Stationary Source Location:

Applicant/Address	Stationary Source/Address (SIC Code: 3577)
Mr. Eric C. Yost Corporate Environmental Engineer 40 West Highland Park Drive Hutchinson, MN 55350	40 W Highland Park Dr NE Hutchinson McLeod County
Contact: Mr. Eric Yost Phone: 320-587-1541	

1.2. Description of the Activities Allowed by this Permit Action

This is a major amendment to the existing Title V permit. Limited potential emissions from the facility do not change after the modification. The main purpose of this major permit amendment is to authorize installation and operation of a new CE 007 Thermal Oxidizer with a higher capacity to replace the existing CE 001 Direct Flame Afterburner. The Thermal Oxidizer controls Volatile Organic Compounds (VOC's) and HAP emissions from the Roller Coaters with a control efficiency of greater than 95 percent. A new EU 185 Roller Coater #4 is also being installed. This emission unit emits VOC and HAP emissions, most of which are controlled.

The thermal oxidizer replacement will be done over a period of 10 working days, during which time the Permittee is allowed to operate the Roller Coaters uncontrolled with maximum emissions of 0.08 tons per day of VOC's and 0.001 tons per day of Cresols. See Attachment 2 for calculations for these limits.

The following items were added to the permit and facility description:

CE 007 Thermal Oxidizer (also added to group GP 008 Coating)
SV 073 RTO3 Exhaust (also added to group GP 008 Coating)
EU 185 Roller Coater #4 (also added to group GP 001 Photoresist Coaters)

The following emission units have been added to the facility since the last major amendment to the permit and were also added to the permit and facility description. (See Attachment 5 to this TSD for more details on these emission units.)

EU 184 Roller Coater #3 (also added to group GP 001 Photoresist Coaters)

EU 175 – 180 Plasma Etchers (also added to group GP 006 Plasma Etchers)

EU 181 – 183 Plasma Etchers have not arrived on the HTI site, but are planned for the future.

1.3 Facility Emissions:

Table 1. Total Facility Potential to Emit Summary

Pollutant	PM tpy	PM ₁₀ tpy	SO ₂ tpy	NO _x tpy	CO tpy	VOC tpy	Single HAP tpy	All HAPs tpy
Total Facility Limited Potential Emissions	249*	249*	249*	249*	249*	249*	9.9*	24.9*
New Emission Units+	0.0	0.0	0.0	0.0	0.0	5.6	0.36	
Total Facility Actual Emissions (2004)	0.5	0.5	0.04	14.6	15.1	32.1	HAPs not reported in emissions inventory	

- Existing Total Facility Limits remain unchanged
- + See Attachment 4 to this TSD for emissions calculations for the New Emission Units

Table 2. Facility Classification

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD		X	
Part 70 Permit Program	X		
Part 63 NESHAP		X	

2.0 Regulatory and/or Statutory Basis

New Source Review (NSR)

The facility is an existing non-major source under New Source Review regulations. This permit action does not change the NSR status.

Part 70 Permit Program

The facility is a major 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 emissions such that it is a non-major source under 40 CFR pt. 63. Thus, no NESHAPs apply.

Compliance Assurance Monitoring (CAM)

The new CE 007 Thermal Oxidizer has been evaluated for compliance with 40 CFR Section 64 (CAM). A requirement for monitoring and recordkeeping for the burner has been added to the permit.

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; however, the permit contains no PM and Opacity limits for all emission units.

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

EU, GP, or SV	Applicable Regulations	Comments:
TF	40 CFR Sections 52.21; Minn. R. 7007.0800, subp. 2	Title I Condition: To avoid a major source classification; The thermal oxidizer replacement will be done over a period of 10 working days, during which time the Permittee is allowed to operate the Roller Coaters uncontrolled with maximum emissions of 0.08 tons per day of VOC's and 0.001 tons per day of Cresols.
TF	40 CFR Sections 52.21; Minn. R. 7007.0800, subp. 5	Title I Condition: To avoid a major source classification; Record keeping for VOC's and Cresols during 10 days of uncontrolled emissions.
GP 001 CE 007 SV 073	40 CFR Sections 52.21 and Part 63	Title I Condition: To avoid a major source classification; Emission control system for VOC and HAP with a collection efficiency greater than or equal to 95%.
GP 001 CE 007 SV 073	40 CFR Sections 52.21 and 63.2, Minn. R. 7007.0800, subp. 2	Title I Condition: Operational requirement for routing of emissions.
GP 001 CE 007 SV 073	40 CFR Sections 52.21, 63.2, and 64, Minn. R. 7007.0800, subp. 4, 5 and 14	Title I Condition: Monitoring to avoid a major source classification; Monitor temperature in the combustion chamber of 1400 degrees F. and take appropriate corrective action. Monitor temperature in accordance with CAM.
GP 001	40 CFR Sections 52.21,	Title I Condition: Recordkeeping to avoid a major source

CE 007 SV 073	63.2, and 64, Minn. R. 7007.0800, subp. 5 and 6	classification; record bypass periods and temperature of 1400 degrees F. Recordkeeping in accordance with CAM.
GP 001 CE 007 SV 073	40 CFR Sections 52.21 and 63.2, Minn. R. 7017.2020, subp. 1	Title I Condition: Testing to avoid major source classification; Initial Performance Test to measure VOC and HAP collection by the emission control system.

In the Total Facility section of the permit, the Operation and Maintenance Plan requirement was updated, a NAAQS requirement was added and the Monitoring Equipment requirement was deleted per the current guidance. The Emission Inventory Report submittal was moved from Table B to Table A.

The performance test requirement for CE 003 was updated to reflect that the test was completed on April 27, 2004. The wording in the performance test requirements for CE 004, 005 and 007 was changed from “due 180 days after permit issuance” to “due 180 days after equipment installation of emission units” because the control equipment has been in place before the emission units were installed, making it impractical to test the control equipment.

3.0 Comments Received

Public Notice Period: 9/30/2005 - 10/31/2005

EPA 45-day Review Period: 9/30/2005 – 11/15/2005

Comments were not received from the public during the public notice period.

4.0 Conclusion

Based on the information provided by Hutchinson Technology, Inc., the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 08500032-007 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Lea Nyberg (permit writer/engineer)
 Sarah Kilgriff (enforcement)
 Mike Westereng (stack testing)
 John Chikkala (peer reviewer and wrap-up)

Attachments:

1. Roller Coater #4 Emissions Calculations (Replacement page received August 25, 2005 for Public Copy of Permit Application dated August 11, 2005)
2. Calculations for Emissions Limits for 10 Day Transition Period
3. Email from Eric Yost at HTI to Lea Nyberg Dated August 23, 2005
4. Calculations for Emissions Increase for this Permit Amendment

5. Emission Units Added to Hutchinson Technology Inc. – Hutchinson in 2005