

DRAFT

AIR EMISSION PERMIT NO. 11100036 - 004 Total Facility Operating Permit - Reissuance

IS ISSUED TO

Prairie Lakes Municipal Solid Waste Authority

Perham Resource Recovery Facility
201 6th Avenue Northeast
Perham, Otter Tail County, MN 56573

The emission units, control equipment and emission stacks at the stationary source authorized in this permit reissuance are as described in the Permit Applications Table.

This permit reissuance supersedes Air Emission Permit No. 11100036-003, and 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.

Unless otherwise indicated, all the Minnesota rules cited as the origin of the permit terms are incorporated into the SIP under 40 CFR § 52.1220 and as such as are enforceable by U.S. Environmental Protection Agency (EPA) Administrator or citizens under the Clean Air Act.

Permit Type: Federal; Pt 70/Major for NSR

Operating Permit Issue Date: <issue date>

Expiration Date: <expiration date > – All Title I Conditions do not expire.

* The Permittee may continue to operate this facility after the expiration date of the permit, per the provision under Minn. R. 7007.0450, subp. 3.

Don Smith, P.E., Manager
Air Quality Permits Section
Industrial Division

for John Linc Stine
Commissioner
Minnesota Pollution Control Agency

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NOTICE TO THE PERMITTEE:

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

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

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

As covered by the current permit, Air Emissions Permit No. 11100036-004, the following describes Perham Resource Recovery Facility (PRRF). The PRRF has two waste combustors (the South Unit EU-001 and the North Unit EU-002). Each combustion unit can operate, individually, at a rate up to 100 tons per day, expressed as an annual average, when the other unit is not operating. This translates into a heat input rate of 45.8 million Btu/hr per boiler. Natural gas is used to warm-up the waste combustor at start-up and as necessary to maintain proper combustion conditions. The waste combustors generate steam which is sold locally. The PRRF also has a small steam turbine for generating electricity on-site.

Each municipal waste combustor unit consists of two waste combustion primary chambers, each with its own secondary combustion chamber. Each waste combustor unit has its own dedicated heat recovery boiler and associated air pollution control equipment. Pollution control equipment consists of dry lime injection for the control of acid gases, activated carbon injection for the control of mercury (and possibly dioxin), and a fabric filter for the control of particulate matter (PM) and other metals. A portion of the flue gases are recirculated from the boiler outlet to the combustion chamber to regulate fabric filter temperature. Exhaust gases currently enter the atmosphere through a single 125-ft. tall primary stack. Each waste combustor unit is also equipped with its' own 65-ft tall dump stack. Exhaust gases are continuously monitored for CO, SO₂, opacity, and O₂. Fabric filter inlet temperature, steam flow rate, and activated carbon feed rate parameters are also monitored continuously.

Ash produced in the course of waste combustion is loaded into a truck in an enclosed area at the facility. The ash is covered and transported via trucks to the Northeast Ottertail Ash Landfill (permit number SW-544).

Upfront of the combustion process, the facility has constructed and operates a Materials Recovery Facility (MRF). This operation is housed with the waste combustors. The operation of the MRF will include:

- Identifying and removal of problem materials;
- Removal of recyclables, such as aluminum, ferrous metals, and cardboard; and.
- Separation and removal, from the fuel supply, undesirable waste and fines.

PRRF also has a 98.3 MMBtu/hr natural gas auxiliary boiler. The 2004 98.3 MMBtu/hr boiler has low NO_x burners and flue gas recirculation for NO_x control.

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-1 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

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

Subject Item: Total Facility

What to do	Why to do it
OPERATIONAL REQUIREMENTS	hdr
The Permittee shall comply 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. Compliance shall be demonstrated upon written request by the MPCA.	40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subp. 7(A), 7(L), & 7(M); Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and shall include a preventative maintenance program for that equipment, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment, and the records kept to demonstrate plan implementation, and measures to be taken to address the ongoing minimization of fugitive dust emission sources as well as sweeping of the roadway/parking lot pavement to minimize fugitive dust emissions.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
Ash Testing: Conduct ash sampling at least quarterly in accordance with Minn. R. 7035.2910 to form an annual composite sample. The permittee shall analyze the annual composite sample in accordance with Minn. R. 7035.2910, subp. 4, item A, tables 1 and 2. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7035.2910, subp. 3 Minn. R. 7007.0801, subp. 2 (D) MSW Ash Combustor Variance of October 1996
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
PERFORMANCE TESTING	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-2** 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>Performance Test Notifications and Submittals:</p> <p>Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements.</p> <p>Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test</p> <p>The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.</p>	<p>Minn. Rs. 7017.2030, subp. 1-4, 7017.2018 and Minn. R. 7017.2035, subp. 1-2</p>
<p>Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change.</p>	<p>Minn. R. 7017.2025, subp. 3</p>
MONITORING REQUIREMENTS	hdr
<p>Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment that have manufacturer's calibration procedures and check the accuracy of meters and monitors that cannot be calibrated. If the accuracy of equipment that cannot be calibrated is outside of recommended manufacturer's specifications, it must be replaced (any requirements applying to continuous emission monitors are listed separately in this permit). The Permittee shall maintain a written record of any action resulting from the calibration.</p>	<p>Minn. R. 7007.0800, subp. 4(D)</p>
<p>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.</p>	<p>Minn. R. 7007.0800, subp. 4(D)</p>
<p>Monitoring Equipment: Install or make needed repairs to all monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued.</p>	<p>Minn. R. 7007.0800, subp. 4(D)</p>
RECORDKEEPING	hdr
<p>Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).</p>	<p>Minn. R. 7007.0800, subp. 5(C)</p>
<p>Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007. 1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.</p>	<p>Minn. R. 7007. 0800, subp. 5(B)</p>
<p>Permittee shall maintain records adequate to document compliance at the stationary source, including at a minimum:</p> <ol style="list-style-type: none"> (1) the date, place, and time of sampling or measurement; (2) the date or dates the analyses were performed; (3) the company or entity that performed the analyses; (4) the analytical techniques or methods used; (5) the results of such analyses; and (6) the operating conditions existing at the time of sampling or measurement 	<p>Minn. R. 7007.0800, subp. 5(A)</p>
<p>If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. For expiring permits, these records shall be kept for a period of five years from the date the change was made or until permit reissuance, whichever is longer. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format.</p>	<p>Minn. R. 7007.1200, subp. 4</p>
REPORTING/SUBMITTALS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-3** 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3.</p> <p>At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.</p>	Minn. R. 7019.1000, subp. 3
<p>Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2.</p> <p>At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.</p>	Minn. R. 7019.1000, subp. 2
<p>Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.</p>	Minn. R. 7019.1000, subp. 1
<p>Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description:</p> <ol style="list-style-type: none"> 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation. 	Minn. R. 7019.1000, subp. 1
<p>As required by 40 CFR Section 64.9(a)(2), for the Semi-Annual Deviations Report listed in Table B of this permit and/or the Notification of Deviations Endangering Human Health and the Environment listed earlier in Table A of this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents.</p>	40 CFR Section 64.9(a)(2); Minn. R. 7017.0200
<p>Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.</p>	Minn. R. 7007.1150 through Minn. R. 7007.1500
<p>Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H). Performance testing deadlines from the General Provisions of 40 CFR pt. 60 and pt. 63 are examples of deadlines for which the MPCA does not have authority to grant extensions and therefore do not meet the requirements of Minn. R. 7007.1400, subp. 1(H).</p>	Minn. R. 7007.1400, subp. 1(H)
<p>Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance, to be submitted on a form approved by the Commissioner.</p>	Minn. R. 7019.3000 through Minn. R. 7019.3100
<p>Emission Fees: due 60 days after receipt of an MPCA bill.</p>	Minn. R. 7002.0005 through Minn. R. 7002.0095
<p>Ash Testing Report: Submit an annual ash testing report to the Commissioner by March 15 of each year. The report must contain at a minimum the information in Minn. R. 7035.2910, subp. 10, items A - F. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.</p>	Minn. R. 7035.2910, subp. 10 Minn. R. 7007.0801, subp. 2(D)
PLANS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-4**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

INDUSTRIAL SOLID WASTE MANAGEMENT PLAN: Permittee shall prepare and maintain a plan for management of industrial solid waste in accordance with Minn. R. 7035.2535, subp. 5, items A and B. The plan shall include the contents listed in Minn. R. 7011.1250, subp. 2. Permittee shall modify the industrial waste management plan whenever the management practices or solid waste identified in the plan have changed. Permittee shall submit the amended plan to the Commissioner for approval. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7011.1250, subp. 1; Minn. R. 7011.1250, subp. 3
Ash Toxicity: Abide by a plan to reduce the level of toxic contaminants in ash, consistent with Minn. R. 7007.0501, subp. 6(A). This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7007.0501, subp. 6
Abide by a plan for the disposal and/or utilization of ash and quench water consistent with Minn. R. 7007.0501, subp. 7. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7007.0501, subp. 7
Abide by the industrial waste management plan prepared in accordance with Minn. R. 7011.1250. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7007.0801, subp. 2(E)
Prepare, update (as necessary) and adhere to the following plans with the Environmental Compliance Operating Manual. A. security requirements in part 7035.2535, subp. 3; B. general inspection requirements in part 7035.2535, subp. 4; C. household hazardous waste management requirements of part 7035.2535, subp. 6, D. emergency preparedness and prevention plans and emergency procedures shall be prepared in accordance with parts 7035.2595 and 7035.2605. E. contingency action plans in part 7035.2615; F. closure plans and procedures in part 7035.2625; G. solid waste transfer facility requirements as required in Minn. R. 7035.2865; and H. infectious waste management plan (if Permittee chooses to accept infectious waste), in accordance with Minn. R. 7035.9100 to 7035.9150. Plans (if not completed) shall be prepared within 90 days of permit issuance. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7011.1245(A)-(H) Minn. R. 7007.0800, subp. 2
Waste Composition Study: due before end of each calendar 60 months following Permit Issuance. Waste composition study report shall be submitted to the Commissioner 45 days after completion of the study. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7011.1270 (B)(4)
Ash Testing Plan: Submit ash testing plan and amendments to the plan to the Regional Environmental Management, Northwest Region, Regular Facilities Unit for approval. The plan must contain the information in Minn. R. 7035.2910, subp. 6(A) - (H). This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7007.0801, subp. 2(D); Minn. R. 7035.2910, subp. 6
In each permit reissuance application, the plan to separate solid wastes which contain mercury shall be revised to improve identification, separation, and collection before combustion of mercury from the solid waste stream for the South Incinerator EU 001. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7011.1255, subps. 1 & 3
By Feb. 1 of each calendar year, the Permittee shall submit an updated plan to separate solid wastes which contain mercury to the Commissioner, for the North Incinerator EU 002. The updated plan must identify improvements that have been made to the plan to increase identification, separation, and collection before combustion of mercury from the solid waste stream. If no changes are being made, the Permittee must state that no changes are being made for that year. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7011.1255, subps. 1 & 3
Upon permit issuance, the Permittee shall implement a plan as described in part 7011.1255 to identify, separate, and collect solid wastes which contain mercury before the mercury is combusted. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7007.0801, subp. 2(F)
QA Plan required: Develop and implement a written quality assurance plan which covers each CEMS and COMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain the written procedures listed in Minn. R. 7017.1210, subp. 1.	Minn. R. 7017.1210, subp. 1 Minn. R. 7017.1170, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-5** 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Reporting: All submittals required by this permit must be certified by a responsible official as defined in Minn. R. 7007.0100, subp. 21. Submittals which must be provided on forms approved by the Commissioner are noted in table B. All submittals must be postmarked or received by the date specified in the tables.	Minn. R. 7007.0800, subp. 6; Minn. R. 7011.1285, subp. 1
Emergency Preparedness and Prevention: The Permittee shall maintain and test, at least annually, the required equipment for emergency preparedness and prevention. The Permittee must also prepare and maintain a procedural manual to use in times of emergency.	Minn. R. 7035.2595
Emergency Response and Reporting: In the event of an emergency, including but not limited to fire or explosion, submit to MPCA within two weeks a written report describing the emergency, the response, and an evaluation of the effectiveness of the response in accordance with Minn. R. 7035.2995 and Minn. R. 7035.2605.	Minn. R. 7011.1245; Minn. R. 7035.2595; Minn. R. 7035.2605; Minn. R. 7007.0800, subp. 2
DETERMINING IF A PROJECT/MODIFICATION IS SUBJECT TO NEW SOURCE REVIEW	hdr
These requirements apply if a reasonable possibility (RP) as defined in 40 CFR Section 52.21(r)(6)(vi) exists that a proposed project, analyzed using the actual-to-projected-actual (ATPA) test (either by itself or as part of the hybrid test at Section 52.21(a)(2)(iv)(f)) and found to not be part of a major modification, may result in a significant emissions increase (SEI). If the ATPA test is not used for the project, or if there is no RP that the proposed project could result in a SEI, these requirements do not apply to that project. The Permittee is only subject to the Preconstruction Documentation requirement for a project where a RP occurs only within the meaning of Section 52.21(r)(6)(vi)(b). Even though a particular modification is not subject to New Source Review (NSR), or where there isn't a RP that a proposed project could result in a SEI, a permit amendment, recordkeeping, or notification may still be required by Minn. R. 7007.1150 - 7007.1500.	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2
Preconstruction Documentation -- Before beginning actual construction on a project, the Permittee shall document the following: 1. Project description 2. Identification of any emission unit (EU) whose emissions of an NSR pollutant could be affected 3. Pre-change potential emissions of any affected existing EU, and the projected post-change potential emissions of any affected existing or new EU. 4. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded due to increases not associated with the modification and that the EU could have accommodated during the baseline period, an explanation of why the amounts were excluded, and any creditable contemporaneous increases and decreases that were considered in the determination. The Permittee shall maintain records of this documentation.	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.1200, subp. 4; Minn. R. 7007.0800, subps. 4 & 5
The Permittee shall monitor the actual emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using the ATPA test, and the potential emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using potential emissions in the hybrid test. The Permittee shall calculate and maintain a record of the sum of the actual and potential (if the hybrid test was used in the analysis) emissions of the regulated pollutant, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit of any unit associated with the project.	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 & 5
MODELING REQUIREMENTS	hdr
The parameters used in the NOx and PM2.5 modeling for permit number 11100036-004 are listed in Appendix B of this permit. The parameters describe the operation of the facility at maximum permitted capacity. The purpose of listing the parameters in the appendix is to provide a benchmark for future changes.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-6**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>Modeling Triggers: For changes that do not require a permit amendment or that require a minor permit amendment, and that affect any modeled parameter or emission rate documented in Appendix B, or an addition to the information documented in Appendix B, a Remodeling Submittal requirement is not triggered. The Permittee shall keep updated records on site of all parameters and emission rates. The Permittee shall submit any changes to parameters and emission rates with the next required remodeling submittal.</p> <p>For changes that require a moderate or major permit amendment and affect any modeled parameter or emission rate, a Remodeling Submittal requirement is triggered. The Permittee shall include previously made changes to parameters and emission rates that did not trigger a remodeling submittal with this modeling submittal.</p>	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
<p>Remodeling Submittal: The Permittee must submit to the Commissioner for approval changes meeting the above criteria and must wait for a written approval (in the form of an issued permit amendment) before making such changes. The information submitted must include, for stack and vent sources, source emission rate, location, height, diameters, exit velocity, exit temperature, discharge direction, use of rain caps or rain hats, and, if applicable, locations and dimensions of nearby buildings. For non-stack/vent sources, this includes the source emission rate, location, size and shape, release height, and, if applicable, any emission rate scalars, and the initial lateral dimensions and initial vertical dimensions and adjacent building heights.</p>	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
<p>Remodeling Submittal, continued: The plume dispersion characteristics due to the revisions of the information must be equivalent to or better than the dispersion characteristics modeled on October 2012. The Permittee shall demonstrate this equivalency in the proposal. If the information does not demonstrate equivalent or better dispersion characteristics, or if a conclusion cannot readily be made about the dispersion, the Permittee must submit full remodeling.</p>	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
PROCESSING OF INCOMING MUNICIPAL SOLID WASTE	hdr
All incoming municipal solid waste shall be processed, except for instances when the Permittee has determined, by pre-approval, that a hauler's specific loads do not need to be processed.	Minn. R. 7007.0800, subp. 2
<p>Processed Mixed Municipal Solid Waste: "Processed mixed municipal solid waste" shall be defined as mixed municipal solid waste, as provided in Minn. Stat. Section 115A.03, subdivision 21, which has been:</p> <ol style="list-style-type: none"> 1) Evaluated by a trained inspector; and, 2) Any objectionable materials, as identified by a trained inspector, have been physically removed. 	Minn. R. 7007.0800, subp. 2
<p>Objectionable Material: "Objectionable material" shall be defined as that material which is not conducive to the combustion process and has been set aside for further processing and/or alternative disposal rather than combustion. This definition includes materials that likely may contain mercury. Objectionable materials shall not be combusted.</p>	Minn. R. 7007.0800, sup. 2
<p>Pre-approved Haulers: After initial start-up of the South Unit, as defined by this permit, a trained inspector may allow pre-approved waste loads to bypass processing upon the following conditions:</p> <ol style="list-style-type: none"> 1) The source of the particular load is known by the trained inspector to contain consistent waste materials and is not likely to contain any objectionable materials; 2) Following initial startup of the South Unit, the trained inspector shall inspect an incoming load to verify that it is of a known consistency and is not likely to contain any objectionable materials; 3) At least annually, the trained inspector shall inspect an additional incoming load from that hauler to confirm that it remains a known, consistent waste load that is not likely to contain any objectionable materials; 	Minn. R. 7007.0800, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-7**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Pre-approved Haulers (continued) 4) The trained inspector shall record, at a minimum, the following information for each load which is inspected for either pre-approval or annual confirmation of approval: - the date of delivery; - the source of the delivery; - a reasonable estimate of the quantity of the delivery; and, - a description of the load material. 5) The inspection information shall be recorded and kept on-site and be available for inspection.	Minn. R. 7007.0800, subp. 4
Environmental Compliance Operating Manual: Within the existing Environmental Compliance Operating Manual required by this permit, the Permittee shall include a section that defines objectionable materials that have been identified, as well as specific criteria which shall be used to identify materials that may be added to the objectionable materials list. Within 180 days after permit issuance, the Permittee shall submit the Environmental Compliance Operating Manual's Objectionable Materials provisions to the Commissioner for approval. The Permittee shall, annually, update the Environmental Compliance Operating Manual's objectionable material list, the pre-approved hauler list, and trained inspector list.	Minn. R. 7007.0800, subp. 5
Recordkeeping of Inspector Training: As part of the operating record, the identity of all personnel who received training to inspect unprocessed municipal solid waste for the presence of objectionable materials shall be recorded along with date and duration of the training.	Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Perham Resource Recovery Facility
Permit Number: 11100036 - 004

Subject Item: **SV 002 South Unit Dump Stack - EU001**

Associated Items: EU 001 South MSW Incinerator
 EU 003 South Incinerator Dumpstack

What to do	Why to do it
A dumpstack shall only be used when plant or worker safety would be jeopardy without its use.	Minn. R. 7011.1240, subp. 7

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Perham Resource Recovery Facility
Permit Number: 11100036 - 004

Subject Item: **SV 003 North Unit Dump Stack - EU002**

Associated Items: EU 002 North MSW Incinerator
 EU 004 North Incinerator Dumpstack

What to do	Why to do it
A dumpstack shall only be used when plant or worker safety would be jeopardy without its use.	Minn. R. 7011.1240, subp. 7

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Perham Resource Recovery Facility
Permit Number: 11100036 - 004

Subject Item: SV 009 Combined MWC Stack

Associated Items: EU 001 South MSW Incinerator
EU 002 North MSW Incinerator

What to do	Why to do it
SV 009: Stack Height: greater than or equal to 125.0 feet above ground level.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-11**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Subject Item: EU 001 South MSW Incinerator**Associated Items:** CE 004 Fabric Filter - High Temperature, i.e., T>250 Degrees F

CE 005 Dry Limestone Injection

CE 006 Activated Carbon Adsorption

MR 006 South Unit Temperature - Primary

MR 008 South Unit Temperature - Secondary

MR 010 South Unit Pressure

MR 019 South Unit O2/CO/SO2 Monitor

MR 020 South Unit Steam Flow

MR 022 South Unit NOx Monitor

MR 023 South Unit Opacity

SV 002 South Unit Dump Stack - EU001

SV 009 Combined MWC Stack

What to do	Why to do it
<p>Materials Separation Plan:</p> <p>For the materials separation plan, the following must be completed:</p> <ol style="list-style-type: none"> 1) Prepare a draft materials separation plan. 2) Make the draft plan available to the public. 3) Hold a public meeting on the draft plan. 4) Prepare responses to public comments received during the public comment period on the draft plan. 5) Prepare a revised materials separation plan. 6) Discuss the revised plan at the public meeting for review of the siting analysis. 7) Prepare responses to public comments received on the revised plan. 8) Prepare a final materials separation plan. 9) Submit the final materials separation plan. <p>This requirement must be completed within 30 days of commencing construction of the South Incinerator Unit (EU 001) expansion project (installation of a new heat recovery boiler and new air pollution control equipment).</p>	40 CFR Section 60.1060
<p>Siting Analysis:</p> <p>For the siting analysis, the following must be completed:</p> <ol style="list-style-type: none"> 1) Prepare an analysis. 2) Make the analysis available to the public. 3) Hold a public meeting on the analysis. 4) Prepare responses to public comments received during the public comment period on the analysis. 5) Submit the siting analysis. <p>This requirement must be completed within 30 days of commencing construction of the South Incinerator Unit (EU 001) expansion project (installation of a new heat recovery boiler and new air pollution control equipment).</p>	40 CFR Section 60.1120
EMISSIONS LIMITS	hdr
<p>Applicability of Standards: the standards of Minn. R. 7011.1229, 7011.1240, subps. 2 and 5 and 7011.1272, subp. 2 apply at all times when waste is being continuously burned. The emission limits must be met 60 days after EU 001 reaches the maximum load level but no later than 180 days after initial start up.</p> <p>"Initial Startup" of EU 001 is defined as the first time waste is burned in the combustion unit after the new heat recovery boiler and new air pollution control equipment (CE 004, CE 005, and CE 006) for EU 001 are installed.</p> <p>The standards do not apply, up to a maximum of three hours, during periods of start-up, shutdown or malfunction. Fugitive emissions standards applicable to the ash conveying system do not apply during periods of maintenance and repair of the ash conveying system.</p>	<p>Minn. R. 7011.1215, subp. 4; Minn. R. 7011.1225, subp. 1(A); 40 CFR Section 60.1215; 40 CFR Section 60.1220; 40 CFR Section 62.1205</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-12** 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>Applicability of Standards (Continued):</p> <p>The Permittee shall not cause to be emitted into the atmosphere, from this waste combustor unit, gases in excess of the applicable standards. Emissions, except opacity, shall be calculated under standard conditions corrected to seven percent oxygen on a dry volume basis.</p> <p>During startup, shutdown, or malfunction periods longer than 3 hours, emissions data cannot be discarded from compliance calculations and all provisions under 40 CFR 60.11(d) apply.</p>	<p>Minn. R. 7011.1215, subp. 4; Minn. R. 7011.1225, subp. 1(A); 40 CFR Section 60.1215; 40 CFR Section 60.1220; 40 CFR Section 60.1205</p>
<p>The Permittee shall use data from the continuous emission monitoring systems (CEMs) for sulfur dioxide and carbon monoxide to demonstrate continuous compliance with the applicable emission limits.</p>	<p>40 CFR Section 60.1235</p>
<p>The Permittee shall use results of performance tests for dioxins/furans, cadmium, lead, mercury, particulate matter, opacity, hydrogen chloride, and fugitive ash to demonstrate compliance with the applicable emission limits.</p>	<p>40 CFR Section 60.1290</p>
<p>Front-half Particulate Matter: less than or equal to 24 milligrams/DSCM . This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in 40 CFR Section 60.1300 regarding sampling methods, sampling time, sample volume, and other testing requirements.</p>	<p>40 CFR Section 60.1215; 40 CFR 60.1300</p>
<p>Total Particulate Matter: less than or equal to 0.020 grains/dry standard cubic foot . This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in Minn. R. 7011.1265 regarding sampling methods, sample volume, and other testing requirements.</p> <p>This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.</p>	<p>Minn. R. 7011.1229, Table 2; Minn. R. 7011.1265</p>
<p>Front-half Particulate Matter: less than or equal to 0.015 grains/dry standard cubic foot . This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in Minn. R. 7011.1265 regarding sampling methods, sample volume, and other testing requirements.</p> <p>This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.</p>	<p>Minn. R. 7011.1229, Table 2; Minn. R. 7011.1265</p>
<p>Muni Waste Combust Organics: less than or equal to 30 nanograms/DSCM . Muni Waste Combustor Organics means total of tetra-through octa-polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans (Total PCDD/PCDF). This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in Minn. R. 7011.1265 and 40 CFR Section 60.1300 regarding sampling methods, sampling time, and other testing requirements.</p>	<p>Minn. R. 7011.1229, Table 2; Minn. R. 7011.1265</p>
<p>Muni Waste Combust Organics: less than or equal to 13 nanograms/DSCM . Muni Waste Combustor Organics means total of tetra-through octa-polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans (Total PCDD/PCDF). This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in 40 CFR Section 60.1300 regarding sampling methods, sampling time, and other testing requirements.</p>	<p>40 CFR Section 60.1215, 40 CFR Section 60.1300</p>
<p>Muni Waste Combust Organics: less than or equal to 13.0 nanograms/DSCM . Muni Waste Combustor Organics means total of tetra-through octa-polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans (Total PCDD/PCDF). This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in Minn. R. 7011.1265 regarding sampling methods, sampling time, and other testing requirements.</p>	<p>Minn. R. 7007.0800, subp. 2</p>
<p>Cadmium compounds: less than or equal to 0.020 milligrams/DSCM . This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in 40 CFR Section 60.1300 regarding sampling methods and other testing requirements and Minn. R. 7011.1265, subpart 3(C) regarding sample volume.</p>	<p>40 CFR Section 60.1215; 40 CFR Section 60.1300, Minn. R. 7011.1265</p>
<p>Lead: less than or equal to 0.20 milligrams/DSCM . This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in 40 CFR Section 60.1300 regarding sampling methods and other testing requirements and Minn. R. 7011.1265, subpart 3(C) regarding sample volume.</p>	<p>40 CFR Section 60.1215; 40 CFR Section 60.1300, Minn. R. 7011.1265</p>
<p>Mercury: less than or equal to 100 micrograms/DSCM , or 85% removal (short term), whichever is less stringent. This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the testing procedures specified in Minn. R. 7011.1265, subpart 3(C) and Minn. R. 7011.1265, subpart 3(D).</p>	<p>Minn. R. 7011.1229, Table 2, Minn. R. 7011.1265</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS
A-13 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Mercury: less than or equal to 60 micrograms/DSCM , or 85% removal (long term), whichever is less stringent. This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the testing procedures specified in Minn. R. 7011.1265, subpart 3(C) and Minn. R. 7011.1265, subpart 3(D).	Minn. R. 7011.1229, Table 2, Minn. R. 7011.1265
Mercury: less than or equal to 0.080 milligrams/DSCM , or 85 percent reduction which ever is less stringent. This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in 40 CFR Section 60.1300 regarding sampling methods and other testing requirements and Minn. R. 7011.1265, subpart 3(C) and Minn. R. 7011.1265, subpart 3(D).	40 CFR Section 60.1215; 40 CFR Section 60.1300; Minn. R. 7011.1265
Mercury: less than or equal to 41.0 micrograms/DSCM . This limit is applied in accordance with Minn. R. 7011.1229, 7011.1240, subps. 2 and 5 and 7011.1272, subp. 2. The Permittee must follow the requirements specified in 40 CFR Section 60.1300 regarding sampling methods and other testing requirements and Minn. R. 7011.1265, subpart 3(C) and Minn. R. 7011.1265, subpart 3(D).	Minn. R. 7007.0800, subp. 2
Opacity: less than or equal to 10 percent opacity . This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the testing requirements specified in 40 CFR Section 60.1300 and Minn. R. 7011.1265, subpart 2.	Minn. R. 7011.1229, Table 2; 40 CFR Section 60.1215; 40 CFR Section 60.1300; 40 CFR Section 64.3
Carbon Monoxide: less than or equal to 100 parts per million by dry volume using 4-hour Block Average. The Permittee must follow the monitoring requirements specified in 40 CFR Section 60.1230, 40 CFR Section 60.1235 and Minn. R. 7011.1260, subpart 3 and Minn. R. 7011.1260, subpart 4.	Minn. R. 7011.1229, Table 2; Minn. R. 7011.1260; 40 CFR Section 60.1215; 40 CFR Section 60.1230; 40 CFR Section 60.1235
Hydrochloric acid: less than or equal to 25 parts per million by volume or 95% removal, whichever is less stringent. This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the testing requirements specified in 40 CFR Section 60.1300.	40 CFR Section 60.1215; 40 CFR Section 60.1300 (This also satisfies Minn. R. 7011.1229, Table 2.)
Nitrogen Oxides: less than or equal to 500 parts per million by volume on a dry basis corrected to 7% O ₂ . This limit is applied in accordance with the "Applicability of Standards" stated above.	40 CFR Section 60.1215
Sulfur Dioxide: less than or equal to 30 parts per million by dry volume using 24-hour Geometric Average or 80 percent removal, whichever is less stringent. This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the monitoring requirements specified in 40 CFR Section 60.1230, 40 CFR Section 60.1235.	40 CFR Section 60.1215; 40 CFR Section 60.1230; 40 CFR Section 60.1235; Minn. R. 7011.1229, Table 2
Fugitive Ash: Permittee shall not cause to be emitted into the atmosphere visible emissions of combustion ash from an ash conveying system, including conveyor transfer points, in excess of five percent of the observation period (i.e., 9 minutes per three-hour period), as determined by Code of Federal Regulations, Title 40, part 60, Appendix A, Method 22, as amended). This limit does not apply to visible emissions discharged inside buildings or enclosures of ash conveying systems; however, the emission limit does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems. Must follow the testing requirements specified in 40 CFR Section 60.1300 and Minn. R. 7011.1265, subpart 2.	Minn. R. 7011.1225, subpart 1(B); Minn. R. 7011.1265, subpart 2; 40 CFR Section 60.1215; 40 CFR Section 60.1300
OPERATIONAL LIMITS	hdr
Steam Flow: less than or equal to lbs/hr using 4-hour Block Average, (minimum steam flow to be determined upon the initial PCDD/PCDF performance test). Notwithstanding the previous sentence, upon the Commissioner's written notification that the emission unit has demonstrated compliance under the conditions of a PCDD/PCDF performance test and prior to incorporation of the steam flow rate into this permit, the Permittee shall not exceed 110 percent of the steam load level established during that compliant performance test.	Minn. R. 7011.1240, subp. 5; Minn. R. 7017.2025, subp. 3; 40 CFR Section 60.1200(a)
Steam Flow (continued): The waste combustor is exempt from limits on load level during any of three situations: (1) Annual tests for PCDD/PCDF. (2) The 2 weeks preceding annual tests for PCDD/PCDF. (3) Whenever approved in writing by the EPA Administrator and Commissioner for any of the following activities: (i) Evaluate system performance. (ii) Test new technology or control technologies. (iii) Perform diagnostic testing. (iv) Perform other activities to improve the performance of the waste combustor. (v) Perform other activities to advance the state of the art for emission controls for the waste combustor.	Minn. R. 7011.1240, subp. 5; Minn. R. 7017.2025, subp. 3; 40 CFR Section 60.1200(e)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-14** 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>Steam Flow (continued)</p> <p>The Permittee shall provide written notification submitted to the Commissioner and EPA Administrator 30 days prior to undertaking any of the activities described above in 3(i) - (v), with the following information:</p> <p>1) a description of the proposed project, and the outcome the project is designed to evaluate;</p> <p>2) how the project conforms with the activities described above for which the waste combustor load level can be waived;</p> <p>3) the length of time the project will take to complete.</p>	<p>Minn. R. 7011.1240, subp. 5; Minn. R. 7017.2025, subp. 3; 40 CFR Section 60.1200(e)</p>
<p>Presence of certified operator. The person described in Minn. R. 7011.1240, subp. 1 shall be present at the waste combustor facility at all times when solid waste is being combusted. The certified operator shall meet the minimum requirements of Minn. R. 7011.1280, subp. 3(B) and 7011.1281.</p>	<p>Minn. R. 7011.1240, subp. 1; 40 CFR Section 60.1190; 40 CFR Section 60.1195</p>
<p>Start-up on waste prohibited. During start-up from a cold furnace, auxiliary fuels shall be used to achieve combustion chamber operating temperature. The use of solid waste solely to provide thermal protection of the grate or hearth during the start-up period when solid waste is not being fed to the grate is not considered to be continuous burning.</p>	<p>Minn. R. 7011.1240, subp. 3</p>
<p>Auxiliary Fuel Use: Use natural gas to warm the combustion and pollution control devices and maintain good combustion conditions in the combustion chamber from the time the waste feed has been discontinued until the combustion chamber is clear of combustible material or active combustion ceases. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.</p>	<p>Minn. R. 7007.0800, subp. 2</p>
<p>Allowed and Prohibited Fuels:</p> <p>The waste combustor may burn natural gas, solid waste, RDF, and mixed municipal solid waste, as defined in Minn. Stat. 115A.03, subp. 21, and other nonhazardous wastes approved through the Facility's Industrial Solid Waste Management Plan, except as noted elsewhere in Table A of this permit.</p> <p>The facility is authorized to burn waste tires, yard waste, and household hazardous waste that are incidentally received co-mingled with municipal solid waste. The waste combustor shall not combust waste tires, yard waste, nor household hazardous waste as a separate waste stream.</p>	<p>Minn. R. 7011.1220, subp. 2</p>
<p>Facility Operation: Properly maintain and operate air pollution control equipment at all times when the waste combustor is in operation and combusting waste.</p> <p>At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with 40 CFR Section 60.11(d).</p>	<p>Minn. R. 7007.0800, subp. 16(J); Minn. R. 7011.1240, subp. 7; 40 CFR Section 60.11(d)</p>
<p>The Permittee shall maintain an 8-hour block average mercury/PCDD/PCDF control additive feed rate at or above the greater of the following: the additive feed rate determined during the most recent compliant mercury performance test and most recent compliant PCDD/PCDF performance test.</p>	<p>Minn. R. 7011.1272, subp. 2 Minn. R. 7011.1272, subp. 3(B); 40 CFR 60.1200(c)</p>
<p>AVERAGING PERIODS</p>	<p>hdr</p>
<p>Averaging Periods: For emission limits or operational limits which are monitored continuously the following averaging periods shall be used:</p> <p>A) for particulate matter control device inlet temperature monitoring, four-hour arithmetic block averages calculated from four consecutive one-hour arithmetic averages.</p> <p>B) for steam flow or alternative unit load, a four-hour arithmetic block average, the four-hour arithmetic block averages shall be calculated from four continuous one-hour arithmetic averages.</p> <p>C) For opacity, a 6-minute average calculated using 36 or more data points equally spaced over a 6-minute period.</p> <p>D) for Hg/PCDD/PCDF control additive feed, eight-hour arithmetic block averages. Eight-hour block average means the average of all hourly control additive feed rates when the controlled incinerator operates and combusts municipal solid waste measured over any of three 8-hour periods of time:</p> <p>(1) 12 midnight to 8 A.M. (2) 8 A.M. to 4 P.M. (3) 4 P.M. to 12 midnight</p>	<p>Minn. R. 7011.1260, subp. 4; 40 CFR Section 60.1260(a) and (b); 40 CFR Section 60.1260(c)</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-15** 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>Averaging Periods (continued)</p> <p>E) for SO₂, a geometric average of the 1-hour arithmetic average emission concentration during each 24-hour daily period measured from midnight to midnight.</p> <p>F) for carbon monoxide, an arithmetic average of the 1-hour arithmetic average emission rates concentration during each 4-hour daily period measured from midnight to midnight.</p> <p>At least 4 data points equally spaced in time shall be used to calculate each 1-hour arithmetic average. For SO₂ and CO, each 1-hour average shall be corrected to 7 % O₂ on an hourly basis using the one-hour arithmetic average of the O₂ or CO₂ continuous emissions monitoring system.</p>	<p>CONTINUED: Minn. R. 7011.1260, subp. 4; 40 CFR Section 60.1260(a) and (b); 40 CFR Section 60.1200(c)</p>
OPERATOR TRAINING & CERTIFICATION	hdr
<p>The Permittee shall provide EPA or state-approved operator training to the following personnel: chief facility operators, shift supervisors and control room operators.</p> <p>Each chief facility operator and shift supervisor hired or transferred to the municipal waste combustion unit must complete a state approved or EPA operator training course by the date before an employee assumes the responsibilities of chief facility operators, shift supervisors and control room operators.</p>	40 CFR Section 60.1160
<p>The Permittee shall require each chief facility operator and shift supervisor to obtain and maintain a current provisional operator certification from the American Society of Mechanical Engineers QRO-1-1994 or a state program approved under 40 CFR Section 60, Subpart AAAA.</p> <p>Each chief facility operator and shift supervisor hired or transferred to the municipal waste combustion unit must obtain provisional certification 6 months after they transfer to the municipal waste combustion unit or 6 months after they are hired to work at the municipal waste combustion unit.</p>	40 CFR Section 60.1185(a) and (b); Minn. R. 7011.1280, subp. 1
<p>Each chief facility operator and shift supervisor hired or transferred to the municipal waste combustion unit must obtain full certification 6 months after they transfer to the municipal waste combustion unit or 6 months after they are hired to work at the municipal waste combustion unit.</p> <p>For purposes of this permit, "obtain" means a full certification from the American Society of Mechanical Engineers or a EPA-approved state program or a full certification exam scheduled for the timeframes established above.</p>	40 CFR Section 60.1185 (c) and (d); Minn. R. 7011.1280, subp. 1; Minn. R. 7011.1240, subp. 1a(B)
<p>Develop and maintain the Environmental Compliance Operating Manual in accordance with Minn. R. 7011.1275, subp. 3, items A through O; Update the manual following each performance test to include operational changes resulting from emission performance testing results. Include the revision dates within the Operating Manual; Store the Operating Manual in a location easily accessed by staff.</p>	Minn. R. 7011.1275, subp. 3; 40 CFR Section 60.1170 (a); 40 CFR Section 60.1175; 40 CFR Section 60.1180
<p>The Permittee shall establish a program to review the plant-specific operating manual with people whose responsibilities affect the operation of the waste combustor. Initial review by the date before an employee assumes responsibilities that affect operation of the waste combustor unit. The Permittee shall update and review the manual with staff annually. The Permittee must record the date of initial review and annual update and review.</p>	40 CFR Section 60.1170 (b), (c) and (d); Minn. R. 7011.1275, subp. 1
<p>Training Program: Persons without waste combustor or boiler operation experience must work under the direct supervision of a certified operator or a certified operator's designee for 40 hours before assuming job-related activities affecting air emissions. The Permittee must record the date of the training session and the number of hours training in each session.</p>	Minn. R. 7011.1275, subp. 1(C)(1)
<p>Training Program: The Permittee will implement a training program, based on the Operating Manual, designed to maintain compliance with this permit, Minn. Rules and federal regulations. Individual training must be specific to the position held. Waste combustor personnel who have responsibilities which affect the operation of the waste combustor must be trained in the operation of the facility. These personnel include, but are not limited to:</p> <ul style="list-style-type: none"> - chief facility operators, - shift supervisors, - operator supervisors, - control room personnel, - ash handlers, - maintenance personnel, - and crane/load handlers. 	Minn. R. 7011.1275, subp. 1; Minn. R. 7011.1275, subp. 2; Minn. R. 7011.1275, subp. 4; Minn. R. 7011.1275; 40 CFR Section 60.1170 (b); 40 CFR Section 60.1165

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-16** 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>Training Program: (continued)</p> <p>The Permittee will:</p> <ul style="list-style-type: none"> - Implement the required training; - Identify all people described above who must be trained; - Include a separate page for each of these people in the Operating Record; - Report the names of those who have been trained, the type of training received, and the date the training was completed, as required, under Minn. R. 7011.1275, subp. 4. 	<p>Minn. R. 7011.1275, subp. 1; Minn. R. 7011.1275, subp. 2; Minn. R. 7011.1275, subp. 4; Minn. R. 7011.1275; 40 CFR Section 60.1170 (b); 40 CFR Section 60.1170</p>
<p>Certified Operator: The Permittee shall:</p> <p>1) Maintain at the facility a record of the names of all certified personnel. This record shall contain the exam dates, the content of the exam, the full name of the certified individual, the examiner's signature and the certification statement in Minn. R. 7011.1284, subp. 3.</p> <p>2) Maintain at the facility a record of the names of all personnel who have obtained provisional and/or full certification by ASME.</p> <p>The Permittee shall allow the Commissioner and/or EPA Administrator to review all records related to the certification of operators including the facility's program for examination and certification of operators, the record required in Minn. R. 7011.1284, subp. 3, and the content and results of an individual's exam.</p>	<p>Minn. R. 7011.1284, subp. 3; Minn. R. 7011.1284, subp. 3a; Minn. R. 7011.1284, subp. 4; 40 CFR Section 60.1355</p>
TESTING REQUIREMENTS	hdr
Initial Performance Test: due 60 days after achieving maximum capacity (load) but no longer than 180 days after EU 001 achieves the initial startup to measure Total PCDD/PCDF emissions.	Minn. R. 7011.1265, subp. 5; Minn. R. 7011.1270(B); Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2
Initial Performance Test: due 60 days after achieving maximum capacity (load) but no longer than 180 days after EU 001 achieves the initial startup to measure Front-half Particulate Matter.	Minn. R. 7011.1265, subp. 5; Minn. R. 7011.1270(B); Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2
Initial Performance Test: due 60 days after achieving maximum capacity (load) but no longer than 180 days after EU 001 achieves the initial startup to measure Total Particulate Matter.	Minn. R. 7011.1265, subp. 5; Minn. R. 7011.1270(B); Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2
Initial Performance Test: due 60 days after achieving maximum capacity (load) but no longer than 180 days after EU 001 achieves the initial startup to measure HCl.	Minn. R. 7011.1265, subp. 5; Minn. R. 7011.1270(B); Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2
Initial Performance Test: due 60 days after achieving maximum capacity (load) but no longer than 180 days after EU 001 achieves the initial startup to measure mercury.	Minn. R. 7011.1265, subp. 5; Minn. R. 7011.1270(B); Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2
Performance Test: due before end of each calendar year following Initial Performance Test to measure Total PCDD/PCDF. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)	Minn. R. 7011.1265, subp. 5; Minn. R. 7011.1270(B); Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2
Performance Test: due before end of each calendar year following Initial Performance Test to measure Front-half Particulate Matter. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)	Minn. R. 7011.1265, subp. 5; Minn. R. 7011.1270(B); Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2
Performance Test: due before end of each calendar year following Initial Performance Test to measure HCl. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)	Minn. R. 7011.1265, subp. 5; Minn. R. 7011.1270(B); Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-17** 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>State Performance Test (continued)</p> <p>If all annual performance tests for a three-year period show compliance with Total PCDD/PCDF, Front-half Particulate Matter, and HCl state limits in this permit, the Permittee may choose to conduct performance tests every 2-1/2 years. At a minimum, a performance test shall be conducted every 2-1/2 years, but no more than 30 months following the previous compliance test.</p> <p>If a performance test indicates noncompliance with the state limits, the Permittee shall resume annual testing, for three years, for that pollutant for which noncompliance was demonstrated. If all performance tests for the three-year period again show compliance with the state limits, the Permittee may again conduct performance testing every 2-1/2 years.</p> <p>This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.</p>	<p>Minn. R. 7011.1270(B); Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2</p>
<p>Performance Test: due before end of each calendar year following Initial Performance Test to measure Total Particulate Matter. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)</p>	<p>Minn. R. 7011.1265, subp. 5; Minn. R. 7011.1270(B); Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2; 40 CFR Section 64.3</p>
<p>State Performance Test (continued)</p> <p>If all annual performance tests for a three-year period show compliance with the Total Particulate Matter state limit in this permit, the Permittee may choose to conduct performance tests every 2-1/2 years. At a minimum, a performance test shall be conducted every 2-1/2 years, but no more than 30 months following the previous compliance test.</p> <p>If a performance test indicates noncompliance with the state limit, the Permittee shall resume annual testing, for three years. If all performance tests for the three-year period again show compliance with the state limit, the Permittee may again conduct performance testing every 2-1/2 years.</p> <p>This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.</p>	<p>Minn. R. 7011.1270(B); Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2; 40 CFR Section 64.3</p>
<p>Performance Test: due before end of each calendar quarter following Initial Performance Test to measure mercury emissions. The facility may implement testing for mercury not less than once every 3 years under the following conditions: the facility has demonstrated that mercury emissions have been below 50 percent of its state long-term permitted mercury limit for four consecutive quarters; and the Permittee has notified the Commissioner in accordance with Minn. Stat. 116.85(c).</p> <p>While on a 3 year testing frequency and if a performance test indicates shows mercury emissions greater than 50 percent of the state long-term permitted mercury limit, the Permittee shall resume annual testing. The facility shall conduct annual mercury stack sampling until emissions are below 50 percent of the state long-term permitted mercury limit. Once the facility demonstrates that mercury emissions are again below 50 percent of the facility's permitted mercury limit, the facility may resume testing every three years or according to federal requirements, whichever is more stringent.</p>	<p>Minn. R. 7011.1270(B); Minn. Stat. 116.85, subd. 1; Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2</p>
<p>Initial Performance Test: due 60 days after achieving maximum capacity (load) but no longer than 180 days after EU 001 achieves the initial startup to measure Total PCDD/PCDF.</p>	<p>40 CFR Section 60.1295(b); 40 CFR Section 60.1305</p>
<p>Initial Performance Test: due 60 days after achieving maximum capacity (load) but no longer than 180 days after EU 001 achieves the initial startup to measure Front-half Particulate Matter.</p>	<p>40 CFR Section 60.1295(b); 40 CFR Section 60.1305</p>
<p>Initial Performance Test: due 60 days after achieving maximum capacity (load) but no longer than 180 days after EU 001 achieves the initial startup to measure HCl.</p>	<p>40 CFR Section 60.1295(b); 40 CFR Section 60.1305</p>
<p>Initial Performance Test: due 60 days after achieving maximum capacity (load) but no longer than 180 days after EU 001 achieves the initial startup to measure opacity.</p>	<p>40 CFR Section 60.1295(b); 40 CFR Section 60.1305</p>
<p>Initial Performance Test: due 60 days after achieving maximum capacity (load) but no longer than 180 days after EU 001 achieves the initial startup to measure cadmium.</p>	<p>40 CFR Section 60.1295(b); 40 CFR Section 60.1305</p>
<p>Initial Performance Test: due 60 days after achieving maximum capacity (load) but no longer than 180 days after EU 001 achieves the initial startup to measure lead.</p>	<p>40 CFR Section 60.1295(b); 40 CFR Section 60.1305</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-18**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Initial Performance Test: due 60 days after achieving maximum capacity (load) but no longer than 180 days after EU 001 achieves the initial startup to measure mercury.	40 CFR Section 60.1295(b); 40 CFR Section 60.1305
Performance Test: due before end of each calendar year following Initial Performance Test to measure Total PCDD/PCDF. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)	40 CFR Section 60.1295(b); 40 CFR Section 60.1305(a)
Performance Test: due before end of each calendar year following Initial Performance Test to measure Front-half Particulate Matter. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)	40 CFR Section 60.1295(b); 40 CFR Section 60.1305(a)
Performance Test: due before end of each calendar year following Initial Performance Test to measure HCl. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)	40 CFR Section 60.1295(b); 40 CFR Section 60.1305(a)
Performance Test: due before end of each calendar year following Initial Performance Test to measure opacity. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)	40 CFR Section 60.1295(b); 40 CFR Section 60.1305(a)
Performance Test: due before end of each calendar year following Initial Performance Test to measure cadmium. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)	40 CFR Section 60.1295(b); 40 CFR Section 60.1305(a)
Performance Test: due before end of each calendar year following Initial Performance Test to measure lead. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)	40 CFR Section 60.1295(b); 40 CFR Section 60.1305(a)
Performance Test: due before end of each calendar year following Initial Performance Test to measure mercury. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)	40 CFR Section 60.1295(b); 40 CFR Section 60.1305(a)
<p>Federal Performance Test (continued)</p> <p>For the federally regulated pollutants listed above (Total PCDD/PCDF, front-half Particulate Matter, HCl, opacity, cadmium, lead, and mercury), the Permittee may conduct performance tests every third year, if the following conditions are met: All performance tests for a given federal pollutant, over the 3 previous years, demonstrated compliance with the emission limit.</p> <p>The next performance test is conducted within 36 months of the anniversary date of the third consecutive performance test that demonstrates compliance with the federal emission limit.</p>	40 CFR Section 60.1295(b); 40 CFR Section 60.1305(a)
<p>Federal Performance Test (continued)</p> <p>Thereafter, the Permittee shall conduct performance tests, every third year, but no later than 36 months following the previous performance tests. If a performance test does not demonstrate compliance with a federal emission limit, the Permittee shall conduct annual performance tests for that pollutant until all performance tests over 3 consecutive years demonstrate compliance with the federal emission limit for that pollutant.</p>	40 CFR Section 60.1295(b); 40 CFR Section 60.1305(a)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-19**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>The Permittee shall use the performance test methods and procedures specified in Minn. R. 7017.2001 to 7017.2060 except as modified in Minn. R. 7011.1265 and 40 CFR Section 60.1300 regarding sampling methods, sampling time, and other testing requirements.</p> <p>The Permittee shall conduct MWC organics tests with a minimum sampling time of 4 hours per test run.</p>	Minn. R. 7011.1265, subp. 1; 40 CFR Section 60.1300(a)
The Permittee shall determine the maximum demonstrated capacity of the waste combustor during the initial performance test for PCDD/PCDF and each subsequent performance test during which compliance with the PCDD/PCDF emissions limits in Minn. R. 7011.1225 and 40 CFR Section 60.1215 are achieved.	Minn. R. 7011.1265, subp. 7; 40 CFR Section 60.1465; and 40 CFR Section 60.1320
Operation during performance testing. The Permittee shall report to the Commissioner the operating conditions including operating parameters of the air pollution control equipment, pressure drop across the fabric filters, flue gas temperatures, air flow rates, mercury/PCDD/PCDF control additive feed rate and acid gas control.	Minn. R. 7011.1265, subp. 6; 40 CFR Section 60.1410
Particulate matter control device temperature. The Permittee shall determine and record the four-hour arithmetic average gas stream temperature as measured at the inlet to each particulate matter control device during the initial and each subsequent performance test for PCDD/PCDF demonstrating compliance with the PCDD/PCDF emission limits in Minn. R. 7011.1225 and 40 CFR Section 60.1215.	Minn. R. 7011.1265, subp. 8; 40 CFR Section 60.1465; 40 CFR Section 60.1325
<p>The Permittee shall: Select a mercury/PCDD/PCDF control additive system operating parameter that can be used to calculate mercury/PCDD/PCDF control additive (additive) feed rate (for example, screw feeder speed).</p> <p>During each PCDD/PCDF and mercury performance test, the Permittee shall determine the average additive feed rate in kilograms (or pounds) per hour and determine the average operating parameter level that correlates to that additive feed rate. The Permittee shall also establish a relationship between the operating parameter and the additive feed rate in order to calculate the additive feed rate based on the operating parameter level.</p>	Minn. R. 7011.1272, subp.1; 40 CFR Section 60.1330 (a) and (b)
<p>Exceedances of emission limits. If accurate and valid data results of a performance test demonstrate an exceedance of a standard of performance as described in this air emission permit after normal start-up, the Permittee shall undertake the actions in items A to D.</p> <p>A. The exceedance shall be reported to the Commissioner as soon as reasonably possible giving consideration to matters of plant or worker safety, or access to communications and the applicable reporting provisions of Minn. R. 7007.0800, subpart 6, shall be met.</p> <p>B. Immediately undertake appropriate repairs or modifications to return the waste combustor to compliance as soon as possible.</p>	Minn. Stat. 165.85, subd. 3; and Minn. R. 7011.1265, subp. 11
<p>Exceedances of emission limits (continued): C. Conduct additional performance test(s) or shut the waste combustor down. If the waste combustor cannot demonstrate compliance within 60 days of the report of initial exceedance, the waste combustor shall be shut down on the 61st day after the report of the exceedance. The performance test shall be conducted and the test report received within those 60 days.</p>	CONTINUED: Minn. Stat. 165.85, subd. 3; and Minn. R. 7011.1265, subp. 11
<p>Exceedances of emission limits (continued): D. If the Permittee cannot demonstrate compliance within 60 days of the report of the initial exceedance, the Permittee may restart the waste combustor for the purposes of compliance testing, provided that at least a 10-day notification has been provided to the Commissioner. The Permittee is allowed to operate the waste combustor until the completion of the test, after which the waste combustor must be shut down. The waste combustor may be restarted only after the Permittee receives notice from the Commissioner that it has achieved compliance with the emissions standards or restarts for the purpose and duration of additional testing after further repair or operational changes.</p>	CONTINUED: Minn. Stat. 165.85, subd. 3; and Minn. R. 7011.1265, subp. 11
MONITORING REQUIREMENTS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-20**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>Continuous Monitoring: Permittee shall install, calibrate, maintain and operate, in accordance with Minn. R. 7011.1260, subp. 5, monitors that continuously read and record:</p> <p>a) sulfur dioxide and carbon monoxide at the outlet of the air pollution control device.</p> <p>b) unit load level as determined through steam flow measurement.</p> <p>c) oxygen concentrations at each location where CO and SO₂ emissions are monitored.</p> <p>d) mercury/PCDD/PCDF control additive feed rate or other parameter for which a correlation between that parameter and the additive feed rate has been developed.</p> <p>If the Permittee chooses to demonstrate compliance by monitoring the percent reduction of sulfur dioxide, the Permittee shall install a continuous emission monitoring system for sulfur dioxide and oxygen at the inlet of the air pollution control device.</p> <p>Additional monitoring requirements are also located at the individual MR level.</p>	<p>Minn. R. 7011.1260, subp. 2; Minn. R. 7011.1260, subp. 3; Minn. R. 7011.1272, subp. 3; 40 CFR Section 60.1225; 40 CFR Section 60.1270; 40 CFR Section 60.1315; 40 CFR Section 60.1325</p>
<p>Continuous Monitoring: Permittee shall install, calibrate, maintain and operate, in accordance with Minn. R. 7011.1260, subp. 5, monitors that continuously read and record:</p> <p>a) temperatures of the flue gas at the inlet of each particulate matter control device.</p> <p>b) flue gas opacity.</p> <p>Additional monitoring requirements are also located at the individual MR level.</p>	<p>Minn. R. 7011.1260, subp. 2; Minn. R. 7011.1260, subp. 3; Minn. R. 7011.1272, subp. 3; 40 CFR Section 60.1225; 40 CFR Section 60.1270; 40 CFR Section 60.1315; 40 CFR Section 60.1325; 40 CFR Section 64.3</p>
<p>Combustion chamber temperature monitor: Install and operate continuous temperature monitors in the combustion unit.</p>	<p>Minn. R. 7011.1260, subp. 1</p>
<p>Continuous Monitoring: The Permittee shall:</p> <ul style="list-style-type: none"> - Continuously monitor the selected mercury/PCDD/PCDF control additive (additive) feed rate operating parameter during all periods when the municipal waste combustion unit is operating and combusting waste - Calculate the 8-hour block average additive feed rate in kilograms (or pounds) per hour. - When calculating the 8-hour block average, exclude hours when the unit is not operating and include hours when unit is operating but the additive feed system is not working correctly. 	<p>40 CFR Section 60.1330(c)</p>
<p>Continuous Monitoring:</p> <p>The Permittee shall obtain one-hour arithmetic averages from 4 or more data points equally spaced over each 1-hour period for:</p> <ul style="list-style-type: none"> - Unit load level of the municipal waste combustion unit. - Temperature of the flue gases at the inlet of the particulate matter control device. - Mercury/PCDD/PCDF control additive feed rate. <p>Data recorded during periods of continuous system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed, unless there are, at least, 2 data points per hour.</p>	<p>40 CFR Section 60.1335; 40 CFR Section 60.13(h); 40 CFR Section 60.13(e)(2)</p>
<p>Continuous Monitoring:</p> <p>The Permittee shall obtain one-hour arithmetic averages from 4 or more data points equally spaced over each 1-hour period for:</p> <ul style="list-style-type: none"> - Temperature of the flue gases at the inlet of the particulate matter control device. <p>Data recorded during periods of continuous system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed, unless there are, at least, 2 data points per hour.</p>	<p>40 CFR Section 60.1335; 40 CFR Section 60.13(h); 40 CFR Section 60.13(e)(2)</p>
<p>Continuous Monitoring:</p> <p>The Permittee shall install the following monitoring systems such that representative measures of the process parameters from the affected facility are obtained:</p> <ul style="list-style-type: none"> - unit load, - flue gas temperature, and - mercury/PCDD/PCDF control additive. 	<p>40 CFR Section 60.13(f)</p>
<p>Continuous Monitoring:</p> <p>All continuous monitoring systems and monitoring devices required under 40 CFR 60, including CEMS and COMS shall be installed, operational, and certified prior to conducting performance tests under 40 CFR Section 60.8.</p>	<p>40 CFR Section 60.13(b)</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-21** 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Continuous Operation: Except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, all continuous monitoring systems (including CEMS and COMS) shall be in continuous operation during all periods of emission unit operation. This includes periods of emission unit start-up, shutdown, or malfunction.	40 CFR Section 60.13(e); Minn. R. 7017.1090, subp. 1
Steam flow measurement method. The method contained in ASME Power Test Codes: Test Codes for Steam Generating Units, PTC 4.1 (1972), section 4, shall be used for calculating the steam flow required under Minn. R. 7011.1260, subpart 3, item A, subitem (2). The recommendations of Instruments and Apparatus: Measurement of Quantity of Materials, Interim Supplement 19.5 (1971), chapter 4, shall be followed for design, construction, installation, calibration, and use of nozzles and orifices, except that measurement devices such as flow nozzles and orifices are not required to be recalibrated after they are installed. All signal conversion elements associated with steam flow measurements must be calibrated according to the manufacturer's instructions before each PCDD/PCDF test, and at least once per year. This annual calibration shall be recorded in the daily operating record as described in Minn. R. 7011.1285, subpart 2.	Minn. R. 7011.1265, subp. 4; 40 CFR Section 60.1320(a)
Alternative continuous measuring methods in place of steam flow may be installed and operated, provided that the method continuously measures the waste combustor unit load, is equivalent to results obtained when using the method in Minn. R. 7011.1265, subp. 4, and the use of the method is approved by the Commissioner and EPA Administrator prior to installation.	Minn. R. 7011.1265, subp. 4a; 40 CFR Section 60.1320(b)
Installation Notification: due 60 days before installing the COMS/CEMS. Install the CEMS according to the procedures in 40 CFR Appendix B.	Minn. R. 7017.1040, subp. 1
CEMS QA/QC: The Permittee shall operate, calibrate, and maintain each CO and SO ₂ CEMS according to the QA/QC procedures in 40 CFR pt. 60, Appendix F, section 3, as amended.	Minn. R. 7011.1260, subp. 5(G); 40 CFR Section 60.1240(d)
COMS Monitoring Data: The Permittee shall reduce all data to 6 minute averages. Opacity averages shall be calculated from all equally spaced consecutive 10-second (or shorter) data points in the 6 minute averaging period.	Minn. R. 7017.1200, subp. 1 & 2; 40 CFR Section 64.3
CEMS/COMS Continuous Operation: CEMS/COMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit startup, shutdown, or malfunction. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS/COMS must not be bypassed except in emergencies where failure to bypass the CEMS/COMS would endanger human health, safety, or plant equipment.	Minn. R. 7017.1090, subp. 1
Monitoring data shall be obtained for at least 75 percent of the hours per day for 90 percent of the days per calendar quarter that the combustor is operating and combusting MSW.	Minn. R. 7011.1260, subp. 5(B); 40 CFR Section 60.1335(c)
The Permittee shall use all valid data from the continuous emission monitoring systems in calculating emission concentrations and percent reductions. If CEM/COM data is unavailable, the Permittee shall meet the minimum data requirements using the alternative methods set forth in 40 CFR part 60, Appendix A, Methods 19 and 6c for SO ₂ ; Method 10 for CO; Method 9 for opacity; Method 3A or 3B for O ₂ or CO ₂ .	40 CFR Section 60.1280; Minn. R. 7011.1260, subp. 5(D); 40 CFR Section 60.1260(e)
The Permittee shall notify the EPA Administrator according to 40 CFR Section 60.1410(e) if the minimum data required for continuously monitored emissions and parameters are not obtained.	40 CFR Section 60.1260(d); 40 CFR Section 60.1335(d)
CEM/COMS Certification Test: due 90 days after first Excess Emissions Report. This requirement applies to any CO and SO ₂ CEMS which have not previously been certified.	Minn. R. 7017.1050, subp. 1; 40 CFR Section 60.1240(b); 40 CFR 60.13(b)
CEMS Certification Test Plan: due 30 days before CEMS Certification Test CEMS Certification Test Pretest Meeting: due 7 days before CEMS Certification Test CEMS Certification Test Report: due 45 days after CEMS Certification Test CEMS Certification Test Report - Microfiche Copy: due 105 days after CEMS Certification Test The Notification, Test Plan, and Test Report may be submitted in alternate format as allowed by Minn. R. 7017.1120, subp. 2	Minn. R. 7017.1060, subp. 1-3; Minn. R. 7017.1080, subp. 1-4
COMS Daily Calibration Drift (CD) Check: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) opacity at least once daily from each COMS according to the procedures listed in 40 CFR Section 60.13.	Minn. R. 7011.1260, subp. 5(E); Minn. R. 7017.1210, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-22** 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

CEMS Daily Calibration Drift Test: The Calibration Drift shall be quantified and recorded at zero (low-level) and upscale (high-level) gas concentrations at least once daily according to the procedures listed in Minn. R. 7017.1170, subp. 3 and 40 CFR Section 60.13(d)(1) for each pollutant concentration, each diluent monitor, and for each monitor range. The CEMS shall be adjusted whenever the Calibration Drift exceeds twice the specification of 40 CFR pt. 60, Appendix B. If no span value is specified in the applicable requirement or in a compliance document, the Permittee shall use a span value equivalent to 1.5 times the emission limit. 40 CFR pt. 60, Appendix F, shall be used to determine out-of-control periods for CEMS. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7011.1260, subp. 5(E); Minn. R. 7017.1170, subp. 3; 40 CFR Section 60.1230(b); 40 CFR Section 60.1365(f)
COMs Calibration Error Audit: due before end of each half-year following COMs Certification Test. Conduct audits at least 3 months apart but no greater than 8 months apart. Follow the procedures of 40 CFR 60, Appendix B, Performance Specification 1.	Minn. R. 7017.1210, subp. 3; Minn. R. 7007.0800, subp. 2
CEMs Cylinder Gas Audit (CGA): due before end of each calendar quarter following CEMS Certification Test except for quarters in which a RATA was performed. This requirement applies to each CO and SO ₂ CEMS as well as each diluent monitor.	Minn. R. 7011.1260, subp. 5(G); Minn. R. 7007.0800, subp. 2; 40 CFR Section 62.15195(b)
CEMs Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEMS Certification Test. Follow the procedure in 40 CFR pt. 60, Appendix F. The RATA shall be conducted during the calendar quarter in which a cylinder gas audit (CGA) is not performed. This requirement applies to each CO and SO ₂ CEMS individually. Conduct annual evaluations of your continuous emission monitoring systems no more than 13 months after the previous evaluation was conducted.	Minn. R. 7011.1260, subp. 5(G); Minn. R. 7007.0800, subp. 2; 40 CFR Section 62.15185(d); 40 CFR Section 62.15195(a)
Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA).	Minn. R. 7007.0800, subp. 2; Minn. R. 7017.1180, subp. 2
QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain all of the information required by 40 CFR pt. 60, Appendix F, Sect. 3. The plan shall include the manufacturer's spare parts list for each CEMS and require that those parts be kept at the facility unless the Commissioner gives written approval to exclude specific spare parts from the list.	40 CFR pt. 60, Appendix F, Section 3; Minn. R. 7017.1170, subp. 2
Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	Minn. R. 7017.1130
Exceedances of Continuously Monitored Emissions: If accurate and valid data results collected from the sulfur dioxide and/or carbon monoxide monitors exceed emission limits, the following procedures shall be followed. (1) Exceedance shall be reported to the Commissioner as soon as reasonably possible. (2) Appropriate repairs or modifications to return the waste combustor to compliance must be commenced within 72 hours. If compliance cannot be achieved within 72 hours, then the waste combustor shall be shut down. If modifications to return the waste combustor to compliance require the amendment of this permit, the waste combustor shall shut down within 72 hours of the exceedance.	Minn. R. 7011.1260, subp. 7
Exceedances of Continuously Monitored Emissions (continued): (3) When repairs or modifications have been completed, the Permittee shall demonstrate to the Commissioner that the waste combustor is in compliance. The waste combustor may be started up after the Permittee has notified the Commissioner in writing of the date the Permittee plans to start up the waste combustor and the date that performance testing is scheduled. Notification shall be given at least 10 days in advance of the compliance test date.	CONTINUED: Minn. R. 7011.1260, subp. 7
Documentation of Need for Improved Compliance Assurance Monitoring (CAM): If the Permittee fails to achieve compliance with an emission limitation or standard for which the CAM monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change.	40 CFR Section 64.7(e); Minn. R. 7017.0200
The Permittee shall maintain CAM records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain the CAM records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.	40 CFR Section 64.9(b); Minn. R. 7017.0200

TABLE A: LIMITS AND OTHER REQUIREMENTS
A-23 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

RECORDKEEPING	hdr
Recordkeeping: Permittee will maintain a record of continuously measured parameters as specified in Minn. R. 7011.1260, subp. 6.	Minn. R. 7011.1260, subp. 6; Minn. R. 7007.0800, subp. 2; 40 CFR Section 60.1365(a) and (b)
The Permittee shall: Keep all records on-site in paper copy or electronic format. Make all records available for submittal to the EPA Administrator or Commissioner, or for on-site review by the EPA Administrator or Commissioner.	Minn. R. 7011.1285, subp.1; 40 CFR Section 60.1345
Recordkeeping: record in the daily operating record the four-hour arithmetic average gas stream temperature as measured at the fabric filter inlet (MR 006) during the most recent PCDD/PCDF performance test demonstrating compliance with the PCDD/PCDF emission limits in part 7011.1225 and 40 CFR 62.15160(a)(2).	Minn. R. 7011.1265, subp. 8; Minn. R. 7011.1240, subp. 2; Minn. R. 7007.0800, subp. 2; 40 CFR Section 60.1365(b)
The Permittee shall maintain on-site for five years after the report is generated, a paper copy of each quarterly report, initial compliance report, and performance test report required under Minn. R. 7011.1285, subparts 3, 5, and 6 respectively.	Minn. R. 7011.1285, subp. 1; 40 CFR Section 60.1360(a)
Daily Operating Record: The Permittee shall maintain on-site daily records for the operation of the waste combustor. Daily records include such things as the operator log book, operator daily log sheets, trend records, CEMS records, and the daily operating report. The record shall contain: A. the calendar date; B. the hours of operation; C. the weight of waste combusted; D. the weight of waste requiring disposal at a solid waste land disposal facility, including separated noncombustibles, excess waste, and ash; E. the amount and description of industrial solid waste received each day, the generator's name, and the method of handling; F. the measurements and determination of emissions averages as required in Minn. R. 7011.1260, subpart 6;	Minn. R. 7011.1285; Minn. R. 7017.1130; Minn. R. 7007.0800, subp. 2; 40 CFR Section 60.1365 (a), (b), (c), and (d); Minn. R. 7011.1270, item B(3) regarding test frequency
Daily Operating Record (Continued) G. results of performance tests conducted on waste combustor units as required in this permit; H. the names of persons who have completed initial review or subsequent annual review of the operating manual; I. Continuous monitoring system records including: I1. each one-hour emission average recorded by the CEMS; I2. each six-minute opacity average recorded by the COMS; I3. monitor certification test reports; I4. excess emissions reports; I5. cylinder gas audit reports; I6. calibration error audit reports; I7. relative accuracy test audits;	CONTINUED: Minn. R. 7011.1285; Minn. R. 7017.1130; Minn. R. 7007.0800, subp. 2; 40 CFR Section 60.1365 (a), (b), (c), and (d); Minn. R. 7011.1270, item B(3) regarding test frequency
Daily Operating Record (Continued) I8. linearity check reports; I9. results of daily calibration drift checks; I10. log of adjustments made to the CEMS or COMS and maintenance performed on the CEMS or COMS; I11. the reasons for exceeding any of the average emission rates, percent reductions, or operating parameters specified under Minn. R. 7011.1260, subpart 6, item C, or six-minute average COMS measurements that exceed the opacity limit and a description of corrective actions taken; I12. reasons for not obtaining the minimum number of hours of sulfur dioxide or operational data (opacity, carbon monoxide emissions, steam flow, particulate matter control device temperature) and a description of corrective actions taken. I13. the date of the calibration of all signal conversion elements associated with steam flow monitoring as required in Minn. R. 7011.1265, subp. 4.	CONTINUED: Minn. R. 7011.1285; Minn. R. 7017.1130; Minn. R. 7007.0800, subp. 2; 40 CFR Section 60.1365 (a), (b), (c), and (d); Minn. R. 7011.1270, item B(3) regarding test frequency
Daily Operating Record (Continued) J. the following for control of Hg or dioxins, with an additive: J1. a record of the average additive system operating parameter for each hour of operation. J2. if the required hourly average additive system operating parameter is not maintained, the reasons for not maintaining the additive system operating parameter as determined in Minn. R. 7011.1272, subp. 2 and the corrective actions taken. J3. a record of the average additive mass feed rate for each hour of operation. J4. if the required hourly average additive mass feed rate is not maintained, the reasons for not maintaining the additive mass feed rate as determined in Minn. R. 7011.1272, subp. 1 and the corrective actions taken. K. Record of the pressure drop across the fabric filters. L. Record of acid gas control.	CONTINUED: Minn. R. 7011.1285; Minn. R. 7017.1130; Minn. R. 7007.0800, subp. 2; 40 CFR Section 60.1365 (a), (b), (c), and (d); Minn. R. 7011.1270, item B(3) regarding test frequency

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-24**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Daily Operating Record (Continued) M. Instances of dumpstack use specifically addressing the length of time the dumpstack was used, the operating conditions of the waste combustor during dumpstack used, and the reason for using the dumpstack.	Minn. R. 7011.1240, subp. 7; Minn. R. 7011.1285
Recordkeeping: The Permittee shall maintain a file of the following CEMS or COMS information at the emission facility in a form suitable for inspection for at least five years from the date of each record. - all monitoring system information required by an applicable compliance document; and - an up-to-date monitor QA/QC plan.	Minn. R. 7017.1130
Recordkeeping, Exclusions of Data. The Permittee shall document each time data was excluded from calculation of averages for any of the following: - Sulfur dioxide emissions. - Carbon monoxide emissions. - Unit load levels. - Temperatures of the flue gases at the inlet of the particulate matter control device.	40 CFR Section 60.1365(e)
Recordkeeping: maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the facility including; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.	Minn. R. 7007.0800, subp. 2
Recordkeeping, Training and Certification: The Permittee shall keep records of training courses completed and certifications achieved, including: i) Names of the chief facility operator, shift supervisors, and control room operators who are provisionally or fully certified by the American Society of Mechanical Engineers. - Dates of the initial provisional or full certifications. - Documentation showing current provisional or full certifications. ii) Names of the chief facility operator, shift supervisors, and control room operators who have completed the EPA or State municipal waste combustion operator training course. - Dates of completion of the operator training course. iii) Documentation showing completion of operator training course. - Names of persons who have reviewed the operating manual. - Date of the initial review. - Dates of subsequent annual reviews.	Minn. R. 7011.1280, subp. 11; Minn. R. 7011.1284; Minn. R. 7011.1285, subp. 2(l); 40 CFR Section 60.1355 (a), (b), (c), and (d)
Recordkeeping and Recording of Mercury/PCDD/PCDF Control Additive Use. The Permittee shall maintain a record of: - The average additive mass feed rate for each hour of operation. - All 8-hour block average mercury/PCDD/PCDF control additive feed rates in kilograms (pounds) per hour calculated from the monitored operating parameter. - Total mercury/PCDD/PCDF control additive purchased and delivered to the facility for each calendar quarter. - Include supporting documentation. - Required quarterly usage of mercury/PCDD/PCDF control additive for the municipal waste combustion plant, calculated using the appropriate equation. - Supporting calculations.	Minn. R. 7011.1272, subp. 3; 40 CFR Section 60.1370(a)
Recordkeeping, Records of Low Mercury/PCDD/PCDF Control Additive Feed Rates: The Permittee shall keep the following records regarding the periods when the average mercury/PCDD/PCDF control additive feed rate over an 8-hour block was less than the average mercury/PCDD/PCDF control additive feed rates determined during the most recent mercury/PCDD/PCDF performance test which demonstrated compliance with the emissions limits: - Calendar date(s) - Beginning and ending time - Reasons for the low mercury/PCDD/PCDF control additive feed rates. - Corrective actions taken to meet the 8-hour average mercury/PCDD/PCDF control additive feed rate requirement. The Permittee shall also keep a record regarding data excluded from averaging calculations including the date(s) and time data was excluded from average feed rate calculations and the reasons the data were excluded.	40 CFR Section 60.1370 (b) and (d)
REPORTING	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-25**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>Notify: due 30 days after Start Of Construction the Notice of Construction. The Notice of Construction shall include:</p> <ol style="list-style-type: none"> 1) A statement of intent to construct EU 001. 2) The planned initial startup date of EU 001. 3) The types of fuels to be combusted in EU 001. 4) The capacity of EU 001 including supporting capacity calculations as specified in 40 CFR Sections 60.1460(d) and (e). 5) The siting analysis, as specified in 40 CFR Section 60.1125. 6) The final materials separation plan, as specified in 40 CFR Section 60.1100(b). 7) The notice of the second public meeting (siting analysis meeting), as specified in 40 Section 60.1130(b). 8) A transcript of the second public meeting, as specified in 40 CFR Section 60.1140(d). 9) A copy of the document that summarizes the Permittee's responses to the public comments received during the second public comment period, as specified in 40 CFR Section 60.1145(a). 10) The final siting analysis, as specified in 40 Section 60.1145(c). 	<p>40 CFR Section 60.1380; 40 CFR Section 60.1105; 40 CFR Section 60.1150</p>
<p>Quarterly Reports: The report shall contain the following items:</p> <p>A. calendar date;</p> <p>B. a graphic or tabular presentation of the sulfur dioxide and carbon monoxide emissions, the maximum waste combustor unit load level and particulate matter control device temperatures as recorded by Minn. R. 7011.1260, subp. 6, item C, and the daily maximum opacity readings as recorded by Minn. R. 7011.1260, subp. 6, item B, subitem (1). The graphs shall be prepared as follows:</p> <ol style="list-style-type: none"> (1) the graph shall represent one operating parameter or pollutant; (2) the applicable limit of the parameter or pollutant shall be indicated on the graph; and (3) data shall be expressed in the same units as the applicable operating parameter or emissions limit; <p>C. instances of dumpstack use;</p>	<p>Minn. R. 7011.1285, subp. 3</p>
<p>Quarterly Reports (Continued):</p> <p>D. the identification of operating days when any of the average emission concentrations, percent reductions, operating parameters specified under Minn. R. 7011.1260, subp. 6(C), Minn. R. 7011.1272, subp. 2 exceeded the applicable limits or any 6 minute average opacity greater than the limit. The report shall include the emission levels recorded during the exceedance, reasons for such exceedances as well as a description of corrective actions taken;</p> <p>E. the percent of the operating time for the quarter that the opacity CEMS was operating and collecting valid data;</p> <p>F. the identification of operating days for which the minimum number of hours that emission concentrations, percent reductions, operating parameters specified under Minn. R. 7011.1260, subp. 6(C), Minn. R. 7011.1272, subp. 2 or the opacity level data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;</p>	<p>CONTINUED: Minn. R. 7011.1285, subp. 3</p>
<p>Quarterly Reports (Continued)</p> <p>G. the results of daily sulfur dioxide and carbon monoxide CEMS drift tests and accuracy assessments as required in Minn. R. 7011.1260, subp. 5.</p> <p>H. the information required in Minn. R. 7011.1285, subp 2(C), (D), and (E), summarized to reflect quarterly totals;</p> <p>I. a compliance certification as required in Minn. R. 7007.0800, subp 6(C); and</p> <p>J. if an additive is used to comply with the mercury and/or PCDD/PCDF emission limits, the total additive used during the calendar quarter, as specified in Minn. R. 7011.1272, subp. 3(B), with supporting calculations. The total amount of additive purchased and delivered to the facility must be equal to or greater than the required quarterly usage of additive. Quarterly usage of the additive shall be determined in accordance with 40 CFR 60.1460.</p>	<p>CONTINUED: Minn. R. 7011.1285, subp. 3; 40 CFR 60.1200(d)</p>
<p>Reporting to the EPA Administrator:</p> <p>The Permittee shall submit to the EPA Administrator an initial report and annual reports, plus semiannual reports for any emission or parameter level that does not meet the limits specified in this permit:</p> <ul style="list-style-type: none"> - Submit the annual report no later than February 1 of each year that follows the calendar year in which data was collected. - Submit semiannual report for data collected during the first half of a calendar year, by August 1 of that year. For data collected during the second half of the calendar year, submit semiannual report by February 1 of the following year. - The Permittee shall retain a copy of all reports on site for 5 years. - All information shall be reported in the units in which the limit or parameter is expressed. 	<p>40 CFR Section 60.1385</p>
<p>Initial Report:</p> <p>The initial report shall contain the items listed in 40 CFR Section 60.1400.</p>	<p>40 CFR Section 60.1395; 40 CFR Section 60.1400</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-26****02/20/13**

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Initial Report: The Initial Report shall contain the following: A. The emission levels measured on the date of the initial evaluation of the continuous emission monitoring systems for all of the following pollutants or parameters as recorded in accordance with 40 CFR Section 60.1365(b): A1. The 24-hour daily geometric average concentration of sulfur dioxide emissions or the 24-hour daily geometric percent reduction of sulfur dioxide emissions. A2. The 4-hour block arithmetic average concentration of the carbon monoxide emissions. A3. The 4-hour block arithmetic average load level of each municipal waste combustion unit. A4. The 4-hour block arithmetic average flue gas temperature at the inlet of each particulate matter control device.	40 CFR Section 60.1395; 40 CFR Section 60.1400
Initial Report: (continued) B. The results of the initial performance tests for the following pollutants: B1. Dioxins/furans, Cadmium, Lead, Mercury, Opacity, Front-half particulate matter, Hydrogen chloride, Fugitive ash. C. The test report that documents the initial stack test including supporting calculations. D. The initial performance evaluation of continuous emissions monitoring systems. E. Operating Conditions during the initial performance tests. E1. The maximum demonstrated load of the waste combustion unit and the maximum demonstrated temperature of the flue gases at the inlet of the particulate matter control device. Use the values established during the initial test for dioxins/furans emissions and include supporting calculations. E2. The average feed rates of the additive to control mercury/PCDD/PCDF as recorded during the mercury and PCDD/PCDF emissions testing and supporting calculations as specified in 40 CFR Section 60.1370(a)(1) and (2).	40 CFR Section 60.1395; 40 CFR Section 60.1400
Initial Report: (continued) F. If the Permittee chooses to monitor carbon dioxide instead of oxygen as the diluent gas, documentation of the relationship between oxygen and carbon dioxide, as specified in 40 CFR Section 60.1255.	40 CFR Section 60.1395; 40 CFR Section 60.1400
Annual Report: due Feb. 1 of each calendar year following permit issuance.	40 CFR Section 60.1410
Annual Report The annual report shall contain a summary of the following: (a) The results of the annual performance test (b) A list of the highest average emission levels recorded, in the appropriate units. (c) The highest 6-minute opacity level measured. (d) For mercury/PCDD/PCDF control additive (additive) usage, (1) The average additive feed rates recorded during the most recent mercury performance tests. (2) The lowest 8-hour block average additive feed rate recorded during the year. (3) The total additive purchased and delivered to the facility. (4) The required quarterly additive usage. (e) The total number of days that the minimum number of hours of data was not obtained. Include the reasons for not obtaining the data and corrective actions taken to obtain the data in the future. (f) The number of hours data was excluded from the calculation of average levels (include the reasons for excluding it).	40 CFR Section 60.1410
Annual Report (continued) (g) If eligible for reduced performance testing, a notice of the intent to begin a reduced performance testing schedule during the following calendar year. (h) A summary of any emission or parameter level that did not meet the required limits. (i) A summary of the data in paragraphs (a) through (d) of this section from the year preceding the reporting year. (j) Documentation of periods when all certified chief facility operators and certified shift supervisors are offsite for more than 12 hours.	CONTINUED: 40 CFR Section 60.1410
Semiannual Report to the EPA Administrator: The Permittee shall submit a semiannual report if any recorded emission or parameter level that does not meet the requirements specified in this permit. The semiannual report shall contain: (a) For any pollutants or parameters that exceeded the specified limits, include the calendar date, the averaged and recorded data for that date, the reasons for exceeding the limits, and corrective actions. (b) If the results of the annual performance tests show emissions above the specified limits, the semiannual report shall include a copy of the test report that documents the emission levels and corrective actions.	40 CFR Section 60.1425 (a) and (b)

TABLE A: LIMITS AND OTHER REQUIREMENTS
A-27

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Semiannual Report to the EPA Administrator: (continued) (c) If mercury/PCDD/PCDF control additive (additive) is used to control mercury and/or PCDD/PCDF emissions, include two items: (1) Documentation of all dates when the 8-hour block average additive feed rate is less than the required additive feed rate. Include four items: (i) Eight-hour average additive feed rate. (ii) Reasons for the occurrences of low additive feed rates. (iii) The corrective actions taken to meet the additive feed rate requirement. (iv) The calendar date.	CONTINUED: 40 CFR Section 60.1425 (c)
Semiannual Report to the EPA Administrator: (continued) (2) Documentation of each quarter when total additive purchased and delivered is less than the total required quarterly usage of additive. Include five items: (i) Amount of additive purchased and delivered. (ii) Required quarterly usage of additive. (iii) Reasons for not meeting the required quarterly usage of additive. (iv) The corrective actions taken to meet the required quarterly usage of additive. (v) The calendar date.	CONTINUED: 40 CFR Section 60.1425 (c)
J. REASONABLE POSSIBILITY	hdr
The Permittee shall monitor NOx emissions and calculate and maintain a record of the annual NOx emissions, in tons per year, on a calendar year basis for a period of 10 years following initial startup of EU 001.	Title I Condition: 40 CFR Section 52.21(r)(6)(c)(iii)
If the Permittee chooses to monitor NOx emissions with a CEMs, the Permittee shall install, operate, calibrate, and maintain the NOx CEMs in accordance with the Minn. R. ch. 7017. The NOx CEMs shall be calibrated prior to the generation of data that will be used in the annual emissions calculation.	Minn. R. 7007.0800, subp. 4
The Permittee shall calculate and maintain a record of the annual emissions for PM10 and PM2.5, in tons per year, on a calendar year basis for a period of 10 years following initial startup of EU001. The Permittee may use either the conservative or direct emission factor option authorized by this permit. The Permittee is allowed to move from the conservative emission factor option to the direct emission factor method in the same year.	Title I Condition: 40 CFR Section 52.21(r)(6)(c)(iii)
Conservative Emission Factor Option: The Permittee shall perform stack testing to measure total filterable PM, organic condensable, and inorganic condensable using EPA Method 5 and EPA Method 202. The conservative emission factor for PM10 and PM2.5 will be the sum of all the particulate forms measured by the tests and will be calculated from the test results as mg/dscm. The testing will be conducted in accordance with the test frequency found in Minn. R. 7011.1270 (B) for Total PM. Testing will be conducted in accordance with Minn. R. ch. 7017. The emission calculation shall be as follows: $\text{PM}_{2.5} \text{ or PM}_{10} (\text{tons/year}) = (\text{EF} * 9.85\text{E-}03 * W) / 2000$ Where EF = the conservative emission factor, in mg/dscm, is the sum of the total filterable PM, organic condensable, and inorganic condensable particulate forms as measured by EPA Method 5 and EPA Method 202 from the most recently approved test results 9.85E-03 = conversion factor from mg/dscm to lb/ton	Title I Condition: 40 CFR Section 52.21(r)(6)(c)(iii); Minn. R. 7007.0800, subp. 4
Conservative Emission Factor Option: (continued) W = annual sum of MSW combusted, based on the total weight of waste combusted, as calculated from the Daily Operating Record, in tons/year 2000 = lb/ton conversion	Title I Condition: 40 CFR Section 52.21(r)(6)(c)(iii); Minn. R. 7007.0800, subp. 4
Direct Emission Factor PM2.5 Method: If the emission factor derived from the conservative option results in annual emission rates higher than 10 tons TPY, the Permittee has the option of performing stack tests that directly measure PM2.5 as per EPA reference methods. If this option is used, the testing will be conducted in accordance with the test frequency found in Minn. R. 7011.1270 (B) for Total PM. The direct emission factor for PM2.5 will be calculated from the test results as mg/dscm. Testing will be conducted in accordance with Minn. R. ch. 7017. The emission calculation shall be as follows: $\text{PM}_{2.5} (\text{tons/year}) = (\text{EF} * 9.85\text{E-}03 * W) / 2000$ Where EF = the direct emission factor, in mg/dscm, as per EPA reference methods from the most recently approved test results 9.85E-03 = conversion factor from mg/dscm to lb/ton W = annual sum of MSW combusted, based on the total weight of waste combusted, as calculated from the Daily Operating Record, in tons/year 2000 = lb/ton conversion	Title I Condition: 40 CFR Section 52.21(r)(6)(c)(iii); Minn. R. 7007.0800, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-28**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Direct Emission Factor PM10 Method: If the emission factor derived from the conservative option results in annual emission rates higher than 15 TPY, the Permittee has the option of performing stack tests that directly measure PM10 as per EPA reference methods. If this option is used, the testing will be conducted in accordance with the test frequency found in Minn. R. 7011.1270 (B) for Total PM. The direct emission factor for PM10 will be calculated from the test results as mg/dscm. Testing will be conducted in accordance with Minn. R. ch. 7017. The emission calculation shall be as follows:

$$\text{PM10 (tons/year)} = (\text{EF} * 9.85\text{E-}03 * \text{W})/2000$$

Where

EF = the direct emission factor, in mg/dscm, as per EPA reference methods from the most recently approved test results

9.85E-03 = conversion factor from mg/dscm to lb/ton

W = annual sum of MSW combusted, based on the total weight of waste combusted, as calculated from the Daily Operating Record, in tons/year

2000 = lb/ton conversion

Title I Condition: 40 CFR Section 52.21(r)(6)(c)(iii);
Minn. R. 7007.0800, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-29**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Subject Item: EU 002 North MSW Incinerator**Associated Items:** CE 001 Fabric Filter - High Temperature, i.e., T>250 Degrees F

CE 002 Dry Limestone Injection

CE 003 Activated Carbon Adsorption

MR 001 North Unit Opacity

MR 005 North Unit Temperature - Primary

MR 007 North Unit Temperature - Secondary

MR 011 North Unit Pressure

MR 016 North Unit O2/CO/SO2 Monitor

MR 017 North Unit Steam Flow

SV 003 North Unit Dump Stack - EU002

SV 009 Combined MWC Stack

What to do	Why to do it
A. APPLICABILITY	hdr
The 40 CFR part 60 subpart A general provisions and appendices to part 60 apply to part 62, except as follows: 40 CFR 60.7(a)(1), 60.7(a)(3), and 60.8(a) and where special provisions set forth under the applicable subpart of 40 CFR part 62 shall apply instead of any conflicting provisions.	40 CFR Section 62.02(b)(2)
B. EMISSIONS LIMITS	hdr
Applicability of Standards: the standards of Minn. R. 7011.1227, 7011.1240, subps. 2 and 5 and 7011.1272, subp. 2 apply at all times when waste is being continuously burned. The standards do not apply, up to a maximum of three hours, during periods of start-up, shutdown or malfunction. Fugitive emissions standards applicable to the ash conveying system do not apply during periods of maintenance and repair of the ash conveying system. The Permittee shall not cause to be emitted into the atmosphere from each waste combustor unit gases in excess of the applicable standards. Emissions, except opacity, shall be calculated under standard conditions corrected to seven percent oxygen on a dry volume basis. During startup, shutdown, or malfunction periods longer than 3 hours, emissions data cannot be discarded from compliance calculations and all provisions under 40 CFR 60.11(d) apply.	Minn. R. 7011.1215, subp. 4; Minn. R. 7011.1225, subp. 1(A) 40 CFR 62.15160; 40 CFR 62.15165
The Permittee shall use data from the continuous emission monitoring systems (CEMs) for sulfur dioxide and carbon monoxide to demonstrate continuous compliance with the applicable emission limits.	40 CFR Section 62.15180
The Permittee shall use results of performance tests for dioxins/furans, cadmium, lead, mercury, particulate matter, opacity, hydrogen chloride, and fugitive ash to demonstrate compliance with the applicable emission limits.	40 CFR Section 62.15235
Front-half Particulate Matter: less than or equal to 70 milligrams/DSCM . This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in 40 CFR Section 62.15245 regarding sampling methods, sampling time, sample volume, and other testing requirements.	40 CFR Section 62.15160(a)(2) 40 CFR Section 62.15045(a)
Total Particulate Matter: less than or equal to 0.020 grains/dry standard cubic foot . This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in Minn. R. 7011.1265 regarding sampling methods, sampling time, sample volume, and other testing requirements. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7011.1227, Table 1; Minn. R. 7011.1265; 40 CFR Section 64.3
Muni Waste Combust Organics: less than or equal to 500 nanograms/DSCM . Muni Waste Combustor Organics means total of tetra-through octa-polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans (Total PCDD/PCDF). This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in Minn. R. 7011.1265 regarding sampling methods, sampling time, sample volume, and other testing requirements.	Minn. R. 7011.1227, Table 1

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-30****02/20/13**

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Muni Waste Combust Organics: less than or equal to 125 nanograms/DSCM . Muni Waste Combustor Organics means total of tetra-through octa-polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans (Total PCDD/PCDF). This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in 40 CFR Section 62.15245 regarding sampling methods, sampling time, sample volume, and other testing requirements.	40 CFR Section 62.15160(a)(2)
Muni Waste Combust Organics: less than or equal to 20.0 nanograms/DSCM . This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in Minn. R. 7011.1265 and 40 CFR Section 62.1300 regarding sampling methods, sampling time, sample volume, and other testing requirements. This limit will apply to the North Incinerator Unit (EU 002) within 180 days after achieving the maximum load level at which the South Incinerator Unit (EU 001) will be operated, but no later than 365 days after initial startup of South Incinerator Unit (EU 001). "Initial Startup" of EU 001 is defined as the first time waste is burned in the combustion unit after the new heat recovery boiler and new air pollution control equipment (CE 004, CE 005, and CE 006) for EU 001 are installed.	Minn. R. 7007.0800, subp. 2
Cadmium compounds: less than or equal to 0.10 milligrams/DSCM . This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in 40 CFR Section 62.15245 regarding sampling methods and other testing requirements and Minn. R. 7011.1265, subpart 3(C) regarding sample volume.	40 CFR Section 62.15160(a)(2); 40 CFR Section 62.15045(a); 40 CFR Section 62.15245; Minn. R. 7011.1265
Lead: less than or equal to 1.6 milligrams/DSCM . This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in 40 CFR Section 62.15245 regarding sampling methods and other testing requirements and Minn. R. 7011.1265, subpart 3(C) regarding sample volume.	40 CFR Section 62.15160(a)(2); 40 CFR Section 62.15245; Minn. R. 7011.1265
Mercury: less than or equal to 100 micrograms/DSCM (short term). This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the testing requirements specified in Minn. R. 7011.1265, subpart 3(C) and Minn. R. 7011.1265, subpart 3(D).	Minn. R. 7011.1227, Table 1; Minn. R. 7011.1265
Mercury: less than or equal to 60 micrograms/DSCM (long term). This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in Minn. R. 7011.1265, subpart 3(C) and Minn. R. 7011.1265, subpart 3(D).	Minn. R. 7011.1227, Table 1; Minn. R. 7011.1265
Mercury: less than 0.080 milligrams/DSCM or 85 percent reduction whichever is less stringent. This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the requirements specified in 40 CFR Section 62.15245 regarding sampling methods and other testing requirements and Minn. R.7011.1265, subpart 3(C) and Minn. R.7011.1265, subpart 3(D).	40 CFR Section 62.15160(a)(2); 40 CFR Section 62.15245; Minn. R. 7011.1265
Mercury: less than or equal to 41.0 micrograms/DSCM . This limit is applied in accordance with Minn. R. 7011.1227, 7011.1240, subps. 2 and 5 and 7011.1272, subp. 2. The Permittee must follow the requirements specified in 40 CFR Section 62.15245 regarding sampling methods and other testing requirements and Minn. R. 7011.1265, subpart 3(C) and Minn. R. 7011.1265, subpart 3(D). This limit will apply to the North Incinerator Unit (EU 002) within 180 days after achieving the maximum load level at which the South Incinerator Unit (EU 001) will be operated, but no later than 365 days after initial startup of South Incinerator Unit (EU 001). "Initial Startup" of EU 001 is defined as the first time waste is burned in the combustion unit after the new heat recovery boiler and new air pollution control equipment (CE 004, CE 005, and CE 006) for EU 001 are installed.	Minn. R. 7007.0800, subp. 2
Opacity: less than or equal to 10 percent opacity . This limit is in accordance with the "Applicability of Standards" stated above. The Permittee must follow the testing requirements specified in 40 CFR Section 62.15245 and Minn. R. 7011.1265, subpart 2.	Minn. R. 7011.1227, Table 1; 40 CFR Section 62.15160(a)(2); 40 CFR Section 64.3
Carbon Monoxide: less than or equal to 100 parts per million using 4-hour Block Average . This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the monitoring requirements specified in 40 CFR Section 62.15175, 40 CFR Section 62.15180 and Minn. R. 7011.1260 subparts 3 and 4.	Minn. R. 7011.1227, Table 1; Minn. R. 7011.1260; 40 CFR Section 62.15160(a)(3); 40 CFR Section 62.15175, 40 CFR 62.15180

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-31** 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Hydrochloric acid: less than or equal to 250 parts per million by volume or 50 % removal, whichever is less stringent. This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the testing requirements specified in 40 CFR Section 62.15245.	40 CFR Section 62.15160(a)(2); 40 CFR Section 62.15245
Nitrogen Oxides: less than or equal to 500 parts per million by volume. This limit is applied in accordance with the "Applicability of Standards" stated above.	40 CFR Section 62.15160(a)(2)
Sulfur Dioxide: less than or equal to 77 parts per million using 24-hour Geometric Average or 50 percent removal, whichever is less stringent. This limit is applied in accordance with the "Applicability of Standards" stated above. The Permittee must follow the monitoring requirements specified in 40 CFR Section 62.15175, 40 CFR Section 62.15180.	40 CFR Section 62.15160(a)(2); 40 CFR Section 62.15175; 40 CFR Section 62.15180
Fugitive Ash. Permittee shall not cause to be emitted into the atmosphere visible emissions of combustion ash from an ash conveying system, including conveyor transfer points, in excess of five percent of the observation period (i.e., 9 minutes per three-hour period), as determined by Code of Federal Regulations, Title 40, part 60, Appendix A, Method 22, as amended. This limit does not apply to visible emissions discharged inside buildings or enclosures of ash conveying systems; however, the emission limit does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems. Must follow the testing requirements specified in 40 CFR Section 62.15245 and Minn. R. 7011.1265, subpart 2.	Minn. R. 7011.1225, subp. 1(B); Minn. R. 7011.1265, subpart 2; 40 CFR Section 62.15160(a)(2); 40 CFR Section 62.15245
C. OPERATIONAL LIMITS	hdr
Steam Flow: less than or equal to 33,211 lbs/hour using 4-hour Block Average (as determined during the May 23-26, 2011 PCDD/PCDF performance test). Notwithstanding the previous sentence, upon the Commissioner's written notification that the emission unit has demonstrated compliance under the conditions of a PCDD/PCDF performance test and prior to incorporation of the steam flow into this permit, the Permittee shall not exceed 110 percent of the steam load level established during that compliant performance test.	Minn. R. 7011.1240, subp. 2; Minn. R. 7017.2025, subp. 3; 40 CFR Section 62.15145(a); 40 CFR Section 62.15145 (b)
Steam Flow (continued): The waste combustor is exempt from limits on the load level during any of three situations: (1) Annual tests for dioxins/furans. (2) The 2 weeks preceding annual tests for dioxins/furans. (3) Whenever approved in writing by the EPA Administrator and Commissioner for any of following activities: - (i) Evaluate system performance. - (ii) Test new technology or control technologies. - (iii) Perform diagnostic testing. - (iv) Perform other activities to improve the performance of the waste combustor. - (v) Perform other activities to advance the state of the art for emission controls for the waste combustor.	Minn. R. 7011.1240, subp. 2; Minn. R. 7017.2025, subp. 3; 40 CFR Section 62.15145(e); 40 CFR Section 62.15145(e) (continued)
Steam Flow (continued) The Permittee shall provide written notification submitted to the Commissioner and EPA Administrator 30 days prior to undertaking any of the activities described above in 3(i) - (v), with the following information: 1) a description of the proposed project, and the outcome the project is designed to evaluate; 2) how the project conforms with the activities described above for which the combustor waste load level can be waived; 3) the length of time the project will take to complete.	Minn. R. 7011.1240, subp. 2; Minn. R. 7017.2025, subp. 3; 40 CFR Section 62.15145(e) (continued)
Presence of certified operator. The person described in Minn. R. 7011.1240, subp. 1 shall be present at the waste combustor facility at all times when solid waste is being combusted. The certified operator shall meet the minimum requirements of Minn. R. 7011.1280, subp. 3(B) and 7011.1281.	Minn. R. 7011.1240, subp. 1; 40 CFR Section 62.15135; 40 CFR Section 62.15140
Start-up on waste prohibited. During start-up from a cold furnace, auxiliary fuels shall be used to achieve combustion chamber operating temperature. The use of solid waste solely to provide thermal protection of the grate or hearth during the start-up period when solid waste is not being fed to the grate is not considered to be continuous burning.	Minn. R. 7011.1240, subp. 3
Auxiliary Fuel Use: Use natural gas to warm the combustion and pollution control devices and maintain good combustion conditions in the combustion chamber from the time the waste feed has been discontinued until the combustion chamber is clear of combustible material or active combustion ceases. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-32****02/20/13**

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>Allowed and Prohibited Fuels:</p> <p>The waste combustor may burn natural gas, solid waste, RDF, and mixed municipal solid waste, as defined in Minn. Stat. 115A.03, subp. 21, and other nonhazardous wastes approved through the Facility's Industrial Solid Waste Management Plan, except as noted elsewhere in Table A, of this permit.</p> <p>The facility is authorized to burn waste tires, yard waste, and household hazardous waste that are incidentally received co-mingled with municipal solid waste. The waste combustor shall not combust waste tires, yard waste, nor household hazardous waste as a separate waste stream.</p>	<p>Minn. R. 7011.1220, subp. 2; Minn. R. 7007.0800, subps. 4 & 5</p>
<p>Facility Operation: Properly maintain and operate air pollution control equipment at all times when the waste combustor is in operation and combusting waste.</p> <p>At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with 40 CFR Section 60.11(d).</p>	<p>Minn. R. 7007.0800, subp. 16(J); Minn. R. 7011.1240, subp. 7; 40 CFR Section 60.11(d)</p>
<p>The Permittee shall maintain an 8-hour block average mercury/PCDD/PCDF control additive feed rate at or above the greater of the following: the additive feed rate determined during the most recent compliant mercury performance test and most recent compliant PCDD/PCDF performance test.</p>	<p>Minn. R. 7011.1272, subp. 2; Minn. R. 7011.1272, subp. 3(B); 40 CFR 62.15145(c)</p>
D. AVERAGING PERIODS	hdr
<p>Averaging Periods: For emission limits or operational limits which are monitored continuously the following averaging periods shall be used:</p> <p>A) for particulate matter control device inlet temperature monitoring, four-hour arithmetic block averages calculated from four consecutive one-hour arithmetic averages.</p> <p>B) for steam flow or alternative unit load, a four-hour arithmetic block average, the four-hour arithmetic block averages shall be calculated from four continuous one-hour arithmetic averages.</p> <p>C) For opacity, a 6-minute average calculated using 36 or more data points equally spaced over a 6-minute period.</p> <p>D) for Hg/PCDD/PCDF control additive feed, eight-hour arithmetic block averages. Eight-hour block average means the average of all hourly control additive feed rates when the controlled incinerator operates and combusts municipal solid waste measured over any of three 8-hour periods of time:</p> <p>(1) 12 midnight to 8 A.M.</p> <p>(2) 8 A.M. to 4 P.M.</p> <p>(3) 4 P.M. to 12 midnight</p>	<p>Minn. R. 7011.1260, subp. 4; 40 CFR Section 62.15205(a) and (b); 40 CFR Section 62.15145(c)</p>
<p>Averaging Periods (continued)</p> <p>E) for SO₂, a geometric average of the 1-hour arithmetic average emission concentration during each 24-hour daily period measured from midnight to midnight.</p> <p>F) for carbon monoxide, an arithmetic average of the 1-hour arithmetic average emission concentration during each 4-hour block period measured from midnight to midnight.</p> <p>At least 4 data points equally spaced in time shall be used to calculate each 1-hour arithmetic average. For SO₂ and CO, each 1-hour average shall be corrected to 7 % O₂ on an hourly basis using the one-hour arithmetic average of the O₂ or CO₂ continuous emissions monitoring system.</p>	<p>Minn. R. 7011.1260, subp. 4; 40 CFR Section 62.15205(a) and (b); 40 CFR Section 62.15145(c) (continued)</p>
E. OPERATOR TRAINING & CERTIFICATION	hdr
<p>The Permittee shall provide EPA or state-approved operator training to the following personnel: chief facility operators, shift supervisors and control room operators.</p> <p>Each chief facility operator and shift supervisor hired or transferred to the municipal waste combustion unit must complete a state approved or EPA operator training course by the date before an employee assumes the responsibilities of chief facility operators, shift supervisors and control room operators.</p>	<p>40 CFR Section 62.15105; 40 CFR Section 62.15045(a)</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-33**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>The Permittee shall require each chief facility operator and shift supervisor to obtain and maintain a current provisional operator certification from the American Society of Mechanical Engineers QRO-1-1994 or a state program approved under 40 CFR Section 62, Subpart JJJ.</p> <p>Each chief facility operator and shift supervisor hired or transferred to the municipal waste combustion unit must obtain provisional certification 6 months after they transfer to the municipal waste combustion unit or 6 months after they are hired to work at the municipal waste combustion unit.</p>	<p>40 CFR Section 62.15130(a) and (b); 40 CFR Section 62.15045(a); Minn. R. 7011.1280, subp. 1</p>
<p>Control room operators shall be certified as described in Minn. R. 7011.1280. Individuals, if assuming the duties of control room operator for the first time, shall obtain certification as described in Minn. R. 7011.1280 within six months of assuming such duties.</p>	<p>Minn. R. 7011.1240, subp. 1a(5)</p>
<p>Each chief facility operator and shift supervisor must obtain full certification, 6 months after EPA approval of a state operator training & certification program, 6 months after they transfer to the municipal waste combustion unit or 6 months after they are hired to work at the municipal waste combustion unit, whichever is later.</p> <p>For purposes of this permit, "obtain" means a full certification from the American Society of Mechanical Engineers or EPA-approved state program or a full certification exam scheduled for the timeframes established above.</p>	<p>40 CFR Section 62.15130 (c) and (d); 40 CFR Section 62.15045(a); Minn. R. 7011.1280, subp.1; Minn. R. 7011.1240, subp. 1a</p>
<p>The Permittee shall establish a program to review the plant-specific operating manual with people whose responsibilities affect the operation of the waste combustor. Initial review of the operating manual shall be completed by the date before an employee assumes responsibilities that affect operation of the waste combustor. The Permittee shall update and review the operating manual with staff annually. The Permittee must record the date of initial review and annual update and review.</p>	<p>40 CFR Section 62.15115 (b), (c) and (d); Minn. R. 7011.1275, subp. 1</p>
<p>Develop and maintain the Environmental Compliance Operating Manual in accordance with Minn. R. 7011.1275, subp. 3, items A through O; Update the manual following each performance test to include operational changes resulting from emission performance testing results. Include the revision dates within the Operating Manual; Store the Operating Manual in a location easily accessed by staff.</p>	<p>Minn. R. 7011.1275, subp. 3; 40 CFR Section 62.15115 (a); 40 CFR Section 62.15120; 40 CFR Section 62.15125</p>
<p>Training Program: Persons without waste combustor or boiler operation experience must work under the direct supervision of a certified operator or a certified operator's designee for 40 hours before assuming job-related activities affecting air emissions. The Permittee must record the date of the training session and the number of hours training in each session.</p>	<p>Minn. R. 7011.1275, subp. 1(C)(1)</p>
<p>Training Program: The Permittee will implement a training program, based on the Operating Manual, designed to maintain compliance with this permit, Minn. Rules and federal regulations. Individual training must be specific to the position held. Waste combustor personnel who have responsibilities which affect the operation of the waste combustor must be trained in the operation of the facility. These personnel include, but are not limited to:</p> <ul style="list-style-type: none"> - chief facility operators, - shift supervisors, - operator supervisors, - control room personnel, - ash handlers, - maintenance personnel, and - crane/load handlers. 	<p>Minn. R. 7011.1275, subp. 1; Minn. R. 7011.1275, subp. 2; Minn. R. 7011.1275, subp. 4; Minn. R. 7011.1275; 40 CFR Section 62.15115 (b); 40 CFR Section 62.15110</p>
<p>Training Program: (continued) The Permittee will:</p> <ul style="list-style-type: none"> - Implement the required training; - Identify all people described above who must be trained; - Include a separate page for each of these people in the Operating Record; - Report the names of those who have been trained, the type of training received, and the date the training was completed, as required, in the Annual Report following training as required under Minn. R. 7011.1285, subp. 4. 	<p>Minn. R. 7011.1275, subp. 1; Minn. R. 7011.1275, subp. 2; Minn. R. 7011.1275, subp. 4; Minn. R. 7011.1275; 40 CFR Section 62.15115 (b); 40 CFR Section 62.15110 (continued)</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-34**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>Certified Operator: The Permittee shall:</p> <p>1) Maintain at the facility a record of the names of all certified personnel. This record shall contain the exam dates, the content of the exam, the full name of the certified individual, the examiner's signature and the certification statement in Minn. R. 7011.1284, subp. 3.</p> <p>2) Maintain at the facility a record of the names of all personnel who have obtained provisional and/or full certification by ASME.</p> <p>The Permittee shall allow the Commissioner and/or EPA Administrator to review all records related to the certification of operators including the facility's program for examination and certification of operators, the record required in Minn. R. 7011.1284, subp. 3, and the content and results of an individual's exam.</p>	<p>Minn. R. 7011.1284, subp. 3; Minn. R. 7011.1284, subp. 3a; 40 CFR Section 62.15295</p>
F. TESTING REQUIREMENTS	hdr
<p>Performance Test: due before end of each calendar year following Permit Issuance to measure Total PCDD/PCDF. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)</p>	<p>Minn. R. 7011.1265, subp. 5; Minn. R. 7011.1270(B); Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2</p>
<p>State Performance Test (continued)</p> <p>If all annual performance tests for a three-year period show compliance with Total PCDD/PCDF state limits in this permit, the Permittee may choose to conduct performance tests every 2-1/2 years. At a minimum, a performance test shall be conducted every 2-1/2 years, but no more than 30 months following the previous compliance test.</p> <p>If a performance test indicates noncompliance with the state limits, the Permittee shall resume annual testing, for three years, for that pollutant for which noncompliance was demonstrated. If all performance tests for the three-year period again show compliance with the state limits, the Permittee may again conduct performance testing every 2-1/2 years.</p> <p>This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.</p>	<p>Minn. R. 7011.1270(B); Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2</p>
<p>Performance Test: due before end of each calendar year following Initial Performance Test to measure Total Particulate Matter. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)</p>	<p>Minn. R. 7011.1265, subp. 5; Minn. R. 7011.1270(B); Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2; 40 CFR Section 64.3</p>
<p>State Performance Test (continued)</p> <p>If all annual performance tests for a three-year period show compliance with the Total Particulate Matter state limit in this permit, the Permittee may choose to conduct performance tests every 2-1/2 years. At a minimum, a performance test shall be conducted every 2-1/2 years, but no more than 30 months following the previous compliance test.</p> <p>If a performance test indicates noncompliance with the state limit, the Permittee shall resume annual testing, for three years. If all performance tests for the three-year period again show compliance with the state limit, the Permittee may again conduct performance testing every 2-1/2 years.</p> <p>This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.</p>	<p>Minn. R. 7011.1270(B); Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2; 40 CFR Section 64.3</p>
<p>Performance Test: due before end of each calendar year following Permit Issuance (or on the date as determined by the EPA Administrator under 40 CFR part 62, subpart JJJ) to measure Total PCDD/PCDF. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)</p>	<p>40 CFR Section 62.15240(b); 40 CFR Section 62.15250(a)</p>
<p>Performance Test: due before end of each calendar year following Permit Issuance (or on the date as determined by the EPA Administrator under 40 CFR part 62, subpart JJJ) to measure front-half PM. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)</p>	<p>40 CFR Section 62.15240(b); 40 CFR Section 62.15250(a)</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-35****02/20/13**

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Performance Test: due before end of each calendar year following Permit Issuance (or on the date as determined by the EPA Administrator under 40 CFR part 62, subpart JJJ) to measure cadmium. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)	40 CFR Section 62.15240(b); 40 CFR Section 62.15250(a)
Performance Test: due before end of each calendar year following Permit Issuance (or on the date as determined by the EPA Administrator under 40 CFR part 62, subpart JJJ) to measure lead. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)	40 CFR Section 62.15240(b); 40 CFR Section 62.15250(a)
Performance Test: due before end of each calendar year following Permit Issuance (or on the date as determined by the EPA Administrator under 40 CFR part 62, subpart JJJ) to measure HCl. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)	40 CFR Section 62.15240(b); 40 CFR Section 62.15250(a)
Performance Test: due before end of each calendar year following Permit Issuance (or on the date as determined by the EPA Administrator under 40 CFR part 62, subpart JJJ) to measure opacity. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12.5 months between test dates. (see the Technical Support Document -004 for an explanation). (Note Federal and State standards regarding reduced frequency. The Facility must meet the most stringent standard.)	40 CFR Section 62.15240(b); 40 CFR Section 62.15250(a)
<p>Federal Performance Test (continued)</p> <p>The Permittee may conduct performance tests every third year, if the following conditions are met:</p> <p>All performance tests for a given pollutant, over the 3 previous years, demonstrated compliance with the federal emission limit. The next performance test is conducted within 36 months of the anniversary date of the third consecutive performance test that demonstrates compliance with the federal emission limit.</p> <p>Thereafter, the Permittee shall conduct performance tests, every third year, but no later than 36 months following the previous performance tests. If a performance test does not demonstrate compliance with a federal emission limit, the Permittee shall conduct annual performance tests for that pollutant until all performance tests over 3 consecutive years demonstrate compliance with the federal emission limit for that pollutant.</p>	40 CFR Section 62.15240(b); 40 CFR Section 62.15250(a)
<p>Performance Test: due before end of each calendar 36 months starting 09/29/2009 to measure mercury emissions.</p> <p>If a performance test indicates shows mercury emissions greater than 50 percent of the state long-term permitted mercury limit, the Permittee shall resume annual testing. The facility shall conduct annual mercury stack sampling until emissions are below 50 percent of the state long-term permitted mercury limit. Once the facility demonstrates that mercury emissions are, again, below 50 percent of the state long-term permitted mercury limit, the facility may resume testing every three years or according to federal requirements, whichever is more stringent, upon notifying the Commissioner.</p>	Minn. R. 7011.1270(B); Minn. Stat. 116.85, subd. 1; Minn. R. 7017.2030, subp. 1; Minn. R. 7007.0800, subp. 2
<p>The Permittee shall use the performance test methods and procedures specified in Minn. R. 7017.2001 to 7017.2060 except as modified in Minn. R. 7011.1265 and 40 CFR Section 62.15245 regarding sampling methods, sampling time, and other testing requirements.</p> <p>The Permittee shall conduct MWC organics tests with a minimum sampling time of 4 hours per test run.</p>	Minn. R. 7011.1265, subp. 1; 40 CFR Section 62.15245(a)
The Permittee shall determine the maximum demonstrated capacity of the waste combustor during the initial performance test for PCDD/PCDF and each subsequent performance test during which compliance with the PCDD/PCDF emissions limits in Minn. R. 7011.1225 and 40 CFR Section 62.15160(a)(2) are achieved.	Minn. R. 7011.1265, subp. 7; 40 CFR Section 62.15410

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-36**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Operation during performance testing. The Permittee shall report to the Commissioner the operating conditions including operating parameters of the air pollution control equipment, pressure drop across the fabric filters, flue gas temperatures, air flow rates, mercury/PCDD/PCDF control additive feed rate and acid gas control.	Minn. R. 7011.1265, subp. 6; 40 CFR Section 62.15340
Particulate matter control device temperature. Permittee shall determine and record the four-hour arithmetic average gas stream temperature as measured at the inlet to each particulate matter control device during the initial and each subsequent performance test for PCDD/PCDF demonstrating compliance with the PCDD/PCDF emission limits in Minn. R. 7011.1225 and 40 CFR Section 62.15160(a)(2).	Minn. R. 7011.1265, subp. 8; 40 CFR Section 62.15410
<p>The Permittee shall: Select a mercury/PCDD/PCDF control additive system operating parameter that can be used to calculate mercury/PCDD/PCDF control additive (additive) feed rate (for example, screw feeder speed).</p> <p>During each dioxins/furans and mercury performance test, the Permittee shall determine the average additive feed rate in kilograms (or pounds) per hour and determine the average operating parameter level that correlates to that additive feed rate. The Permittee shall also establish a relationship between the operating parameter and the additive feed rate in order to calculate the additive feed rate based on the operating parameter level.</p>	Minn. R. 7011.1272, subp. 1; 40 CFR Section 62.15275 (a) and (b)
<p>Exceedances of emission limits. If accurate and valid data results of a performance test demonstrate an exceedance of a standard of performance as described in this air emission permit after normal start-up, the Permittee shall undertake the actions in items A to D. A. The exceedance shall be reported to the Commissioner as soon as reasonably possible giving consideration to matters of plant or worker safety, or access to communications and the applicable reporting provisions of Minn. R. 7007.0800, subpart 6, shall be met. B. Immediately undertake appropriate repairs or modifications to return the waste combustor to compliance as soon as possible.</p>	Minn. Stat. 116.85, subd 3; and Minn. R. 7011.1265, subp. 11
<p>Exceedances of emission limits (continued): C. Conduct additional performance test(s) or shut the waste combustor down. If the waste combustor cannot demonstrate compliance within 60 days of the report of initial exceedance, the waste combustor shall be shut down on the 61st day after the report of the exceedance. The performance test shall be conducted and the test report received within those 60 days.</p>	Minn. Stat. 116.85, subd 3; and Minn. R. 7011.1265, subp. 11 (continued)
<p>Exceedances of emission limits (continued): D. If the Permittee cannot demonstrate compliance within 60 days of the report of the initial exceedance, the Permittee may restart the waste combustor for the purposes of compliance testing, provided that at least a 10-day notification has been provided to the Commissioner. The Permittee is allowed to operate the waste combustor until the completion of the test, after which the waste combustor must be shut down. The waste combustor may be restarted only after the Permittee receives notice from the Commissioner that it has achieved compliance with the emissions standards or restarts for the purpose and duration of additional testing after further repair or operational changes.</p>	Minn. Stat. 116.85, subd 3; and Minn. R. 7011.1265, subp. 11 (continued)
G. MONITORING REQUIREMENTS	hdr
<p>Continuous Monitoring: Permittee shall install, calibrate, maintain and operate, in accordance with Minn. R. 7011.1260, subp. 5, monitors that continuously read and record: a) sulfur dioxide at the outlet of the air pollution control device, and carbon monoxide at the inlet of the air pollution control device. b) unit load level as determined through steam flow measurement. c) oxygen concentrations at each location where CO and SO₂ emissions are monitored. d) mercury/PCDD/PCDF control additive feed rate or other parameter for which a correlation between that parameter and the additive feed rate has been developed.</p> <p>If the Permittee chooses to demonstrate compliance by monitoring the percent reduction of sulfur dioxide, the Permittee shall install a continuous emission monitoring system for sulfur dioxide and oxygen at the inlet of the air pollution control device.</p> <p>Additional monitoring requirements are also located at the individual MR level.</p>	Minn. R. 7011.1260, subp. 2; Minn. R. 7011.1260, subp. 3; Minn. R. 7011.1272, subp. 3; 40 CFR Section 62.15175; 40 CFR Section 62.15215; 40 CFR Section 62.15260; 40 CFR Section 62.15270

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-37** 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Continuous Monitoring: Permittee shall install, calibrate, maintain and operate, in accordance with Minn. R. 7011.1260, subp. 5, monitors that continuously read and record: a) temperatures of the flue gas at the inlet of each particulate matter control device. b) flue gas opacity. Additional monitoring requirements are also located at the individual MR level.	Minn. R. 7011.1260, subp. 2; Minn. R. 7011.1260, subp. 3; Minn. R. 7011.1272, subp. 3; 40 CFR Section 62.15175; 40 CFR Section 62.15215; 40 CFR Section 62.15260; 40 CFR Section 62.15270; 40 CFR Section 64.3
Combustion chamber temperature monitor: Install and operate continuous temperature monitors in the combustion unit.	Minn. R. 7011.1260, subp. 1
Continuous Monitoring: The Permittee shall: - Continuously monitor the selected mercury/PCDD/PCDF control additive (additive) feed rate operating parameter during all periods when the municipal waste combustion unit is operating and combusting waste (effective 5/6/2005 or on the date as determined by the EPA Administrator under 40 CFR part 62, subpart JJJ) - Calculate the 8-hour block average additive feed rate in kilograms (or pounds) per hour. - When calculating the 8-hour block average, exclude hours when the unit is not operating and include hours when unit is operating but the additive feed system is not working correctly.	40 CFR Section 62.15275 (c)
Continuous Monitoring: The Permittee shall obtain one-hour arithmetic averages from 4 or more data points equally spaced over each 1-hour period for: - Unit load level of the municipal waste combustion unit. - Mercury/PCDD/PCDF control additive feed rate (effective 5/6/05 or on the date as determined by the EPA Administrator under 40 CFR part 62, subpart JJJ). Data recorded during periods of continuous system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed, unless there are, at least, 2 data points per hour.	40 CFR Section 62.15280; 40 CFR Section 60.13(h); 40 CFR Section 60.13(e)(2)
Continuous Monitoring: The Permittee shall obtain one-hour arithmetic averages from 4 or more data points equally spaced over each 1-hour period for: - Temperature of the flue gases at the inlet of the particulate matter control device. Data recorded during periods of continuous system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed, unless there are, at least, 2 data points per hour.	40 CFR Section 62.15280; 40 CFR Section 60.13(h); 40 CFR Section 60.13(e)(2); 40 CFR Section 64.3
Continuous Monitoring: The Permittee shall install the following monitoring systems such that representative measurements of the process parameters from the affected facility are obtained: - unit load, - flue gas temperature, and - mercury/PCDD/PCDF control additive.	40 CFR Section 60.13(f)
Continuous Monitoring: All continuous monitoring systems and monitoring devices required under 40 CFR 60, including CEMS and COMS shall be installed, operational, and certified prior to conducting performance tests under 40 CFR Section 60.8.	40 CFR Section 60.13(b)
Continuous Operation: Except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, all continuous monitoring systems (including CEMS and COMS) shall be in continuous operation during all periods of emission unit operation. This includes periods of emission unit start-up, shutdown, or malfunction.	40 CFR Section 60.13(e); Minn. R. 7017.1090, subp. 1
Steam flow measurement method. The method contained in ASME Power Test Codes: Test Codes for Steam Generating Units, PTC 4.1 (1972), section 4, shall be used for calculating the steam flow required under Minn. R. 7011.1260, subpart 3, item A, subitem (2). The recommendations of Instruments and Apparatus: Measurement of Quantity of Materials, Interim Supplement 19.5 (1971), chapter 4, shall be followed for design, construction, installation, calibration, and use of nozzles and orifices, except that measurement devices such as flow nozzles and orifices are not required to be recalibrated after they are installed. All signal conversion elements associated with steam flow measurements must be calibrated according to the manufacturer's instructions before each PCDD/PCDF test, and at least once per year. This annual calibration shall be recorded in the daily operating record as described in Minn. R. 7011.1285, subpart 2.	Minn. R. 7011.1265, subp. 4; 40 CFR Section 62.15265(a)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-38** 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Alternative continuous measuring methods in place of steam flow may be installed and operated, provided that the method continuously measures the waste combustor unit load, is equivalent to results obtained when using the method in Minn. R. 7011.1265, subp. 4, and the use of the method is approved by the Commissioner and EPA Administrator prior to installation.	Minn. R. 7011.1265, subp. 4a; 40 CFR Section 62.15265(b)
CEMS QA/QC: The Permittee shall operate, calibrate, and maintain each SO ₂ and CO CEMS according to the QA/QC procedures in 40 CFR pt. 60, Appendix F, section 3, as amended.	Minn. R. 7011.1260, subp. 5(G); 40 CFR Section 62.15185(d)
COMS Monitoring Data: The Permittee shall reduce all data to 6 minute averages. Opacity averages shall be calculated from all equally spaced consecutive 10-second (or shorter) data points in the 6 minute averaging period.	Minn. R. 7017.1200, subp. 1 & 2; 40 CFR Section 64.3
CEMS/COMS Continuous Operation: CEMS/COMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit startup, shutdown, or malfunction. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS/COMS must not be bypassed except in emergencies where failure to bypass the CEMS/COMS would endanger human health, safety, or plant equipment.	Minn. R. 7017.1090, subp. 1
Monitoring data shall be obtained for at least 75 percent of the hours per day for 90 percent of the days per calendar quarter that the combustor is operating and combusting MSW.	Minn. R. 7011.1260, subp. 5(B); 40 CFR Section 62.15280(c)
The Permittee shall use all valid data from the continuous monitoring systems in calculating emission concentrations and percent reductions. If CEM/COM data is unavailable, the Permittee shall meet the minimum data requirements using alternative methods set forth in 40 CFR part 60, Appendix A, Methods 19 and 6c for SO ₂ ; Method 10 for CO; Method 9 for opacity; Method 3A or 3B for O ₂ or CO ₂ .	40 CFR Section 62.15225; Minn. R. 7011.1260, subp. 5(D); 40 CFR Section 62.15205(e)
The Permittee shall notify the EPA Administrator according to 40 CFR Section 62.15340(e) if the minimum data required for continuously monitored emissions and parameters are not obtained.	40 CFR Section 62.15205(d); 40 CFR Section 62.15280(d)
CEMS/COMS Certification Test: due 90 days after first Excess Emissions Report. This requirement applies to any CO or SO ₂ CEMS which have not previously been certified.	Minn. R. 7017.1050, subp. 1; 40 CFR Section 62.15185(b); 40 CFR Section 60.13(b)
CEMS Certification Test Plan: due 30 days before CEMS Certification Test CEMS Certification Test Pretest Meeting: due 7 days before CEMS Certification Test CEMS Certification Test Report: due 45 days after CEMS Certification Test CEMS Certification Test Report - Microfiche Copy: due 105 days after CEMS Certification Test The Notification, Test Plan, and Test Report may be submitted in alternate format as allowed by Minn. R. 7017.1120, subp. 2	Minn. R. 7017.1060, subp. 1-3; Minn. R. 7017.1080, subp. 1-4
CEM/COMS Certification Test Report - Microfiche Copy: due 105 days after CEM/COMS Certification Test.	Minn. R. 7017.1080, subp. 3
COMS Daily Calibration Drift (CD) Check: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) opacity at least once daily from each COMS according to the procedures listed in 40 CFR 60.13.	Minn. R. 7011.1260, subp. 5(E); Minn. R. 7017.1210, subp. 2
CEMS Daily Calibration Drift Test: The Calibration Drift shall be quantified and recorded at zero (low-level) and upscale (high-level) gas concentrations at least once daily according to the procedures listed in Minn. R. 7017.1170, subp. 3 and 40 CFR Section 60.13(d)(1) for each pollutant concentration, each diluent monitor, and for each monitor range. The CEMS shall be adjusted whenever the Calibration Drift exceeds twice the specification of 40 CFR pt. 60, Appendix B. If no span value is specified in the applicable requirement or in a compliance document, the Permittee shall use a span value equivalent to 1.5 times the emission limit. 40 CFR pt. 60, Appendix F, shall be used to determine out-of-ctrl periods for CEMS. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7011.1260, subp. 5(E); Minn. R. 7017.1170, subp. 3; 40 CFR Section 62.15175(b); 40 CFR Section 62.15305(f)
COMS Calibration Error Audit: due before end of each half-year following COMS Certification Test. Conduct audits at least 3 months apart but no greater than 8 months apart. Follow the procedures of 40 CFR 60, Appendix B, Performance Specification 1.	Minn. R. 7017.1210, subp 3; Minn. R. 7007.0800, subp. 2
CEMS Cylinder Gas Audit (CGA): due before end of each calendar quarter following CEM Certification Test except for quarters in which a RATA was performed. This requirement applies to each CO and SO ₂ CEMS as well as each diluent monitor.	Minn. R. 7011.1260, subp. 5(G); Minn. R. 7007.0800, subp. 2; 40 CFR Section 62.15195(b)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-39**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

CEMS Relative Accuracy Test Audit (RATA): due before end of each year following CEM Certification Test. Follow the procedure in 40 CFR pt. 60, Appendix F. The RATA shall be conducted during the calendar quarter in which a cylinder gas audit (CGA) is not performed. This requirement applies to each CO and SO ₂ CEMS individually. Conduct annual evaluations of your continuous emission monitoring systems no more than 13 months after the previous evaluation was conducted.	Minn. R. 7011.1260, subp. 5(G); Minn. R. 7007.0800, subp. 2; 40 CFR Section 62.15185(d); 40 CFR Section 62.15195(a)
Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA).	Minn. R. 7007.0800, subp. 2; Minn. R. 7017.1180, subp. 2
QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain all of the information required by 40 CFR pt. 60, Appendix F, Sect. 3. The plan shall include the manufacturer's spare parts list for each CEMS and require that those parts be kept at the facility unless the Commissioner gives written approval to exclude specific spare parts from the list.	Minn. R. 7017.1170, subp. 2
Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	Minn. R. 7017.1130
Exceedances of Continuously Monitored Emissions: If accurate and valid data results collected from the sulfur dioxide and/or carbon monoxide monitors exceed emission limits, the following procedures shall be followed. (1) Exceedance shall be reported to the Commissioner as soon as reasonably possible. (2) Appropriate repairs or modifications to return the waste combustor to compliance must be commenced within 72 hours. If compliance cannot be achieved within 72 hours, then the waste combustor shall be shut down. If modifications to return the waste combustor to compliance require the amendment of this permit, the waste combustor shall shut down within 72 hours of the exceedance.	Minn. R. 7011.1260, subp. 7
Exceedances of Continuously Monitored Emissions (continued): (3) When repairs or modifications have been completed, The Permittee shall demonstrate to the Commissioner that the waste combustor is in compliance. The waste combustor may be started up after the Permittee has notified the Commissioner in writing of the date the Permittee plans to start up the waste combustor and the date that performance testing is schedule. Notification shall be given at least 10 days in advance of the compliance test date.	Minn. R. 7011.1260, subp. 7 (continued)
H. RECORDKEEPING	hdr
Recordkeeping: Permittee will maintain a record of continuously measured parameters as specified in Minn. R. 7011.1260, subp. 6.	Minn. R. 7011.1260, subp. 6; Minn. R. 7007.0800, subp. 2; 40 CFR Section 62.15305(a) and (b)
The Permittee shall: - Keep all records on site in paper copy or electronic format. - Make all records available for submittal to the EPA Administrator or Commissioner, or for on-site review by the EPA Administrator or Commissioner.	Minn. R. 7011.1285, subp. 1; 40 CFR Section 62.15290
Recordkeeping: record in the daily operating record the four-hour arithmetic average gas stream temperature as measured at the fabric filter inlets (MR 005) during the most recent PCDD/PCDF performance test demonstrating compliance with the PCDD/PCDF emission limits in part 7011.1225 and 40 CFR 62.15160(a)(2).	Minn. R. 7011.1265, subp. 8; Minn. R. 7011.1240, subp. 2; Minn. R. 7007.0800, subp. 2; 40 CFR Section 62.15305(b)
Permittee shall maintain on site for five years after the report is generated, a paper copy of each quarterly report, initial compliance report, and performance test report required under Minn. R. 7011.1285, subparts 3, 5, and 6 respectively.	Minn. R. 7011.1285, subp. 1; 40 CFR Section 62.15300 (a)
Daily Operating Record: The Permittee shall maintain on-site daily records for the operation of each waste combustor. Daily records include such things as the operator log book, operator daily log sheets, trend records, CEMS records, and the daily operating report. The record shall contain: A. the calendar date; B. the hours of operation; B1. the time when waste begins feeding and the steam load at the time; B2. the time the waste feed to the combustion chamber ceases; C. the total weight of waste combusted; D. the weight of waste requiring disposal at a solid waste land disposal facility, including separated noncombustibles, excess waste, and ash; E. the amount and description of industrial solid waste received each day, the generator's name, and the method of handling;	Minn. R. 7011.1285, Minn. R. 7017.1130, Minn. R. 7007.0800, subp. 2; 40 CFR Section 62.15305 (a), (b), (c), and (d); Minn. R. 7011.1270, item B(3) regarding test frequency

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-40**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>Daily Operating Record (Continued)</p> <p>F. the measurements and determination of emissions averages as required in Minn. R. 7011.1260, subpart 6;</p> <p>G. results of performance tests conducted on waste combustor units as required in this permit;</p> <p>H. instances of dumpstack use;</p> <p>H1. the time when PM control equipment by-pass begins;</p> <p>H2. the time when PM control bypass ceases;</p> <p>I. the names of persons who have completed initial review or subsequent annual review of the operating manual;</p> <p>J. Continuous monitoring system records including:</p> <p>J1. each one-hour emission average recorded by the CEMS;</p> <p>J2. each six-minute opacity average recorded by the COMS;</p> <p>J3. monitor certification test reports;</p> <p>J4. excess emissions reports;</p> <p>J5. cylinder gas audit reports;</p> <p>J6. calibration error audit reports;</p> <p>J7. relative accuracy test audits;</p>	<p>Minn. R. 7011.1285, Minn. R. 7017.1130; Minn. R. 7007.0800, subp. 2; 40 CFR Section 62.15305 (a), (b), (c), and (d); Minn. R. 7011.1270, item B(3) regarding test frequency (continued)</p>
<p>Daily Operating Record (Continued)</p> <p>J8. linearity check reports;</p> <p>J9. results of daily calibration drift checks;</p> <p>J10. log of adjustments made to the CEMS or COMS and maintenance performed on the CEMS or COMS;</p> <p>J11. the reasons for exceeding any of the average emission rates, percent reductions, or operating parameters specified under Minn. R. 7011.1260, subpart 6, item C, or six-minute average COMS measurements that exceed the opacity limit and a description of corrective actions taken;</p> <p>J12. reasons for not obtaining the minimum number of hours of sulfur dioxide or operational data (opacity, carbon monoxide emissions, steam flow, particulate matter control device temperature) and a description of corrective actions taken.</p> <p>J13. the date of the calibration of all signal conversion elements associated with steam flow monitoring as required in Minn. R. 7011.1265, subp. 4.</p>	<p>Minn. R. 7011.1285; Minn. R. 7017.1130; Minn. R. 7007.0800, subp. 2; 40 CFR Section 62.15305 (a), (b), (c), and (d); Minn. R. 7011.1270, item B(3) regarding test frequency (Continued)</p>
<p>Daily Operating Record (continued)</p> <p>K. the following for control of Hg or dioxins, with an additive:</p> <p>K1. a record of the average additive system operating parameter for each hour of operation.</p> <p>K2. if the required hourly average additive system operating parameter is not maintained, the reasons for not maintaining the additive system operating parameter as determined in Minn. R. 7011.1272, subp. 2 and the corrective actions taken.</p> <p>K3. a record of the average additive mass feed rate for each hour of operation.</p> <p>K4. if the required hourly average additive mass feed rate is not maintained, the reasons for not maintaining the additive mass feed rates as determined in Minn. R. 7011.1272, subp. 1 and the corrective actions taken.</p> <p>L. Record of the pressure drop across the fabric filters.</p> <p>M. Record of acid gas control.</p>	<p>Minn. R. 7011.1285; Minn. R. 7017.1130; Minn. R. 7007.0800, subp. 2; 40 CFR Section 62.15305 (a), (b), (c), and (d); Minn. R. 7011.1270, item B(3) regarding test frequency (continued)</p>
<p>Daily Operating Record (Continued)</p> <p>N. Instances of dumpstack use specifically addressing the length of time the dumpstack was used, the operating conditions of the waste combustor during dumpstack used, and the reason for using the dumpstack.</p>	<p>Minn. R. 7011.1240, subp. 7; Minn. R. 7011.1285</p>
<p>Recordkeeping:</p> <p>The Permittee shall maintain a file of the following CEMS or COMS information at the emission facility in a form suitable for inspection for at least five years from the date of each record.</p> <ul style="list-style-type: none"> - all monitoring system information required by an applicable compliance document; and - an up-to-date monitor QA/QC plan. 	<p>Minn. R. 7017.1130</p>
<p>Recordkeeping, Exclusions of Data.</p> <p>The Permittee shall document each time data was excluded from calculation of averages for any of the following:</p> <ul style="list-style-type: none"> - Sulfur dioxide emissions. - Carbon monoxide emissions. - Unit load levels. - Temperatures of the flue gases at the inlet of the particulate matter control device. 	<p>40 CFR Section 62.15305 (e)</p>
<p>Recordkeeping: maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the facility including; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.</p>	<p>Minn. R. 7007.0800, subp. 2</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS
A-41

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>Recordkeeping, Training and Certification: The Permittee shall keep records of training courses completed and certifications achieved, including:</p> <p>i) Names of the chief facility operator, shift supervisors, and control room operators who are provisionally or fully certified by the American Society of Mechanical Engineers.</p> <ul style="list-style-type: none"> - Dates of the initial provisional or full certifications. - Documentation showing current provisional or full certifications. <p>ii) Names of the chief facility operator, shift supervisors, and control room operators who have completed the EPA or State municipal waste combustion operator training course.</p> <ul style="list-style-type: none"> - Dates of completion of the operator training course. <p>iii) Documentation showing completion of operator training course.</p> <ul style="list-style-type: none"> - Names of persons who have reviewed the operating manual. - Date of the initial review. - Dates of subsequent annual reviews. 	<p>Minn. R. 7011.1280, subp. 11; Minn. R. 7011.1284; Minn. R. 7011.1285, subp. 2(l); 40 CFR Section 62.15295 (a), (b), (c), and (d)</p>
<p>Recordkeeping and Recording of Mercury/PCDD/PCDF Control Additive Use: The Permittee shall maintain a record of:</p> <ul style="list-style-type: none"> - The average additive mass feed rate for each hour of operation. - All 8-hour block average mercury/PCDD/PCDF control additive feed rates in kilograms (pounds) per hour calculated from the monitored operating parameter. - Total mercury/PCDD/PCDF control additive purchased and delivered to the facility for each calendar quarter. Include supporting documentation. - Required quarterly usage of mercury/PCDD/PCDF control additive for the municipal waste combustion plant, calculated using the appropriate equation. - Supporting calculations. 	<p>Minn. R. 7011.1272, subp. 3; 40 CFR Section 62.15310 (a)</p>
<p>Recordkeeping, Records of Low Mercury/PCDD/PCDF Control Additive Feed Rates: The Permittee shall keep the following records regarding the periods when the average mercury/PCDD/PCDF control additive feed rate over an 8-hour block was less than the average mercury/PCDD/PCDF control additive feed rates determined during the most recent mercury/PCDD/PCDF performance test mercury which demonstrated compliance with the emissions limits:</p> <ul style="list-style-type: none"> - Calendar date(s) - Beginning and ending time - Reasons for the low mercury/PCDD/PCDF control additive feed rates. - Corrective actions taken to meet the 8-hour average mercury/PCDD/PCDF control additive feed rate requirement. <p>The Permittee shall also keep a record regarding data excluded from averaging calculations including the date(s) and time data was excluded from average feed rate calculations and the reasons the data were excluded.</p>	<p>40 CFR Section 62.15310 (b) and (d)</p>
<p>I. REPORTING</p>	<p>hdr</p>
<p>Quarterly Reports: The report shall contain the following items:</p> <p>A. calendar date;</p> <p>B. a graphic or tabular presentation of the sulfur dioxide and carbon monoxide emissions, the maximum waste combustor unit load level and particulate matter control device temperatures as recorded by Minn. R. 7011.1260, subp. 6, item C, and the daily maximum opacity readings as recorded by Minn. R. 7011.1260, subp. 6, item B, subitem (1). The graphs shall be prepared as follows:</p> <ol style="list-style-type: none"> (1) the graph shall represent one operating parameter or pollutant; (2) the applicable limit of the parameter or pollutant shall be indicated on the graph; and, (3) data shall be expressed in the same units as the applicable operating parameter or emissions limit; <p>C. instances of dumpstack use;</p>	<p>Minn. R. 7011.1285, subp. 3</p>
<p>Quarterly Reports (Continued):</p> <p>D. the identification of operating days when any of the average emission concentrations, percent reductions, operating parameters specified under Minn. R. 7011.1260, subp 6(C), Minn. R. 7011.1272, subp. 2 exceeded the applicable limits or any 6 minute average opacity greater than the opacity limit. The report shall include the emission levels recorded during the exceedance, reasons for such exceedances as well as a description of corrective actions taken;</p> <p>E. the percent of the operating time for the quarter that the COMS was operating and collecting valid data;</p> <p>F. the identification of operating days for which the minimum number of hours that emission concentrations, percent reductions, operating parameters specified under Minn. R. 7011.1260, subp. 6(C), Minn. R. 7011.1272, subp. 2 or the opacity level data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;</p>	<p>Minn. R. 7011.1285, subp. 3 (Continued)</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-42**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>Quarterly Reports (Continued)</p> <p>G. the results of daily sulfur dioxide and carbon monoxide CEMS drift tests and accuracy assessments as required in Minn. R. 7011.1260, subp. 5.</p> <p>H. the information required in Minn. R. 7011.1285, subp 2(C), (D), and (E), summarized to reflect quarterly totals;</p> <p>I. a compliance certification as required in Minn. R. 7007.0800, subp 6(C); and</p> <p>J. if an additive is used to comply with the mercury and/or PCDD/PCDF emission limits, the total additive used during the calendar quarter, as specified in Minn. R. 7011.1272, subp. 3(B), with supporting calculations. The total amount of additive purchased and delivered to the facility must be equal to or greater than the required quarterly usage of additive. Quarterly usage of the additive shall be determined in accordance with 40 CFR Section 62.15390.</p>	<p>Minn. R. 7011.1285, subp. 3 (Continued); 40 CFR Section 62.15145(d)</p>
<p>Reporting to the EPA Administrator:</p> <p>The Permittee shall submit to the EPA Administrator annual reports, plus semiannual reports for any emission or parameter level that does not meet the limits specified in this permit:</p> <ul style="list-style-type: none"> - Submit the annual report no later than February 1 of each year that follows the calendar year in which data was collected. - Submit semiannual report for data collected during the first half of a calendar year, by August 1 of that year. For data collected during the second half of the calendar year, submit semiannual report by February 1 of the following year. - The Permittee shall retain a copy of all reports on site for 5 years. - All information shall be reported in the units in which the limit or parameter is expressed. 	<p>40 CFR Section 62.15315</p>
<p>Annual Report: due Feb. 1 of each calendar year following permit issuance.</p>	<p>40 CFR Section 62.15340</p>
<p>Annual Report</p> <p>The annual report shall contain a summary of the following:</p> <ul style="list-style-type: none"> (a) The results of the annual performance test (b) A list of the highest average emission levels recorded, in the appropriate units. (c) The highest 6-minute opacity level measured. (d) For mercury/PCDD/PCDF control additive (additive) usage, <ul style="list-style-type: none"> (1) The average additive feed rates recorded during the most recent mercury performance tests. (2) The lowest 8-hour block average additive feed rate recorded during the year. (3) The total additive purchased and delivered to the facility (4) The required quarterly additive usage (e) The total number of days that the minimum number of hours of data was not obtained. Include the reasons for not obtaining the data and corrective actions taken to obtain the data in the future. (f) The number of hours data was excluded from the calculation of average levels (include the reasons for excluding it). <p>(continued below)</p>	<p>40 CFR Section 62.15340</p>
<p>Annual Report (continued)</p> <ul style="list-style-type: none"> (g) If eligible for reduced performance testing, a notice of the intent to begin a reduced performance testing schedule during the following calendar year (h) A summary of any emission or parameter level that did not meet the required limits (i) A summary of the data in paragraphs (a) through (d) of this section from the year preceding the reporting year. (j) Documentation of periods when all certified chief facility operators and certified shift supervisors are offsite for more than 12 hours. 	<p>40 CFR Section 62.15340 (continued)</p>
<p>Semiannual Compliance Report: due 31 days after end of each calendar half-year following Permit Issuance</p> <p>The Permittee shall submit to the EPA Administrator a semiannual report on any recorded emission or parameter level that does not meet the requirements specified. The Permittee shall submit semiannual report for data collected during the first half of a calendar year, by August 1 of that year. For data collected during the second half of the calendar year, submit semiannual report by February 1 of the following year. The Permittee shall retain a copy of all reports on site for 5 years. All information shall be reported in the units in which the limit or parameter is expressed.</p>	<p>40 CFR Section 62.15345; 40 CFR Section 62.15350</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-43**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

<p>Semiannual Report to the EPA Administrator: The Permittee shall submit a semiannual report if any recorded emission or parameter level does not meet the requirements specified in this permit. The semiannual report shall contain:</p> <p>(a) For any pollutants or parameters that exceeded the specified limits, include the calendar date, the averaged and recorded data for that date, the reasons for exceeding the limits, and corrective actions:</p> <p>(b) If the results of the annual performance tests show emissions above the specified limits, the semiannual report shall include a copy of the test report that documents the emission levels and corrective actions.</p>	40 CFR Section 62.15355
<p>Semiannual Report to the EPA Administrator: (continued)</p> <p>(c) If mercury/PCDD/PCDF control additive (additive) is used to control mercury and/or PCDD/PCD emissions, including two items:</p> <p>(1) Documentation of all dates when the 8-hour block average additive feed rate is less than the required additive feed rate. Including four items:</p> <ul style="list-style-type: none">- (i) Eight-hour average additive feed rate.- (ii) Reasons for the occurrences of low additive feed rates.- (iii) The corrective actions taken to meet the additive feed rate requirement.- (iv) The calendar date.	40 CFR Section 62.15355 (continued)
<p>Semiannual Report to the EPA Administrator: (continued)</p> <p>(2) Documentation of each quarter when total additive purchased and delivered is less than the total required quarterly usage of additive. Including five items:</p> <ul style="list-style-type: none">- (i) Amount of additive purchased and delivered.- (ii) Required quarterly usage of additive.- (iii) Reasons for not meeting the required quarterly usage of additive.- (iv) The corrective actions taken to meet the required quarterly usage of additive.- (v) The calendar date.	40 CFR Section 62.15355 (continued)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-44**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Subject Item: EU 005 Auxiliary Boiler w/ FGR and low NOx burners**Associated Items:** MR 015 Boiler Pressure

SV 004 Auxiliary Boiler Stack

What to do	Why to do it
The emission unit is permitted to burn only natural gas.	Minn. R. 7007.0800, subp. 2
Recordkeeping: By the last day of each calendar month, the Permittee shall record the amount of natural gas combusted in the boilers during the previous calendar month. These records shall consist of purchase records, receipts, or fuel meter readings.	40 CFR Section 60.48c(g); Minn. R. 7011.0570

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-45

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Subject Item: CE 001 Fabric Filter - High Temperature, i.e., T>250 Degrees F**Associated Items:** EU 002 North MSW Incinerator

MR 013 Baghouse Temp

MR 018 Baghouse Pressure Drop

What to do	Why to do it
Temperature: less than or equal to 422.7 degrees F using 4-hour Block Average as measured at the inlet to the PM control device (as determined during the May 23-26, 2011PCDD/PCDF performance test). Notwithstanding the previous sentence, upon the Commissioner's written notification that the emission unit has demonstrated compliance under the conditions of a PCDD/PCDF performance test and prior to incorporation of the new PM control device inlet temperature into this permit, the PM control device inlet temperature shall not exceed a temperature greater than 30 degrees Fahrenheit (17 degree C) greater than the PM control device inlet temperature established during that compliant performance test.	Minn. R. 7011.1240, subp. 2; Minn. R. 7017.2025, subp. 3; 40 CFR Section 62.15145 (b); 40 CFR Section 64.3
Temperature (continued): The waste combustor is exempt from limits on temperature at the inlet of the particulate matter control device during any of three situations: (1) Annual tests for dioxins/furans. (2) The 2 weeks preceding annual tests for dioxins/furans. (3) Whenever approved in writing by the EPA Administrator and Commissioner for any of following activities: (i) Evaluate system performance. (ii) Test new technology or control technologies. (iii) Perform diagnostic testing. (iv) Perform other activities to improve the performance of the waste combustor. (v) Perform other activities to advance the state of the art for emission controls for the waste combustor.	Minn. R. 7011.1240, subp. 2; Minn. R. 7017.2025, subp. 3; 40 CFR Section 62.15145(e)
Temperature (continued) The Permittee shall provide written notification submitted to the Commissioner and EPA Administrator 30 days prior to undertaking any of the activities described above in 3(i) - (v), with the following information: 1) a description of the proposed project, and the outcome the project is designed to evaluate; 2) how the project conforms with the activities described above for which the particulate matter control device inlet gas temperature limit can be waived; 3) the length of time the project will take to complete.	Minn. R. 7011.1240, subp. 2; Minn. R. 7017.2025, subp. 3; 40 CFR Section 62.15145(e)
Pressure Drop: greater than or equal to 0.5 inches of water column and less than or equal to 10 inches of water column, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. The Permittee shall record the pressure drop on a 4-hour block average when in operation. The recommended range of pressure drop shall be documented in the facility Operations and Maintenance Plan.	Minn. R. 7007.0800, subp. 2 and 14; 40 CFR Section 64.3
Recordkeeping of Pressure Drop. The Permittee shall record the time and date of each pressure drop reading and whether or not the recorded pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a.	Minn. R. 7007.0800, subp. 4 and 5
The Permittee shall operate and maintain the fabric filter at all times that any emission unit controlled by the fabric filter is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subp. 2 and 14
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions indicate evidence of fabric filter malfunction; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	40 CFR Section 64.7(d); Minn. R. 7017.0200

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-46**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.	40 CFR Section 64.7(b); Minn. R. 7017.0200
Periodic Inspections: At least once per semi-annually, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5 and 14; 40 CFR Section 64.3; Minn. R. 7017.0200
The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14; 40 CFR Section 64.7
The Permittee shall calibrate the pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration.	40 CFR Section 64.3; Minn. R. 7017.0200
As required by 40 CFR Section 64.9(a)(2), for the Semi-Annual Deviations Report listed in Table B of this permit and/or the Notification of Deviations Endangering Human Health and the Environment listed earlier in Table A of this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents.	40 CFR Section 64.9(a)(2); Minn. R. 7017.0200
Documentation of Need for Improved Compliance Assurance Monitoring (CAM): If the Permittee fails to achieve compliance with an emission limitation or standard for which the CAM monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change.	40 CFR Section 64.7(e); Minn. R. 7017.0200
The Permittee shall maintain CAM records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain the CAM records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.	40 CFR Section 64.9(b); Minn. R. 7017.0200

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-47**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Subject Item: CE 002 Dry Limestone Injection**Associated Items:** EU 002 North MSW Incinerator

What to do	Why to do it
<p>Reagent feedrate: For acid gas control (HCl), maintain reagent injection feedrate equal or greater than the most recent MPCA approved hourly feedrate performance test. Once per calendar day, there is to be a feedrate calibration. The compliance test is to be demonstrated, based on the average of three one-hour tests (lbs/hr). During the May 23-26, 2011 HCl compliance test, the average lime feed rate was 108.8 lb/hr.</p> <p>The Permittee shall use the same or similar reagent as used during the most recent compliant acid gas compliance test.</p>	Minn. R. 7017.0205, subp. 3a
The Permittee shall operate and maintain the reagent injection at all times that any emission unit controlled, by the reagent injection, is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subp. 2 and 14
Daily visual inspection to ensure that control equipment is properly operating (i.e., no plugging of reagent, proper reagent injection feedrate being maintained, etc.)	Minn. R. 7007.0800, subp. 4
<p>Recordkeeping:</p> <p>Keep a daily record of the reagent injection equipment inspection. The record will note any required corrective actions.</p> <p>Keep a daily record of the reagent feedrate calibrations to verify that the feedrate is equal to or greater than the hourly feedrate during the most recent MPCA approved compliance test.</p>	Minn. R. 7007.0800, subp. 4
<p>Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:</p> <ul style="list-style-type: none"> - fabric filter cleaning cycle indicates evidence of reagent injection malfunction; - the recorded feedrate is outside the required operating range; or - the reagent injection or any of its components are found during the inspections to need repair. <p>Corrective actions shall return the feedrate to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan. The Permittee shall keep a record of the type and date of any corrective action taken.</p>	Minn. R. 7007.0800, subp. 4, 5, and 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording feedrate as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the reagent injection is in operation.	Minn. R. 7007.0800, subp. 4; Minn. R. 7017.0200
Periodic Inspections: At least once semi-annually, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5 and 14
The Permittee shall operate and maintain the reagent injection in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-48**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Subject Item: CE 003 Activated Carbon Adsorption**Associated Items:** EU 002 North MSW Incinerator

What to do	Why to do it
Mercury additive feedrate: greater than or equal to 5.0 lbs/hour using 8-hour Block Average for CE 003 (as determined during the May 23-26, 2011 PCDD/PCDF performance test). Notwithstanding the previous sentence, upon the Commissioner's written notification that the emissions unit has demonstrated compliance under the conditions of a PCDD/PCDF or mercury performance test and prior to incorporation of the new mercury/PCDD/PCDF control additive feed rate into this permit, the Permittee shall maintain the greater of the following: the additive feed rate determined during the most recent compliant mercury performance test and the most recent compliant PCDD/PCDF performance test.	Minn. R. 7011.1272, subp. 2; 40 CFR Section 62.15145(c)
Mercury Additive Feedrate (continued): The waste combustor is exempt from limits on the mercury additive feedrate during any of three situations: (1) Annual tests for dioxins/furans. (2) The 2 weeks preceding annual tests for dioxins/furans. (3) Whenever approved in writing by the EPA Administrator and Commissioner for any of following activities: (i) Evaluate system performance. (ii) Test new technology or control technologies. (iii) Perform diagnostic testing. (iv) Perform other activities to improve the performance of the waste combustor. (v) Perform other activities to advance the state of the art for emission controls for the waste combustor.	Minn. R. 7011.1240, subp. 2; Minn. R. 7017.2025, subp. 3; 40 CFR Section 62.15145(e) (continued)
Mercury Additive Feedrate (continued) The Permittee shall provide written notification submitted to the Commissioner and EPA Administrator 30 days prior to undertaking any of the activities described above in 3(i) - (v), with the following information: 1) a description of the proposed project, and the outcome the project is designed to evaluate; 2) how the project conforms with the activities described above for which the activated carbon feedrate limit can be waived; 3) the length of time the project will take to complete.	Minn. R. 7011.1240, subp. 2; Minn. R. 7017.2025, subp. 3; 40 CFR Section 62.15145(e) (continued)
The Permittee shall operate and maintain the carbon injection, at all times, that any emission unit controlled, by the carbon injection, is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subp. 2 and 14
Daily visual inspection to ensure that carbon injection control equipment is properly operating (i.e., no plugging of carbon, etc.)	Minn. R. 7007.0800, subp. 4
Keep a daily record of the carbon injection equipment to verify that there is no plugging of the carbon.	Minn. R. 7007.0800, subp. 4
Keep a record of the carbon injection rate at all times the waste combustor is in operation.	Minn. R. 7007.0800, subp. 4(B)
The Permittee shall evaluate total mercury/PCDD/PCDF control additive usage for each calendar quarter. The total amount of additive purchased and delivered to the facility must be equal to or greater than the required quarterly usage of additive. Quarterly usage of additive shall be determined in accordance with 40 CFR Section 62.15390.	Minn. R. 7011.1272, subp. 2; 40 CFR Section 62.15145(d)
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - fabric filter cleaning cycle indicates evidence of carbon injection malfunction; - the recorded feedrate is outside the required operating range; or - the carbon injection or any of its components are found during the inspections to need repair. Corrective actions shall return the feedrate to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7007.0800, subp. 4, 5, and 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording feedrate as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the carbon injection is in operation.	Minn. R. 7007.0800, subp. 4; Minn. R. 7017.0200

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-49**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Periodic Inspections: At least once semi-annually, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5 and 14
The Permittee shall operate and maintain the carbon injection in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-50**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Subject Item: CE 004 Fabric Filter - High Temperature, i.e., T>250 Degrees F**Associated Items:** EU 001 South MSW Incinerator

MR 021 Baghouse Pressure Drop

What to do	Why to do it
Temperature: less than or equal to 0 degrees F using 4-hour Block Average as measured at the inlet to the PM control device (minimum temperature to be determined during the initial PCDD/PCDF compliance test). Notwithstanding the previous sentence, upon the Commissioner's written notification that the emission unit has demonstrated compliance under the conditions of a PCDD/PCDF performance test and prior to incorporation of the new PM control device inlet temperature into this permit, the PM control device inlet temperature shall not exceed a temperature greater than 30 degrees Fahrenheit (17 degree C) greater than the PM control device inlet temperature established during that compliant performance test.	Minn. R. 7011.1240, subp. 2; Minn. R. 7017.2025, subp. 3; 40 CFR Section 60.1200 (b); 40 CFR Section 64.3
Temperature (continued): The waste combustor is exempt from limits on temperature at the inlet of the particulate matter control device during any of three situations: (1) Annual tests for dioxins/furans. (2) The 2 weeks preceding annual tests for dioxins/furans. (3) Whenever approved in writing by the EPA Administrator and Commissioner for any of following activities: (i) Evaluate system performance. (ii) Test new technology or control technologies. (iii) Perform diagnostic testing. (iv) Perform other activities to improve the performance of the waste combustor. (v) Perform other activities to advance the state of the art for emission controls for the waste combustor.	Minn. R. 7011.1240, subp. 2; Minn. R. 7017.2025, subp. 3; 40 CFR Section 60.1200(e)
Temperature (continued) The Permittee shall provide written notification submitted to the Commissioner and EPA Administrator 30 days prior to undertaking any of the activities described above in 3(i) - (v), with the following information: 1) a description of the proposed project, and the outcome the project is designed to evaluate; 2) how the project conforms with the activities described above for which the particulate matter control device inlet gas temperature limit can be waived; 3) the length of time the project will take to complete.	Minn. R. 7011.1240, subp. 2; Minn. R. 7017.2025, subp. 3; 40 CFR Section 60.1200(e)
Pressure Drop: greater than or equal to 0.5 inches of water column and less than or equal to 10 inches of water column, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. The Permittee shall record the pressure drop on a 4-hour block average when in operation. The recommended range of pressure drop shall be documented in the facility Operations and Maintenance Plan.	Minn. R. 7007.0800, subp. 2 and 14; 40 CFR Section 64.3
Recordkeeping of Pressure Drop. The Permittee shall record the time and date of each pressure drop reading and whether or not the recorded pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a.	Minn. R. 7007.0800, subp. 4 and 5
The Permittee shall operate and maintain the fabric filter at all times that any emission unit controlled by the fabric filter is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subp. 2 and 14
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions indicate evidence of fabric filter malfunction; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subp. 4, 5, and 14; 40 CFR Section 64.7(d); Minn. R. 7017.0200

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-51**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.	Minn. R. 7007.0800, subp. 4; 40 CFR Section 64.7(b); Minn. R. 7017.0200
Periodic Inspections: At least once semi-annually, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5 and 14; 40 CFR Section 64.3; Minn. R. 7017.0200
The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14; 40 CFR Section 64.7
The Permittee shall calibrate the pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration.	40 CFR Section 64.3; Minn. R. 7017.0200
As required by 40 CFR Section 64.9(a)(2), for the Semi-Annual Deviations Report listed in Table B of this permit and/or the Notification of Deviations Endangering Human Health and the Environment listed earlier in Table A of this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents.	40 CFR Section 64.9(a)(2); Minn. R. 7017.0200
Documentation of Need for Improved Compliance Assurance Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the CAM monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change.	40 CFR Section 64.7(e); Minn. R. 7017.0200
The Permittee shall maintain CAM records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain the CAM records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.	40 CFR Section 64.9(b); Minn. R. 7017.0200

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-52**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Subject Item: CE 005 Dry Limestone Injection**Associated Items:** EU 001 South MSW Incinerator

What to do	Why to do it
<p>Reagent feedrate: For acid gas control (HCl), maintain reagent injection feedrate equal or greater than the most recent MPCA approved hourly feedrate compliance test (minimum reagent feedrate to be determined during the initial compliance test). Once per calendar day, there is to be a feedrate calibration. The compliance test is to be demonstrated, based on the average of three one-hour tests (lbs/hr).</p> <p>The Permittee shall use the same or similar reagent as used during the most recent compliant acid gas performance test.</p>	Minn. R. 7017.2025, subp. 3a
The Permittee shall operate and maintain the reagent injection at all times that any emission unit controlled, by the reagent injection, is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subp. 2 and 14
Daily visual inspection to ensure that control equipment is properly operating (i.e., no plugging of reagent, proper reagent injection feedrate being maintained, etc.)	Minn. R. 7007.0800, subp. 4
<p>Recordkeeping:</p> <p>Keep a daily record of the reagent injection equipment inspection. The record will note any required corrective actions.</p> <p>Keep a daily record of the feedrate calibrations to verify that the feedrate is equal to or greater than the hourly feedrate during the most recent MPCA approved compliance test.</p>	Minn. R. 7007.0800, subp. 4
<p>Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:</p> <ul style="list-style-type: none"> - fabric filter cleaning cycle indicates evidence of reagent injection malfunction; - the recorded feedrate is outside the required operating range; or - the reagent injection or any of its components are found during the inspections to need repair. <p>Corrective actions shall return the feedrate to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan. The Permittee shall keep a record of the type and date of any corrective action taken.</p>	Minn. R. 7007.0800, subp. 4, 5, and 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording feedrate as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the reagent injection is in operation.	Minn. R. 7007.0800, subp. 4; Minn. R. 7017.0200
Periodic Inspections: At least once semi-annually, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5 and 14
The Permittee shall operate and maintain the reagent injection in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-53**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Subject Item: CE 006 Activated Carbon Adsorption**Associated Items:** EU 001 South MSW Incinerator

What to do	Why to do it
Mercury additive feedrate: greater than or equal to the hourly feedrate (lb/hr) using 8-hour Block Average for CE 006 (minimum mercury additive feedrate to be determined during the initial PCDD/PCDF compliance test). Notwithstanding the previous sentence, upon the Commissioner's written notification that the emissions unit has demonstrated compliance under the conditions of a PCDD/PCDF or mercury performance test and prior to incorporation of the new mercury/PCDD/PCDF control additive feed rate into this permit, the Permittee shall maintain the greater of the following: the additive feed rate determined during the most recent compliant mercury performance test and the most recent compliant PCDD/PCDF performance test.	Minn. R. 7011.1272, subp. 2; 40 CFR Section 60.1200(c)
Mercury Additive Feedrate (continued): The waste combustor is exempt from limits on the mercury additive feedrate during any of three situations: (1) Annual tests for dioxins/furans. (2) The 2 weeks preceding annual tests for dioxins/furans. (3) Whenever approved in writing by the EPA Administrator and Commissioner for any of following activities: (i) Evaluate system performance. (ii) Test new technology or control technologies. (iii) Perform diagnostic testing. (iv) Perform other activities to improve the performance of the waste combustor. (v) Perform other activities to advance the state of the art for emission controls for the waste combustor.	Minn. R. 7011.1240, subp. 2; Minn. R. 7017.2025, subp. 3; 40 CFR Section 60.1200(e) (continued)
Mercury Additive Feedrate (continued) The Permittee shall provide written notification submitted to the Commissioner and EPA Administrator 30 days prior to undertaking any of the activities described above in 3(i) - (v), with the following information: 1) a description of the proposed project, and the outcome the project is designed to evaluate; 2) how the project conforms with the activities described above for which the activated carbon feedrate limit can be waived; 3) the length of time the project will take to complete.	Minn. R. 7011.1240, subp. 2; Minn. R. 7017.2025, subp. 3; 40 CFR Section 60.1200(e) (continued)
The Permittee shall operate and maintain the carbon injection, at all times, that any emission unit controlled, by the carbon injection, is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subp. 2 and 14
Daily visual inspection to ensure that carbon injection control equipment is properly operating (i.e., no plugging of carbon, etc.)	Minn. R. 7007.0800, subp. 4
Keep a daily record of the carbon injection equipment to verify that there is no plugging of the carbon.	Minn. R. 7007.0800, subp. 4
Keep a record of the carbon injection rate at all times the waste combustor is in operation.	Minn. R. 7007.0800, subp. 4(B)
The Permittee shall evaluate total mercury/PCDD/PCDF control additive usage for each calendar quarter. The total amount of additive purchased and delivered to the facility must be equal to or greater than the required quarterly usage of additive. Quarterly usage of additive shall be determined in accordance with 40 CFR Section 62.15390.	Minn. R. 7011.1272, subp. 2; 40 CFR Section 62.15145(d)
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - fabric filter cleaning cycle indicates evidence of carbon injection malfunction; - the recorded feedrate is outside the required operating range; or - the carbon injection or any of its components are found during the inspections to need repair. Corrective actions shall return the feedrate to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7007.0800, subp. 4, 5, and 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording feedrate as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the carbon injection is in operation.	Minn. R. 7007.0800, subp. 4; Minn. R. 7017.0200

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-54**

02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

Periodic Inspections: At least once semi-annually, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5 and 14
The Permittee shall operate and maintain the carbon injection in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14

TABLE B: SUBMITTALS**B-1** 02/20/13

Facility Name: Perham Resource Recovery Facility
Permit Number: 11100036 - 004

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

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

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

Chief Air Enforcement
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

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.

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.

Send any application for a permit or permit amendment to:

Fiscal Services
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

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

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

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS**B-2** 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Initial Compliance Status Report	due 60 days after achieving maximum capacity (i.e., the maximum load level) at which EU 001 will operate, but no later than 180 days after its initial startup. "Initial Startup" of EU 001 is defined as the first time waste is burned in the combustion unit after the new heat recovery boiler and new air pollution control equipment (CE 004, CE 005, and CE 006) for EU 001 are installed.	EU001
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup "Initial Startup" of EU 001 is defined as the first time waste is burned in the combustion unit after the new heat recovery boiler and new air pollution control equipment (CE 004, CE 005, and CE 006) for EU 001 are installed.	EU001
Notification of the Date Construction Began	due 30 days after Start Of Construction. Submit the unit name, number of EU 001, and the date construction began.	EU001
Notification	due 60 days after achieving maximum capacity	EU001
Notification	due 60 days before Equipment Installation (the continuous emissions monitoring system). The notification shall include plans and drawings of the system.	EU001
Relative Accuracy Test Audit (RATA) Results Summary	due 30 days after end of the calendar quarter in which the Audit was performed	MR016, MR019, MR022

TABLE B: RECURRENT SUBMITTALS**B-3** 02/20/13

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036 - 004

What to send	When to send	Portion of Facility Affected
COMS Calibration Error Audit Results Summary	due 30 days after end of each calendar quarter following COMS Certification Test	MR001, MR023
Cylinder Gas Audit (CGA) Results Summary	due 30 days after end of each calendar quarter following end of the calendar quarter in which the Audit was performed	MR016, MR019, MR022
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter following CEM Certification Test. The EER shall indicate all periods of monitor bypass and all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions.	Total Facility
Quarterly Report	due 30 days after end of each calendar quarter following Permit Issuance	EU002
Quarterly Report	due 30 days after end of each calendar quarter following Permit Issuance (-004)	EU001
Semiannual Compliance Report	due 31 days after end of each calendar half-year following Permit Issuance (-004). The Permittee shall submit to the EPA Administrator a semiannual report on any recorded emission or parameter level that does not meet the requirements specified. The Permittee shall submit semiannual report for data collected during the first half of a calendar year, by August 1 of that year. For data collected during the second half of the calendar year, submit semiannual report by February 1 of the following year. The Permittee shall retain a copy of all reports on site for 5 years. All information shall be reported in the units in which the limit or parameter is expressed.	EU001
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 30 days after end of each calendar year following Permit Issuance (for the previous calendar year). To be submitted on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility

APPENDIX MATERIAL

Facility Name: Perham Resource Recovery Facility

Permit Number: 11100036-004

APPENDIX A – INSIGNIFICANT ACTIVITIES

Activity	Criteria for Insignificant Status
Space Heaters	Minn. R. 7007.1300, subp. 3(B)(2)
Furnace with heat input of 135,000 Btu/hr	Minn. R. 7007.1300, subp. 3(B)(2)
Welding equipment.	Minn. R. 7007.1300, subp. 3(H)(3)
Fugitive emissions from roads and parking lots	Minn. R. 7007.1300, subp. 3(J)
Emission units with potential emissions of less than 2,000 pounds per year or actual emissions of one ton per year for particulate matter, particulate matter less than ten microns, nitrogen oxide, sulfur dioxide, and VOCs: MSW Unloading Waste pile Lime Storage Silo/Handling Cooling Towers	Minn. R. 7007.1300, subp. 4(B)
Use of paint sprayer – infrequent use	Minn. R. 7007.1300, subp. 3(K)
Minn. R. 7011.0710 and Minn. R. 7011.0715	Standards of Performance for Industrial Process Equipment. These standards apply to miscellaneous sources of particulate matter: MSW unloading, MRF, welding equipment, spray paint equipment, lime storage silo/handling, and cooling towers
Minn. R. 7011.0150	Preventing Particulate Matter from becoming Airborne. These standards apply to miscellaneous sources of fugitive particulate matter: MSW unloading, waste pile, emissions from roads and parking lots.

Minn. R. 7011.0710 and Minn. R. 7011.0715	Indirect Heating Equipment These standards apply to the space heaters and furnace with heat input of 135,000 btu/hr

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APPENDIX B – MODELING PARAMETERS

Stack	Description	PM10/PM2.5		NOx	
		g/s	lb/hr	g/s	lb/hr
SV001	Existing MWC Stack	0.332197913	2.6365495	NA ¹	NA ¹
SV004	Aux Boiler Stack	0.078395472	0.6222	0.330062	2.6196
SV009	New MWC Combined Stack	0.572755023	4.545775	10.86959	86.26852

Stack	Description	UTM Coordinates		Base Elevation	Stack Height	
		X(m)	Y(m)	(m)	(m)	(ft)
SV001	Existing MWC Stack	303507.800	5162965.200	416.120	22.860	75.0
SV004	Aux Boiler Stack	303519.200	5162962.200	416.100	27.127	89.0
SV009	New MWC Combined Stack	303503.922	5162964.682	416.130	38.100	125.0

Stack	Description	Exhaust Temperature		Exit Diameter		Exhaust Velocity	
		(K)	F	(m)	(ft)	(m/s)	acfm
SV001	Existing MWC Stack	458.150	365.000	1.2192	4.0	14.3505	35498.8
SV004	Aux Boiler Stack	377.599	220.001	1.2192	4.0	9.2059	22772.6
SV009	New MWC Combined Stack	435.928	325.000	1.2192	4.0	25.2654	62499.0

¹ SIL analysis was not performed for NO₂. Therefore, SV001 was not modeled for NO₂.

Existing MWC Stack was the former combined MWC stack that was removed for permit action -004, but was included for modeling existing conditions.

New MWC Combined Stack is the combined MWC stack that both the North and South Incinerators duct their exhaust into. This stack was approved in permit action -004.

In addition to the modeling of the PRRF facility itself, two additional buildings were included in the modeling. Building one has one tier with 4 corners and a height of 15.77 meters. Building 2 has two tiers, one with a height of 7.62 meters and nine corners, and one with a height of 17.83 meters and 14 corners. The coordinates of the corners are given in UTM coordinates (UTM zone 15N).

Number of buildings to be processed : 2

B2T1 has 1 tier(s) with a base elevation of 416.08 METERS

BUILDING NAME	TIER NUMBER	BLDG-TIER NUMBER	TIER HEIGHT	NO. OF CORNERS	CORNER X	COORDINATES Y
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B2T1	1	1	15.77	4		
					303504.50	5162948.90 meters
					(0.00	0.00) meters
					303510.20	5162948.90 meters
					(5.70	0.00) meters
					303510.20	5162943.60 meters
					(5.70	-5.30) meters
					303504.50	5162943.60 meters
					(0.00	-5.30) meters

B1T1 has 2 tier(s) with a base elevation of 416.13 METERS

BUILDING NAME	TIER NUMBER	BLDG-TIER NUMBER	TIER HEIGHT	NO. OF CORNERS	CORNER X	COORDINATES Y
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B1T1	1	3	7.62	14		
					303520.90	5162972.70 meters
					(16.40	23.80) meters
					303520.90	5162980.40 meters
					(16.40	31.50) meters
					303511.00	5162980.40 meters
					(6.50	31.50) meters
					303511.00	5162967.90 meters
					(6.50	19.00) meters
					303501.50	5162967.90 meters
					(-3.00	19.00) meters
					303501.50	5162953.00 meters
					(-3.00	4.10) meters
					303511.00	5162953.00 meters
					(6.50	4.10) meters
					303511.00	5162931.60 meters
					(6.50	-17.30) meters

				303530.00	5162931.60	meters
			(	25.50	-17.30)	meters
				303530.00	5162942.40	meters
			(	25.50	-6.50)	meters
				303556.10	5162942.40	meters
			(	51.60	-6.50)	meters
				303556.10	5162961.40	meters
			(	51.60	12.50)	meters
				303540.10	5162961.40	meters
			(	35.60	12.50)	meters
				303540.10	5162972.90	meters
			(	35.60	24.00)	meters
BIT1	2	4	17.83	9		
				303520.90	5162972.70	meters
			(	16.40	23.80)	meters
				303511.00	5162972.70	meters
			(	6.50	23.80)	meters
				303511.00	5162967.90	meters
			(	6.50	19.00)	meters
				303511.00	5162942.20	meters
			(	6.50	-6.70)	meters
				303549.00	5162942.40	meters
			(	44.50	-6.50)	meters
				303556.10	5162942.40	meters
			(	51.60	-6.50)	meters
				303556.10	5162961.40	meters
			(	51.60	12.50)	meters
				303540.10	5162961.40	meters
			(	35.60	12.50)	meters
				303540.10	5162972.90	meters
			(	35.60	24.00)	meters