

**Air Individual Permit  
Administrative Amendment  
00100024-103**

**Permittee:** American Peat Technology LLC

**Facility name:** American Peat Technology LLC  
36203 350th Ave  
Aitkin, MN 56431-5558  
Aitkin County

**Operating permit issuance date:** June 21, 2019

**Expiration date:** June 22, 2024

**Administrative Amendment:** March 10, 2020

**Permit characteristics:** Federal; Part 70/ True minor for NSR; True Minor for NSR

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

This permit amendment supersedes Air Emission Permit No. 00100024-102 and authorizes the Permittee to operate the stationary source at the address listed above unless otherwise noted in the permit. 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 are enforceable by U.S. Environmental Protection Agency (EPA) Administrator or citizens under the Clean Air Act.

*Signature:* *Toni Volkmeier*

*This document has been electronically signed.*

*for* Carolina Espejel-Schutt, P.E., Acting Manager  
Air Quality Permits Section  
Industrial Division

*for the Minnesota Pollution Control Agency*

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**1. Permit applications table**

Permit applications:

<b>Title description</b>	<b>Application receipt date</b>	<b>Action number</b>
Part 70 Permit	3/11/2019 (supplemental information received 4/24/2019)	00100024-102
Administrative Amendment	11/27/2019	00100024-103

## 2. Where to send submittals

Send submittals that are required to be submitted to the 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 Minn. R. 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send 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

Send any application for a permit or permit amendment to:

Fiscal Services – 6<sup>th</sup> Floor  
Minnesota Pollution Control Agency  
520 Lafayette Road North  
St. Paul, Minnesota 55155-4194

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

- a. Accumulated insignificant activities
- b. Installation of control equipment
- c. Replacement of an emissions unit, and
- d. Changes that contravene a permit term

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

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

**Or**

Email a signed and scanned PDF copy to:

[submitstacktest.pca@state.mn.us](mailto:submitstacktest.pca@state.mn.us)

*(for submittals related to stack testing)*

[AQRoutineReport.PCA@state.mn.us](mailto:AQRoutineReport.PCA@state.mn.us)

*(for other compliance submittals)*

(See complete email instructions in “Routine Air Report Instructions Letter” at

<http://www.pca.state.mn.us/nwqh472.>)

### 3. Facility description

The American Peat Technology LLC (Facility) is located at 36203 350th Avenue in Aitkin, Aitkin County, Minnesota.

American Peat Technology harvests, dries, and processes reed-sedge peat to create a granular or powdered peat product. Almost all equipment included in the permit has already been constructed and the facility is currently operating. The only exception is the venturi scrubbers, which have not yet been constructed but are not necessary for compliance with any permit limit or requirement.

The peat harvest is conducted on a yearly cycle. During the summer months, the peatland is disked to accelerate air drying, and pushed into windrows. In the winter, when the ground is frozen enough to support large trucks and machinery, the trucks are loaded up with the windrowed peat using a backhoe. The peat is then transported about one mile to the production plant, where it is added to a pile sized to hold two years of reserve material. The pile is continually cultivated to encourage evaporation and minimize water infiltration. Throughout the year, peat from the reserve pile is transferred into the processing building as needed using front end loaders.

The peat is screened to remove sticks and rocks, and is either fed straight into the processing plant Stage 1 dryers at approximately 80% moisture, or fed into an initial dewatering process using filter presses to reduce the moisture content. If it will be dewatered, the peat is first transferred to a large tank where it is mixed with water. At this time a dewatering polymer and calcium carbonate may be added. Reed Sedge Peat is naturally acidic so the calcium carbonate is used to increase the pH. The slurry is then piped into filter presses for dewatering. The dewatered (about 67% moisture) cakes of peat are conveyed to one of two Stage 1 dryer/combustors. The dryer/combustors consist of a combustion chamber where wood chips are burned for heat, and a rotary drying chamber where the peat and heated air are mixed. Each dryer/combustor is routed to a cyclone for product recovery and particulate matter control, and each cyclone will be vented to a venturi scrubber for particulate matter control, once the scrubbers are constructed. Stage 1 drying reduces the moisture content to about 35% - 40%. The semi-dry peat is conveyed to a ribbon mixer where it is mixed with Stage 2 dryer fines, which are fine peat particles that are recovered from the Stage 2 dryer cyclone, and "-30 fines" which are undersized peat particles that are recovered from the final screening of the granulated peat. Calcium carbonate may also be added at this step. After mixing, the peat is pelletized in pellet mills and conveyed to the Stage 2 belt dryer or the Stage 2 rotary dryer. The belt dryer conveys the pellets through a chamber that is heated with air from a wood chip and propane-fired process heater. The air from the belt dryer will be vented to a venturi scrubber once it is constructed. The Stage 2 rotary dryer is heated with propane only and is controlled by a cyclone and a venturi scrubber (once constructed). Stage 2 drying reduces the moisture content down to about 12%. The dried peat pellets are conveyed to one of two crumblers that grind the pellets into granules. Both crumblers vent to the a cyclone and venturi scrubber (once constructed). The product is then screened to separate the granules from the fines. The granules are put in super sacks (1 ton storage sacks) for storage or transport. The fines are either routed to size reduction, to storage in super sacks, or recycled back to the ribbon mixer and pellet mills. Peat that is sent to the size reduction unit is ground into a powder that is routed to a baghouse. The powder that is captured by the baghouse is collected and sent to hoppers and super sacks for storage or transport.

The main pollutants of concern are particulate matter (PM), particulate matter less than ten microns (PM<sub>10</sub>), and particulate matter less than 2.5 microns (PM<sub>2.5</sub>) from wood burning and peat drying and handling, and nitrogen dioxide, carbon monoxide, and hazardous air pollutants (HAPs) from wood burning. Cyclones, venturi scrubbers, and a baghouse are used at various parts of the process to control particulate matter.

This permit action is an Administrative Amendment under Minn. R. 7007.1400, subp. 1(H) to extend a performance test deadline in the permit.

4. Summary of subject items

SI ID: Description	Relationship type	Related SI ID: Description
TFAC 1: American Peat Technology LLC		
ACTV 1: All IA's		
EQUI 7: Stage #1 Dryer/Combustor #1	sends to	STRU 11: Scrubber exhaust
EQUI 7: Stage #1 Dryer/Combustor #1	sends to	STRU 12: Combustor start up stack
EQUI 7: Stage #1 Dryer/Combustor #1	is controlled by	TREA 9: Stage #1 Dryer Cyclone #1
EQUI 7: Stage #1 Dryer/Combustor #1	is controlled by	TREA 10: Stage #1 Dryer Scrubber #1
EQUI 8: Stage #1 Dryer/Combustor #2	sends to	STRU 11: Scrubber exhaust
EQUI 8: Stage #1 Dryer/Combustor #2	sends to	STRU 12: Combustor start up stack
EQUI 8: Stage #1 Dryer/Combustor #2	is controlled by	TREA 11: Stage #1 Dryer Cyclone #2
EQUI 8: Stage #1 Dryer/Combustor #2	is controlled by	TREA 12: Stage #1 Dryer Scrubber #2
EQUI 9: Stage #2 Rotary Dryer	sends to	STRU 11: Scrubber exhaust
EQUI 9: Stage #2 Rotary Dryer	is controlled by	TREA 12: Stage #1 Dryer Scrubber #2
EQUI 9: Stage #2 Rotary Dryer	is controlled by	TREA 13: Stage #2 Rotary Dryer Fines Cyclone
EQUI 10: Stage #2 Belt Dryer	sends to	STRU 11: Scrubber exhaust
EQUI 10: Stage #2 Belt Dryer	is controlled by	TREA 10: Stage #1 Dryer Scrubber #1
EQUI 11: Stage #2 Process Heater	sends to	STRU 14: Stage #2 process heater stack
EQUI 12: Crumbler 1	sends to	STRU 11: Scrubber

SI ID: Description	Relationship type	Related SI ID: Description
		exhaust
EQUI 12: Crumbler 1	is controlled by	TREA 12: Stage #1 Dryer Scrubber #2
EQUI 12: Crumbler 1	is controlled by	TREA 13: Stage #2 Rotary Dryer Fines Cyclone
EQUI 13: Size Reduction	sends to	STRU 13: Size reduction air sweep exhaust
EQUI 13: Size Reduction	is controlled by	TREA 14: Size Reduction Baghouse
EQUI 14: Crumbler 2	sends to	STRU 11: Scrubber exhaust
EQUI 14: Crumbler 2	is controlled by	TREA 12: Stage #1 Dryer Scrubber #2
EQUI 14: Crumbler 2	is controlled by	TREA 13: Stage #2 Rotary Dryer Fines Cyclone
STRU 7: Production Building		
STRU 8: Chip Storage Building		
STRU 9: Warehouse		
STRU 10: Main Baghouse		
STRU 11: Scrubber exhaust		
STRU 12: Combustor start up stack		
STRU 13: Size reduction air sweep exhaust		
STRU 14: Stage #2 process heater stack		
TREA 9: Stage #1 Dryer Cyclone #1	is controlled in series by	TREA 10: Stage #1 Dryer Scrubber #1
TREA 10: Stage #1 Dryer Scrubber #1		
TREA 11: Stage #1 Dryer Cyclone #2	is controlled in series by	TREA 12: Stage #1 Dryer Scrubber #2

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<b>SI ID: Description</b>	<b>Relationship type</b>	<b>Related SI ID: Description</b>
TREA 12: Stage #1 Dryer Scrubber #2		
TREA 13: Stage #2 Rotary Dryer Fines	is controlled in series by	TREA 12: Stage #1 Dryer

<b>SI ID: Description</b>	<b>Relationship type</b>	<b>Related SI ID: Description</b>
Cyclone		Scrubber #2
TREA 14: Size Reduction Baghouse		

## 5. Limits and other requirements

Requirement number	Requirement and citation
<b>TFAC 1</b>	<b>American Peat Technology LLC</b>
5.1.1	Permit Appendices: This permit contains appendices as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in Appendix A, Insignificant Activities and General Applicable Requirements. [Minn. R. 7007.0800, subp. 2]
5.1.2	<p>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.</p> <p>This permit shall not alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance. [Minn. R. 7007.1800(A)(2)]</p>
5.1.3	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 7009.0090. Compliance shall be demonstrated upon written request by the MPCA. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
5.1.4	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]
5.1.5	Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated. [Minn. R. 7007.0800, subp. 16(J), Minn. R. 7007.0800, subp. 2]
5.1.6	Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 16(J)]
5.1.7	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]
5.1.8	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]
5.1.9	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]
5.1.10	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)]



Requirement number	Requirement and citation
5.1.11	The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16. [Minn. R. 7007.0800, subp. 16]
5.1.12	Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in this permit. [Minn. R. ch. 7017]
5.1.13	<p>Performance Test Notifications and Submittals:</p> <p>Performance Test Notification and 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</p> <p>The Notification, Test Plan, and Test Report must be submitted in a format specified by the commissioner. [Minn. R. 7017.2017, Minn. R. 7017.2030, subps. 1-4, Minn. R. 7017.2035, subps. 1-2]</p>
5.1.14	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. [Minn. R. 7017.2025, subp. 3]
5.1.15	<p>Monitoring Equipment Calibration - The Permittee shall either:</p> <ol style="list-style-type: none"> <li>1. Calibrate or replace required monitoring equipment every 12 months; or</li> <li>2. Calibrate at the frequency stated in the manufacturer's specifications.</li> </ol> <p>For each monitor, the Permittee shall maintain a record of all calibrations, including the date conducted, and any corrective action that resulted. The Permittee shall include the calibration frequencies, procedures, and manufacturer's specifications (if applicable) in the Operations and Maintenance Plan. Any requirements applying to continuous emission monitors are listed separately in this permit. [Minn. R. 7007.0800, subp. 4(D)]</p>
5.1.16	Operation of Monitoring Equipment: Unless noted elsewhere in this permit, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system. [Minn. R. 7007.0800, subp. 4(D)]
5.1.17	Recordkeeping: Retain all records at the stationary source, unless otherwise specified within this permit, for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A). [Minn. R. 7007.0800, subp. 5(C)]
5.1.18	Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350, subp. 2), including records of the emissions resulting from those changes. [Minn. R. 7007.0800, subp. 5(B)]
5.1.19	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. [Minn. R. 7007.1200, subp. 4]
5.1.20	Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown

Requirement number	Requirement and citation
	<p>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. [Minn. R. 7019.1000, subp. 3]</p>
5.1.21	<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. [Minn. R. 7019.1000, subp. 2]</p>
5.1.22	<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"> <li>1. the cause of the deviation;</li> <li>2. the exact dates of the period of the deviation, if the deviation has been corrected;</li> <li>3. whether or not the deviation has been corrected;</li> <li>4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and</li> <li>5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation. [Minn. R. 7019.1000, subp. 1]</li> </ol>
5.1.23	<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. [Minn. R. 7019.1000, subp. 1]</p>
5.1.24	<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> <p>Upon adoption of a new or amended federal applicable requirement, and if there are 3 or more years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150 - 7007.1500]</p>
5.1.25	<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). [Minn. R. 7007.1400, subp. 1(H)]</p>
5.1.26	<p>Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance. Submit in a format specified by the Commissioner. [Minn. R. 7019.3000-7019.3100]</p>

Requirement number	Requirement and citation
5.1.27	Emission Fees: due 30 days after receipt of an MPCA bill. [Minn. R. 7002.0005-7002.0085]
5.1.28	The Permittee must submit a Risk Management Plan (RMP) under 40 CFR pt. 68. Each owner or operator of a stationary source, at which a regulated substance is present above a threshold quantity in a process, shall design and implement an accidental release prevention program. An initial RMP must be submitted no later than the latest of the following dates: 1) June 21, 1999; 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or 3) The date on which a regulated substance is first present above a threshold quantity in a process. A full update and resubmission of the RMP is required at least once every five years. The five-year anniversary date is reset whenever the Permittee fully updates and resubmits their RMP. Submit RMPs as specified by EPA as of the date of submission. [40 CFR pt. 68]
5.1.29	The Permittee currently uses ozone-depleting substances as defined in 40 CFR pt. 82. Sections 601-618 of the 1990 Clean Air Act Amendments and 40 CFR pt. 82 may apply to the facility. Read Sections 601-618 and 40 CFR pt. 82 to determine all the requirements that apply to the facility. [40 CFR pt. 82]
<b>EQUI 7</b>	<b>Stage #1 Dryer/Combustor #1</b>
5.2.1	Opacity <= 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0610, subp. 1(A)(2)]
5.2.2	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. [Minn. R. 7011.0610, subp. 1(A)(1)]
5.2.3	The Permittee shall vent emissions from EQUI 7 to control equipment meeting the requirements of TREA 9 and TREA 10 (once installed) whenever EQUI 7 operates. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0075, subp. 1]
<b>EQUI 8</b>	<b>Stage #1 Dryer/Combustor #2</b>
5.3.1	Opacity <= 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0610, subp. 1(A)(2)]
5.3.2	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. [Minn. R. 7011.0610, subp. 1(A)(1)]
5.3.3	The Permittee shall vent emissions from EQUI 8 to control equipment meeting the requirements of TREA 11 and TREA 12 (once installed) whenever EQUI 8 operates. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0075, subp. 1]
<b>EQUI 9</b>	<b>Stage #2 Rotary Dryer</b>
5.4.1	Opacity <= 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0610, subp. 1(A)(2)]
5.4.2	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. [Minn. R. 7011.0610, subp. 1(A)(1)]
5.4.3	The Permittee shall vent emissions from EQUI 9 to control equipment meeting the requirements of TREA 12 (once installed) and TREA 13 whenever EQUI 9 operates. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0075, subp. 1]
<b>EQUI 10</b>	<b>Stage #2 Belt Dryer</b>
5.5.1	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
5.5.2	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. [Minn. R. 7011.0715, subp. 1(A)]
5.5.3	The Permittee shall vent emissions from EQUI 10 to control equipment meeting the requirements of

Requirement number	Requirement and citation
	TREA 10 (once installed) whenever EQUI 10 operates. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0075, subp. 1]
<b>EQUI 11</b>	<b>Stage #2 Process Heater</b>
5.6.1	Fuel type: Natural gas only, by design. [Minn. R. 7005.0100, subp. 35a]
5.6.2	The Permittee shall keep records of fuel purchases showing fuel types. [Minn. R. 7007.0800, subp. 5]
5.6.3	Filterable Particulate Matter <= 0.40 pounds per million Btu heat input. The potential to emit from the unit is 0.33 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.0515, subp. 1]
5.6.4	Opacity <= 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0515, subp. 2]
5.6.5	Sulfur Dioxide <= 4.0 pounds per million Btu heat input while burning wood chips. The potential to emit from the unit is 0.025 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.0515, subp. 1]
<b>EQUI 12</b>	<b>Crumbler 1</b>
5.7.1	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
5.7.2	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. [Minn. R. 7011.0715, subp. 1(A)]
5.7.3	The Permittee shall vent emissions from EQUI 12 to control equipment meeting the requirements of TREA 12 (once installed) and TREA 13 whenever EQUI 12 operates. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0075, subp. 1]
<b>EQUI 13</b>	<b>Size Reduction</b>
5.8.1	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
5.8.2	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. [Minn. R. 7011.0715, subp. 1(A)]
5.8.3	The Permittee shall vent emissions from EQUI 13 to control equipment meeting the requirements of TREA 14 whenever EQUI 13 operates. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0075, subp. 1]
<b>EQUI 14</b>	<b>Crumbler 2</b>
5.9.1	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
5.9.2	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. [Minn. R. 7011.0715, subp. 1(A)]
5.9.3	The Permittee shall vent emissions from EQUI 14 to control equipment meeting the requirements of TREA 12 (once installed) and TREA 13 whenever EQUI 14 operates. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0075, subp. 1]
<b>STRU 11</b>	<b>Scrubber exhaust</b>
5.10.1	After the initial testing for PM, PM10, PM2.5, and VOC is complete, the Permittee shall verify that the facility potential emissions do not exceed the major source thresholds under 40 CFR 52.21(b)(1)(i). The Permittee shall do this by calculating the total facility potential to emit for each pollutant by taking the measured hourly emission rate multiplied by 8760 and adding that to the annual potential emissions from EQUI 11 and 13, which are the only emission units that do not vent to STRU 11. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
<b>TREA 9</b>	<b>Stage #1 Dryer Cyclone #1</b>
5.11.1	If the Permittee replaces TREA 9, the replacement control must meet or exceed the control efficiency

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	<p>requirements of TREA 9 as well as comply with all other requirements of TREA 9. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Minn. R. 7007.0800, subp. 2(B)]</p>
5.11.2	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for Particulate Matter $\geq$ 90 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
5.11.3	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 10 micron $\geq$ 78 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
5.11.4	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 2.5 micron $\geq$ 78 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B)]
5.11.5	<p>Pressure Drop <math>\geq</math> 4.0 and <math>\leq</math> 7.0 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.</p> <p>The Permittee shall record the pressure drop at least once every 24 hours when in operation. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation, as defined by Minn. R. 7007.0100, subp. 8a. [Minn. R. 7011.0075, subp. 1, Minn. R. 7011.0080(A)]</p>
5.11.6	The control equipment is listed control equipment under Minn. R. 7011.0060 to 7011.0080. The Permittee shall vent emissions from EQUI 7 to TREA 9 whenever EQUI 7 operates, and operate and maintain TREA 9 at all times that any emissions are vented to TREA 9. The Permittee shall document periods of non-operation of the control equipment TREA 9 whenever EQUI 7 is operating. [Minn. R. 7011.0075, subp. 1]
5.11.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the recorded values were within the ranges specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Minn. R. 7011.0080]
5.11.8	<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"> <li>- the recorded pressure drop is outside the required operating range; or</li> <li>- the cyclone or any of its components are found during the inspections to need repair.</li> </ul> <p>Corrective actions shall return the pressure drop 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 Operation and Maintenance (O &amp; M) Plan for the cyclone. The Permittee shall keep a record of the type and date of any corrective action taken for each cyclone. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p>
5.11.9	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 cyclone is in operation. [Minn. R. 7011.0075, subp. 3]
5.11.10	The Permittee shall maintain each piece of control equipment according to the control equipment

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	<p>manufacturer's specifications, and shall:</p> <p>A. maintain an inventory of spare parts that are subject to frequent replacement, as required by the manufacturing specification or documented in records under items H and I;</p> <p>B. train staff on the operation and monitoring of control equipment and troubleshooting, and train and require staff to respond to indications of malfunctioning equipment;</p> <p>C. thoroughly inspect all control equipment at least annually, or as required by the manufacturing specification;</p> <p>D. inspect monthly, or as required by the manufacturing specification, components that are subject to wear or plugging, for example: bearings, belts, hoses, fans, nozzles, orifices, and ducts;</p> <p>E. inspect quarterly, or as required by the manufacturing specification, components that are not subject to wear including structural components, housings, ducts, and hoods;</p> <p>F. check daily, or as required by the manufacturing specification, monitoring equipment, for example: pressure gauges, chart recorders, temperature indicators, and recorders;</p> <p>G. calibrate (or replace) annually, or as required by the manufacturing specification, all monitoring equipment;</p> <p>H. maintain a record of activities conducted in items A to G consisting of the activity completed, the date the activity was completed, and any corrective action taken; and</p> <p>I. maintain a record of parts replaced, repaired, or modified for the previous five years. [Minn. R. 7011.0075, subp. 2]</p>
<b>TREA 10</b>	<b>Stage #1 Dryer Scrubber #1</b>
5.12.1	<p>If the Permittee replaces TREA 10, the replacement control must meet or exceed the control efficiency requirements of TREA 10 as well as comply with all other requirements of TREA 10. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Minn. R. 7007.0800, subp. 2(B)]</p>
5.12.2	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for Particulate Matter $\geq 94$ percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
5.12.3	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 10 micron $\geq 84$ percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
5.12.4	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 2.5 micron $\geq 84$ percent control efficiency. [Minn. R. 7007.0800, subp. 2(B)]
5.12.5	<p>Water flow rate <math>\geq 2.0</math> gallons per minute, unless a new limit 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 limit shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The limit is final upon issuance of a permit amendment incorporating the change.</p> <p>The Permittee shall record the water flow rate at least once every 24 hours when in operation. If the recorded flow rate is below the minimum flow rate limit, the emissions during that time shall be considered uncontrolled until the flow rate is once again above the minimum flow rate limit. The period of time for which the flow rate is below the minimum limit shall be reported as a deviation, as defined by Minn. R. 7007.0100, subp. 8a. [Minn. R. 7011.0075, subp. 1, Minn. R. 7011.0080(A)]</p>
5.12.6	Pressure Drop $\geq 11.0$ and $\leq 18.0$ inches of water, 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

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	<p>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.</p> <p>The Permittee shall record the pressure drop at least once every 24 hours when in operation. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation, as defined by Minn. R. 7007.0100, subp. 8a. [Minn. R. 7011.0075, subp. 1, Minn. R. 7011.0080(A)]</p>
5.12.7	<p>The control equipment is listed control equipment under Minn. R. 7011.0060 to 7011.0080. The Permittee shall vent emissions from EQUI 7 and EQUI 10 to TREA 10 (once installed) whenever EQUI 7 or EQUI 10 operates, and operate and maintain TREA 10 at all times that any emissions are vented to TREA 10. The Permittee shall document periods of non-operation of the control equipment TREA 10 whenever EQUI 7 or EQUI 10 is operating. [Minn. R. 7011.0075, subp. 1]</p>
5.12.8	<p>Recordkeeping of Pressure Drop and Water Flow Rate: The Permittee shall record the time and date of each pressure drop reading and water flow rate reading, and whether or not the recorded values were within the ranges specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Minn. R. 7011.0080]</p>
5.12.9	<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"> <li>- the recorded flow rate is below the required rate;</li> <li>- the recorded pressure drop is outside the required operating range; or</li> <li>- the scrubber or any of its components are found during the inspections to need repair.</li> </ul> <p>Corrective actions shall return the pressure drop and/or water flow rate to within the permitted range(s), 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 Operation and Maintenance (O &amp; M) Plan for the scrubber. The Permittee shall keep a record of the type and date of any corrective action taken for the scrubber. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p>
5.12.10	<p>Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop and water flow rate as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored scrubber is in operation. [Minn. R. 7011.0075, subp. 3]</p>
5.12.11	<p>The Permittee shall maintain each piece of control equipment according to the control equipment manufacturer's specifications, and shall:</p> <ul style="list-style-type: none"> <li>A. maintain an inventory of spare parts that are subject to frequent replacement, as required by the manufacturing specification or documented in records under items H and I;</li> <li>B. train staff on the operation and monitoring of control equipment and troubleshooting, and train and require staff to respond to indications of malfunctioning equipment;</li> <li>C. thoroughly inspect all control equipment at least annually, or as required by the manufacturing specification;</li> <li>D. inspect monthly, or as required by the manufacturing specification, components that are subject to wear or plugging, for example: bearings, belts, hoses, fans, nozzles, orifices, and ducts;</li> <li>E. inspect quarterly, or as required by the manufacturing specification, components that are not subject to wear including structural components, housings, ducts, and hoods;</li> <li>F. check daily, or as required by the manufacturing specification, monitoring equipment, for example: pressure gauges, chart recorders, temperature indicators, and recorders;</li> <li>G. calibrate (or replace) annually, or as required by the manufacturing specification, all monitoring equipment;</li> <li>H. maintain a record of activities conducted in items A to G consisting of the activity completed, the</li> </ul>

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	date the activity was completed, and any corrective action taken; and l. maintain a record of parts replaced, repaired, or modified for the previous five years. [Minn. R. 7011.0075, subp. 2]
<b>TREA 11</b>	<b>Stage #1 Dryer Cyclone #2</b>
5.13.1	If the Permittee replaces TREA 11, the replacement control must meet or exceed the control efficiency requirements of TREA 11 as well as comply with all other requirements of TREA 11. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.  If no amendment is needed for the replacement, the Permittee shall submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Minn. R. 7007.0800, subp. 2(B)]
5.13.2	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for Particulate Matter $\geq 90$ percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
5.13.3	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 10 micron $\geq 78$ percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
5.13.4	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 2.5 micron $\geq 78$ percent control efficiency. [Minn. R. 7007.0800, subp. 2(B)]
5.13.5	Pressure Drop $\geq 4.0$ and $\leq 7.0$ 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 at least once every 24 hours when in operation. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation, as defined by Minn. R. 7007.0100, subp. 8a. [Minn. R. 7011.0075, subp. 1, Minn. R. 7011.0080(A)]
5.13.6	The control equipment is listed control equipment under Minn. R. 7011.0060 to 7011.0080. The Permittee shall vent emissions from EQUI 8 to TREA 11 whenever EQUI 8 operates, and operate and maintain TREA 11 at all times that any emissions are vented to TREA 11. The Permittee shall document periods of non-operation of the control equipment TREA 11 whenever EQUI 8 is operating. [Minn. R. 7011.0075, subp. 1]
5.13.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the recorded values were within the ranges specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Minn. R. 7011.0080]
5.13.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the cyclone 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, 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 Operation and Maintenance (O & M) Plan for the cyclone. The Permittee shall keep a record of the type and date of any corrective action taken for the cyclone. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]



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5.13.9	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 cyclone is in operation. [Minn. R. 7011.0075, subp. 3]
5.13.10	<p>The Permittee shall maintain each piece of control equipment according to the control equipment manufacturer's specifications, and shall:</p> <p>A. maintain an inventory of spare parts that are subject to frequent replacement, as required by the manufacturing specification or documented in records under items H and I;</p> <p>B. train staff on the operation and monitoring of control equipment and troubleshooting, and train and require staff to respond to indications of malfunctioning equipment;</p> <p>C. thoroughly inspect all control equipment at least annually, or as required by the manufacturing specification;</p> <p>D. inspect monthly, or as required by the manufacturing specification, components that are subject to wear or plugging, for example: bearings, belts, hoses, fans, nozzles, orifices, and ducts;</p> <p>E. inspect quarterly, or as required by the manufacturing specification, components that are not subject to wear including structural components, housings, ducts, and hoods;</p> <p>F. check daily, or as required by the manufacturing specification, monitoring equipment, for example: pressure gauges, chart recorders, temperature indicators, and recorders;</p> <p>G. calibrate (or replace) annually, or as required by the manufacturing specification, all monitoring equipment;</p> <p>H. maintain a record of activities conducted in items A to G consisting of the activity completed, the date the activity was completed, and any corrective action taken; and</p> <p>I. maintain a record of parts replaced, repaired, or modified for the previous five years. [Minn. R. 7011.0075, subp. 2]</p>
<b>TREA 12</b>	<b>Stage #1 Dryer Scrubber #2</b>
5.14.1	<p>If the Permittee replaces TREA 12, the replacement control must meet or exceed the control efficiency requirements of TREA 12 as well as comply with all other requirements of TREA 12. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Minn. R. 7007.0800, subp. 2(B)]</p>
5.14.2	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the 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 or water flow rate, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.14.3	As required by 40 CFR Section 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by 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 64.9(a)(2), Minn. R. 7017.0200]
5.14.4	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or

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	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 64.9(b), Minn. R. 7017.0200]
5.14.5	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for Particulate Matter $\geq$ 94 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
5.14.6	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 10 micron $\geq$ 84 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
5.14.7	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 2.5 micron $\geq$ 84 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B)]
5.14.8	<p>Pressure Drop <math>\geq</math> 11.0 and <math>\leq</math> 18.0 inches of water, 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.</p> <p>If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation, as defined by Minn. R. 7007.0100, subp. 8a. [Minn. R. 7011.0075, subp. 1, Minn. R. 7011.0080(A)]</p>
5.14.9	<p>Water flow rate <math>\geq</math> 2.0 gallons per minute, unless a new limit 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 limit shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The limit is final upon issuance of a permit amendment incorporating the change.</p> <p>If the recorded water flow rate is below the Water Flow Rate Limit, the emissions during that time shall be considered uncontrolled until the water flow rate is above the Water Flow Rate Limit. The period of time for which emissions are considered uncontrolled shall be reported as a deviation. [Minn. R. 7011.0075, subp. 1, Minn. R. 7011.0080(A)]</p>
5.14.10	The Permittee shall operate and maintain the scrubber 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]
5.14.11	Daily Inspections: The Permittee shall do the following, once each day of operation: 1). Read and record the scrubber liquid flow rate; and 2). Read and record the gas pressure drop across the scrubber. [Minn. R. 7007.0800, subps. 4-5]
5.14.12	Recordkeeping of Pressure Drop and Water Flow Rate: The Permittee shall record the time and date of each pressure drop reading and water flow rate reading, and whether or not the observed value was within the range specified in this permit. Recorded values outside any range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [40 CFR 64.9(b), Minn. R. 7011.0080, Minn. R. 7017.0200]
5.14.13	The control equipment is listed control equipment under Minn. R. 7011.0060 to 7011.0080. The Permittee shall vent emissions from EQUI 8, EQUI 9, EQUI 12, and EQUI 14 to TREA 12 (once installed) whenever EQUI 8, EQUI 9, EQUI 12, or EQUI 14 operates, and operate and maintain TREA 12 at all times that any emissions are vented to TREA 12. The Permittee shall document periods of non-operation of the control equipment TREA 12 whenever EQUI 8, EQUI 9, EQUI 12, or EQUI 14 is operating. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0075, subp. 1]
5.14.14	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment

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	for measuring and recording pressure drop, water flow rate, and water supply pressure as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored scrubber is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.14.15	The Permittee shall calibrate the gauges at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.14.16	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.14.17	<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"> <li>- the recorded water flow rate is below the water flow rate limit; or</li> <li>- the recorded pressure drop is outside the required operating range; or</li> <li>- the scrubber or any of its components are found during the inspections to need repair.</li> </ul> <p>Corrective actions shall return the pressure drop and/or water flow rate 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 &amp; M Plan for the scrubber. The Permittee shall keep a record of the type and date of any corrective action taken for the filter. [40 CFR 64.7(d), Minn. R. 7017.0200]</p>
<b>TREA 13</b>	<b>Stage #2 Rotary Dryer Fines Cyclone</b>
5.15.1	<p>If the Permittee replaces TREA 13, the replacement control must meet or exceed the control efficiency requirements of TREA 13 as well as comply with all other requirements of TREA 13. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Minn. R. 7007.0800, subp. 2(B)]</p>
5.15.2	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for Particulate Matter $\geq 90$ percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
5.15.3	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 10 micron $\geq 78$ percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
5.15.4	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 2.5 micron $\geq 78$ percent control efficiency. [Minn. R. 7007.0800, subp. 2(B)]
5.15.5	<p>Pressure Drop <math>\geq 4.0</math> and <math>\leq 7.0</math> inches of water, 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.</p> <p>The Permittee shall record the pressure drop at least once every 24 hours when in operation. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation, as defined by Minn. R. 7007.0100, subp. 8a. [Minn. R. 7011.0075, subp. 1, Minn. R. 7011.0080(A)]</p>
5.15.6	The control equipment is listed control equipment under Minn. R. 7011.0060 to 7011.0080. The Permittee shall vent emissions from EQUI 9 and EQUI 12 to TREA 13 whenever EQUI 9 or EQUI 12

Requirement number	Requirement and citation
	operates, and operate and maintain TREA 13 at all times that any emissions are vented to TREA 13. The Permittee shall document periods of non-operation of the control equipment TREA 13 whenever EQUI 9 or EQUI 12 is operating. [Minn. R. 7011.0075, subp. 1]
5.15.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the recorded values were within the ranges specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Minn. R. 7011.0080]
5.15.8	<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"> <li>- the recorded pressure drop is outside the required operating range; or</li> <li>- the cyclone or any of its components are found during the inspections to need repair.</li> </ul> <p>Corrective actions shall return the pressure drop 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 Operation and Maintenance (O &amp; M) Plan for the cyclone. The Permittee shall keep a record of the type and date of any corrective action taken for each cyclone. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p>
5.15.9	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 cyclone is in operation. [Minn. R. 7011.0075, subp. 3]
5.15.10	<p>The Permittee shall maintain each piece of control equipment according to the control equipment manufacturer's specifications, and shall:</p> <ul style="list-style-type: none"> <li>A. maintain an inventory of spare parts that are subject to frequent replacement, as required by the manufacturing specification or documented in records under items H and I;</li> <li>B. train staff on the operation and monitoring of control equipment and troubleshooting, and train and require staff to respond to indications of malfunctioning equipment;</li> <li>C. thoroughly inspect all control equipment at least annually, or as required by the manufacturing specification;</li> <li>D. inspect monthly, or as required by the manufacturing specification, components that are subject to wear or plugging, for example: bearings, belts, hoses, fans, nozzles, orifices, and ducts;</li> <li>E. inspect quarterly, or as required by the manufacturing specification, components that are not subject to wear including structural components, housings, ducts, and hoods;</li> <li>F. check daily, or as required by the manufacturing specification, monitoring equipment, for example: pressure gauges, chart recorders, temperature indicators, and recorders;</li> <li>G. calibrate (or replace) annually, or as required by the manufacturing specification, all monitoring equipment;</li> <li>H. maintain a record of activities conducted in items A to G consisting of the activity completed, the date the activity was completed, and any corrective action taken; and</li> <li>I. maintain a record of parts replaced, repaired, or modified for the previous five years. [Minn. R. 7011.0075, subp. 2]</li> </ul>
<b>TREA 14</b>	<b>Size Reduction Baghouse</b>
5.16.1	<p>If the Permittee replaces TREA 14, the replacement control must meet or exceed the control efficiency requirements of TREA 14 as well as comply with all other requirements of TREA 14. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Minn. R. 7007.0800, subp. 2(B)]</p>

Requirement number	Requirement and citation
5.16.2	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for Particulate Matter $\geq 99$ percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
5.16.3	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 10 micron $\geq 93$ percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
5.16.4	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 2.5 micron $\geq 93$ percent control efficiency. [Minn. R. 7007.0800, subp. 2(B)]
5.16.5	<p>Pressure Drop <math>\geq 1.0</math> and <math>\leq 3.0</math> 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.</p> <p>If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Minn. R. 7011.0080]</p>
5.16.6	Visible Emissions: The Permittee shall check the fabric filter stack (STRU 13) for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7011.0080]
5.16.7	Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7011.0080]
5.16.8	The control equipment is listed control equipment under Minn. R. 7011.0060 to 7011.0080. The Permittee shall vent emissions from EQUI 13 to TREA 14 whenever EQUI 13 operates, and operate and maintain TREA 14 at all times that any emissions are vented to TREA 14. The Permittee shall document periods of non-operation of the control equipment TREA 14 whenever EQUI 13 is operating. [Minn. R. 7011.0075, subp. 1]
5.16.9	<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"> <li>- visible emissions are observed;</li> <li>- the recorded pressure drop is outside the required operating range; or</li> <li>- the fabric filter or any of its components are found during the inspections to need repair.</li> </ul> <p>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 &amp; 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. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p>
5.16.10	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. 7011.0075, subp. 3]
5.16.11	The Permittee shall maintain each piece of control equipment according to the control equipment manufacturer's specifications, and shall:

Requirement number	Requirement and citation
	<p>A. maintain an inventory of spare parts that are subject to frequent replacement, as required by the manufacturing specification or documented in records under items H and I;</p> <p>B. train staff on the operation and monitoring of control equipment and troubleshooting, and train and require staff to respond to indications of malfunctioning equipment;</p> <p>C. thoroughly inspect all control equipment at least annually, or as required by the manufacturing specification;</p> <p>D. inspect monthly, or as required by the manufacturing specification, components that are subject to wear or plugging, for example: bearings, belts, hoses, fans, nozzles, orifices, and ducts;</p> <p>E. inspect quarterly, or as required by the manufacturing specification, components that are not subject to wear including structural components, housings, ducts, and hoods;</p> <p>F. check daily, or as required by the manufacturing specification, monitoring equipment, for example: pressure gauges, chart recorders, temperature indicators, and recorders;</p> <p>G. calibrate (or replace) annually, or as required by the manufacturing specification, all monitoring equipment;</p> <p>H. maintain a record of activities conducted in items A to G consisting of the activity completed, the date the activity was completed, and any corrective action taken; and</p> <p>I. maintain a record of parts replaced, repaired, or modified for the previous five years. [Minn. R. 7011.0075, subp. 2]</p>

## 6. Submittal/action requirements

This section lists most of the submittals required by this permit. Please note that some submittal requirements may appear in the Limits and Other Requirements section, or, if applicable, within a Compliance Schedule section.

Requirement number	Requirement and citation
<b>TFAC 1</b>	<b>American Peat Technology LLC</b>
6.1.1	The Permittee shall submit a semiannual deviations report : Due semiannually, by the 30th of January and July. 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. Submit this on form DRF-2 (Deviation Reporting Form). If no deviations have occurred, submit the signed report certifying that there were no deviations. [Minn. R. 7007.0800, subp. 6(A)(2)]
6.1.2	The Permittee shall submit a compliance certification : Due annually, by the 31st of January (for the previous calendar year). Submit this on form CR-04 (Annual Compliance Certification Report). This report covers all deviations experienced during the calendar year. If no deviations have occurred, submit the signed report certifying that there were no deviations. [Minn. R. 7007.0800, subp. 6(C)]
6.1.3	The Permittee shall submit an application for permit reissuance : Due 180 calendar days before Permit Expiration Date. [Minn. R. 7007.0400, subp. 2]
<b>EQUI 11</b>	<b>Stage #2 Process Heater</b>
6.2.1	<p>Opacity: The Permittee shall conduct a performance test due before 180 days after 6/21/2019 and every 60 months thereafter to measure opacity.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below, unless further testing is not required. Further testing will not be required if the first test measures opacity less than 10%. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval.</p>

Requirement number	Requirement and citation
	<p>Testing conducted during the 60 days prior to the performance test due date will not reset the test due date for future testing as required by this permit or within a Notice of Compliance letter.</p> <p>Testing conducted more than 60 days prior to the performance test due date satisfies this test due date requirement but will reset future performance test due dates based on the performance test date. [Minn. R. 7017.2020, subp. 1, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]</p>
<b>STRU 11</b>	<b>Scrubber exhaust</b>
6.3.1	<p>PM &lt; 10 micron: The Permittee shall conduct a performance test due 180 days after permit issuance and every 120 months thereafter to verify the STRU 11 emission factor for PM &lt; 10 micron.</p> <p>The deadline for the first test is extended to 4/16/2020. Subsequent tests are due 12/18/2029 and every 120 months thereafter.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 120 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval.</p> <p>Testing conducted during the 60 days prior to the performance test due date will not reset the test due date for future testing as required by this permit or within a Notice of Compliance letter.</p> <p>Testing conducted more than 60 days prior to the performance test due date satisfies this test due date requirement but will reset future performance test due dates based on the performance test date. [Minn. R. 7017.2020, subp. 1, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]</p>
6.3.2	<p>PM &lt; 2.5 micron: The Permittee shall conduct a performance test due 180 days after permit issuance and every 120 months thereafter to verify the emission factor of PM &lt; 2.5 microns.</p> <p>The deadline for the first test is extended to 4/16/2020. Subsequent tests are due 12/18/2029 and every 120 months thereafter.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 120 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval.</p> <p>Testing conducted during the 60 days prior to the performance test due date will not reset the test due date for future testing as required by this permit or within a Notice of Compliance letter.</p> <p>Testing conducted more than 60 days prior to the performance test due date satisfies this test due date requirement but will reset future performance test due dates based on the performance test date. [Minn. R. 7017.2020, subp. 1, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]</p>
6.3.3	<p>Particulate Matter: The Permittee shall conduct a performance test due 180 days after permit issuance and every 120 months thereafter to verify the emission factor of Particulate Matter.</p>

Requirement number	Requirement and citation
	<p>The deadline for the first test is extended to 4/16/2020. Subsequent tests are due 12/18/2029 and every 120 months thereafter.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5 and 202, or other method approved by MPCA in the performance test plan approval.</p> <p>Testing conducted during the 60 days prior to the performance test due date will not reset the test due date for future testing as required by this permit or within a Notice of Compliance letter.</p> <p>Testing conducted more than 60 days prior to the performance test due date satisfies this test due date requirement but will reset future performance test due dates based on the performance test date. [Minn. R. 7017.2020, subp. 1, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]</p>
6.3.4	<p>Volatile Organic Compounds: The Permittee shall conduct a performance test due 180 days after permit issuance and every 120 months thereafter to verify the emission factor of Volatile Organic Compounds.</p> <p>The deadline for the first test is extended to 4/16/2020. Subsequent tests are due 12/18/2029 and every 120 months thereafter.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 120 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 25A, or other method approved by MPCA in the performance test plan approval.</p> <p>Testing conducted during the 60 days prior to the performance test due date will not reset the test due date for future testing as required by this permit or within a Notice of Compliance letter.</p> <p>Testing conducted more than 60 days prior to the performance test due date satisfies this test due date requirement but will reset future performance test due dates based on the performance test date. [Minn. R. 7017.2020, subp. 1, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]</p>



## 7. Appendices

### Appendix A. Insignificant activities and general applicable requirements

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

Minn. R.	Rule description of the activity	General applicable requirement
Minn. R. 7007.1300, subp. 3(A)	Fuel Use: space heaters fueled by kerosene, natural gas, or propane, less than 420,000 Btu/hr <ul style="list-style-type: none"> <li>• <i>APT has two heating units with heat input capacity of 190,000 Btu/hr each</i></li> </ul>	PM <= 0.4 lb/MMBtu, depending on year constructed Opacity <= 20% with exceptions (Minn. R. 7011.0515)
Minn. R. 7007.1300, subp. 4	Individual units with potential or actual emissions meeting the criteria in Minn. R. 7007.1300, subp. 4(A)-(D) <ul style="list-style-type: none"> <li>• <i>APT has internally vented conveyors/drop points, screeners, and a surge bin with emissions under the thresholds of this subpart</i></li> </ul>	PM, variable depending on airflow Opacity <= 20% (Minn. R. 7011.0715)
Minn. R. 7007.1300, subp. 3(D)	Emissions from a laboratory, as defined in Minn. R. 7007.1300, subp. 3(d). <ul style="list-style-type: none"> <li>• <i>APT has an onsite laboratory with a lab hood and atomic absorption spectroscopy machine</i></li> </ul>	PM, variable depending on airflow Opacity <= 20% (Minn. R. 7011./0715)
Minn. R. 7007.1300, subp. 3(E)	Brazing, soldering, torch-cutting, or welding equipment <ul style="list-style-type: none"> <li>• <i>APT has welding equipment</i></li> </ul>	PM, variable depending on airflow Opacity <= 20% (Minn. R. 7011.0715)
Minn. R. 7007.1300, subp. 3(F)	Individual units with potential emissions less than 2000 lb/year of certain pollutants <ul style="list-style-type: none"> <li>• <i>APT has external peat handling activities with emissions under the thresholds of this subpart</i></li> </ul>	PM, variable depending on airflow Opacity <= 20% (Minn. R. 7011.0715)
Minn. R. 7007.1300, subp. 3(G)	Fugitive dust emissions from unpaved roads and parking lots <ul style="list-style-type: none"> <li>• <i>APT has unpaved entry roads and parking lots</i></li> </ul>	Requirement to take reasonable measures to prevent PM from becoming airborne (Minn. R. 7011.0150)

**Technical Support Document  
For  
Air Emission Permit No. 00100024-103**

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

**1. General information**

**1.1 Applicant and stationary source location:**

**Table 1. Applicant and source address**

<b>Applicant/Address</b>	<b>Stationary source/Address</b> (SIC Code: 3295 - Minerals and Earths, Ground or Otherwise Treated)
Conversion Technology 2190 N Norcross Tucker Rd Ste 202 Norcross, Georgia 30071-3458	American Peat Technology LLC 36203 350th Ave Aitkin, MN 56431-5558
Contact: William Cook Phone: 770-263-6330113	

**1.2 Facility description**

American Peat Technology harvests, dries, and processes reed-sedge peat to create a granular or powderized peat product. Almost all equipment included in the permit has already been constructed and the facility is currently operating. The only exception is the venturi scrubbers, which have not yet been constructed but are not necessary for compliance with any permit limit or requirement.

The peat harvest is conducted on a yearly cycle. During the summer months, the peatland is disked to accelerate air drying, and pushed into windrows. In the winter, when the ground is frozen enough to support large trucks and machinery, the trucks are loaded up with the windrowed peat using a backhoe. The peat is then transported about one mile to the production plant, where it is added to a pile sized to hold two years of reserve material. The pile is continually cultivated to encourage evaporation and minimize water infiltration. Throughout the year, peat from the reserve pile is transferred into the processing building as needed using front end loaders.

The peat is screened to remove sticks and rocks, and is either fed straight into the processing plant Stage 1 dryers at approximately 80% moisture, or fed into an initial dewatering process using filter presses to reduce the moisture content. If it will be dewatered, the peat is first transferred to a large tank where it is mixed with water. At this time a dewatering polymer and calcium carbonate may be added. Reed Sedge Peat is naturally acidic so the calcium carbonate is used to increase the pH. The slurry is then piped into filter presses for dewatering. The dewatered (about 67% moisture) cakes of peat are conveyed to one of two Stage 1 dryer/combustors. The dryer/combustors consist of a combustion chamber where wood chips are burned for heat, and a rotary drying chamber where the peat and heated air are mixed. Each dryer/combustor is routed to a cyclone for product recovery and particulate matter control, and each cyclone will be vented to a venturi scrubber for particulate matter control, once the scrubbers are constructed. Stage 1 drying reduces the moisture content to about 35% - 40%. The semi-dry peat is conveyed to a ribbon mixer where it is mixed with Stage 2 dryer fines, which are fine peat particles that are recovered from the Stage 2 dryer cyclone, and "-30 fines" which are undersized peat particles that are recovered from the final screening of the granulated peat. Calcium carbonate may also be added at this step.

After mixing, the peat is pelletized in pellet mills and conveyed to the Stage 2 belt dryer or the Stage 2 rotary dryer. The belt dryer conveys the pellets through a chamber that is heated with air from a wood chip and propane-fired process heater. The air from the belt dryer will be vented to a venturi scrubber once it is constructed. The Stage 2 rotary dryer is heated with propane only and is controlled by a cyclone and a venturi scrubber (once constructed). Stage 2 drying reduces the moisture content down to about 12%. The dried peat pellets are conveyed to one of two crumblers that grind the pellets into granules. Both crumblers vent to the a cyclone and venturi scrubber (once constructed). The product is then screened to separate the granules from the fines. The granules are put in super sacks (1 ton storage sacks) for storage or transport. The fines are either routed to size reduction, to storage in super sacks, or recycled back to the ribbon mixer and pellet mills. Peat that is sent to the size reduction unit is ground into a powder that is routed to a baghouse. The powder that is captured by the baghouse is collected and sent to hoppers and super sacks for storage or transport.

**1.3 Description of the activities allowed by this permit action**

This permit action is an Administrative Amendment under Minn. R. 7007.1400, subp. 1(H) to extend a performance test deadline in the permit.

**1.4 Description of notifications and applications included in this action**

**Table 2. Notifications and applications included in this action**

Date received	Application/notification type and description
11/27/2019	Administrative Amendment (IND20190002)

**1.5 Facility emissions:**

The Administrative Amendment does not change the allowable emissions for the facility nor does it change the facility classification under the various permitting programs. The following table shows the existing facility classification.

**Table 3. Facility classification**

Classification	Major	Synthetic minor/area	Minor/area
PSD			X
Part 70 Permit Program	X		
Part 63 NESHAP			X

**1.6 Changes to permit**

The following changes have been made through this permit action:

- Extended the first performance test deadlines for PM<sub>10</sub>, PM<sub>2.5</sub>, Total Particulate Matter, and Volatile Organic Compounds from STRU 11 from December 18, 2019 to April 16, 2020
- Updated standard requirement language in TFAC 1 and EQUI 11 as per MPCA guidance (Requirements 5.1.3, 5.6.1, 5.6.2)
- Updated language in EQUI 11 opacity performance test due date to reflect last permit issuance

**2. Regulatory and/or statutory basis**

This permit action does not change any regulatory requirements that apply to the facility.

**3. Technical information**

**3.1 Monitoring**

The deadline for the first PM<sub>10</sub>, PM<sub>2.5</sub>, Total Particulate Matter, and Volatile Organic Compounds performance tests from STRU 11 have been extended by 120 days from December 18, 2019 to April 16, 2020. This extension was requested due to delivery delays from the scrubber vendor and to allow the facility enough time to ensure the scrubber is operating properly before testing.

### 3.2 Insignificant activities

American Peat Technology LLC has several operations which are classified as insignificant activities under the MPCA's permitting rules. These are listed in Appendix A to the permit. The following insignificant activities are included in this amendment.

**Table 4. Insignificant activities**

Insignificant activity	General applicable emission limit	Discussion
Fuel Use: space heaters fueled by kerosene, natural gas, or propane, less than 420,000 Btu/hr	PM ≤ 0.4 lb/MMBtu Opacity ≤ 20% with exceptions (Minn. R. 7011.0515)	Two heating units with heat input capacity of 190,000 Btu/hr each. For these unit, based on the fuels used and EPA published emissions factors, it is highly unlikely that it could violate the applicable requirement. In addition, these types of units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.
Individual units with potential or actual emissions meeting the criteria in Minn. R. 7007.1300, subp. 4(A)-(D)	PM, variable depending on airflow Opacity ≤ 20% (Minn. R. 7011.0715)	These are ten internally venting peat conveyors and conveyor drop points, four screeners, and a surge bin. Based on EPA published emissions factors for comparable activities, it is highly unlikely that they could violate the applicable requirement. In addition, these units are operated and vented inside a building, so testing for PM or opacity is not feasible.
Emissions from a laboratory, as defined in Minn. R. 7007.1300, subp. 3(D).	PM, variable depending on airflow Opacity ≤ 20% (Minn. R. 7011.0715)	On site laboratory with a lab hood and atomic absorption spectroscopy machine. These are very small, intermittent, bench-top operations that typically do not even have any emissions. It is highly unlikely that they could violate the applicable requirement.
Brazing, soldering, torch-cutting, or welding equipment	PM, variable depending on airflow Opacity ≤ 20% (Minn. R. 7011.0715)	Welding equipment. For these units, based on EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. In addition, these units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.
Individual units with potential emissions less than 2000 lb/year of certain pollutants	PM, variable depending on airflow Opacity ≤ 20% (Minn. R. 7011.0715)	These are external peat handling activities including peat extraction from the field, adding peat to the storage pile, and removal of peat from the pile. Based on EPA published emissions factors for comparable activities, it is highly unlikely that they could violate the applicable requirement.
Fugitive dust emissions from unpaved roads and parking lots	Requirement to take reasonable measures to prevent PM from becoming airborne (Minn. R. 7011.0150)	The Facility has unpaved entry roads and parking lots. The permit contains a general requirement that this standard must be met.

#### **4. Permit fee assessment**

This permit action includes an administrative amendment application that was subject to a permit application fee as required by Minn. R. 7002.0019. However, no additional points apply to the action.

#### **5. Conclusion**

Based on the information provided by American Peat Technology LLC the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 00100024-103 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff members on permit team: Joey Handtmann (permit writer)  
Peggy Bartz (peer reviewer)  
Beckie Olson (permit writing assistant)  
Laurie O'Brien (administrative support)

TEMPO360 Activities: Administrative Amendment (IND20190002)

Attachments: 1. Subject item inventory and requirements report

**Attachment 1 – Subject item inventory and facility requirements**

## List of SIs

Agency Interest: American Peat Technology LLC

















Agency Interest ID: 2173

Activity: IND20190002 (Administrative Amendment)

Details for:

SI Category: None

SI Type: All

Agency Interest Name	Subject Item ID	Subject Item Designation	Subject Item Descr..	
American Peat Technology LLC	ACTV1	Null	All IA's	
	AISI2173	Null	Null	
	EQUI7	Null	Stage #1 Dryer/Combustor ..	
	EQUI8	Null	Stage #1 Dryer/Combustor ..	
	EQUI9	Null	Stage #2 Rotary Dryer	
	EQUI10	Null	Stage #2 Belt Dryer	
	EQUI11	Null	Stage #2 Process Heater	
	EQUI12	Null	Crumbler 1	
	EQUI13	Null	Size Reduction	
	EQUI14	Null	Crumbler 2	
	STRU7	Null	Production Building	
	STRU8	Null	Chip Storage Building	
	STRU9	Null	Warehouse	
	STRU10	Null	Main Baghouse	
STRU11	Null	Scrubber exhaust		
STRU12	Null	Combustor start up stack		

## List of SIs

Agency Interest: American Peat Technology LLC










Agency Interest ID: 2173

Activity: IND20190002 (Administrative Amendment)

Details for:

SI Category: None

SI Type: All

Agency Interest Name	Subject Item ID	Subject Item Designation	Subject Item Descr..	
American Peat Technology LLC	STRU13	Null	Size reduction air sweep exhaust	
	STRU14	Null	Stage #2 process heater stack	
	TFAC1	Null	American Peat Technology LLC	
	TREA9	Null	Stage #1 Dryer Cyclone #1	
	TREA10	Null	Stage #1 Dryer Scrubber #1	
	TREA11	Null	Stage #1 Dryer Cyclone #2	
	TREA12	Null	Stage #1 Dryer Scrubber #2	
	TREA13	Null	Stage #2 Rotary Dryer Fines Cyclone	
	TREA14	Null	Size Reduction Baghouse	



Insignificant air emissions activity

Agency Interest: American Peat Technology LLC







Agency Interest ID: 2173

Activity: IND20190002 (Administrative Amendment)

Details for:

SI Category: Activity

SI Type: Insignificant Air Emissions Activity

Agency Interest Na..	Activity ID	Subject Ite..	Subject Item Type Description	Subject Item ID	Subject Ite..	Subject Ite..	Status Desc..	Sub Attribute Description	
American Peat Technology LLC	IND20190002	Activity	Insignificant Air Emissions Activity	ACTV1	Null	All IA's	Active/ Existing	Minn. R. 7007.1300, subp. 3(A)	
								Minn. R. 7007.1300, subp. 3(D)	
								Minn. R. 7007.1300, subp. 3(E)	
								Minn. R. 7007.1300, subp. 3(F)	
								Minn. R. 7007.1300, subp. 3(G)	
								Minn. R. 7007.1300, subp. 4	

PTE by subject item

Agency Interest: None

Agency Interest ID: 2173

Activity: None (Administrative Amendment)

Details for:

SI Category: Equipment

SI Type: All

Subject Item Category Description	Subject Item Type Description	Subject Item ID	Subject Item Designation	Subject Item Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Crusher	EQUI12	Null	Crumbler 1	Particulate Matter	0.077	5.93192	0.336	
					PM < 2.5 micron	0.077	1.52808	0.336	
		EQUI14	Null	Crumbler 2	PM < 10 micron	0.077	1.52808	0.336	
	Particulate Matter				0.077	5.932	0.336		
	PM < 2.5 micron				0.077	1.528	0.336		
		EQUI7	Null	Stage #1 Dryer/Combustor #1	PM < 10 micron	0.077	1.52808	0.336	
	1,1,2,2-Tetrachloroethane				0.000684	0.002996	0.002996		
	2-Methylnaphthalene				2.88e-06	1.261e-05	1.261e-05		
					2,4-Dinitrophenol	3.24e-06	1.419e-05	1.419e-05	
					2,4,6-Trichlorophenol	3.96e-07	1.734e-06	1.734e-06	
					4-Nitrophenol	1.98e-06	8.672e-06	8.672e-06	
					Acenaphthene	1.638e-05	7.174e-05	7.174e-05	
					Acenaphthylene	9e-05	0.0003942	0.0003942	
					Acetaldehyde	0.01494	0.06544	0.06544	
					Acetophenone	5.76e-08	2.523e-07	2.523e-07	
					Acrolein	0.072	0.3154	0.3154	
					Anthracene	5.4e-05	0.0002365	0.0002365	
					Antimony compounds	0.0001422	0.0006228	0.0006228	
					Arsenic compounds	0.000396	0.001734	0.001734	
					Benzene	0.0756	0.3311	0.3311	
					Benzo(a)anthracene	1.17e-06	5.125e-06	5.125e-06	
					Benzo(b)fluoranthene	1.8e-06	7.884e-06	7.884e-06	
					Benzo(e)pyrene	4.68e-08	2.05e-07	2.05e-07	
					Benzo(ghi)perylene	1.674e-06	7.332e-06	7.332e-06	
					Benzo(k)fluoranthene	6.48e-07	2.838e-06	2.838e-06	
					Benzo[a]pyrene	4.68e-05	0.000205	0.000205	
					Beryllium Compounds	1.98e-05	8.672e-05	8.672e-05	
					Bis(2-ethylhexyl) phthalate	8.46e-07	3.705e-06	3.705e-06	
					Cadmium compounds	7.38e-05	0.0003232	0.0003232	
					Carbon Dioxide	3,722.28	16,303.59	16,303.59	
					Carbon Dioxide Equivalent	3,774.3	16,531.44	16,531.44	
					Carbon Monoxide	10.8	47.304	47.304	
					Carbon tetrachloride	0.00081	0.003548	0.003548	
					Chlorine	0.01422	0.06228	0.06228	
					Chlorobenzene (Monochlo..	0.000594	0.002602	0.002602	
					Chloroform	0.000504	0.002208	0.002208	
					Chromium compounds	0.000378	0.001656	0.001656	
					Chrysene	6.84e-07	2.996e-06	2.996e-06	
					Cobalt compounds	0.000117	0.0005125	0.0005125	
					Dibenzofuran	4.82e-08	2.111e-07	2.111e-07	
					Ethylbenzene	0.000558	0.002444	0.002444	
					Fluoranthene	2.88e-05	0.0001261	0.0001261	
					Fluorene	6.12e-05	0.0002681	0.0002681	
					Formaldehyde	0.0792	0.3469	0.3469	
					HAPs - Total	0.725	3.175	3.175	
					Indeno(1,2,3-cd)pyrene	1.566e-06	6.859e-06	6.859e-06	
					Lead	0.000864	0.003784	0.003784	
					Manganese compounds	0.0288	0.1261	0.1261	
					Mercury Compounds	6.3e-05	0.0002759	0.0002759	
					Methane	0.378	1.6556	1.6556	
					Naphthalene	0.001746	0.007647	0.007647	
					Nickel compounds	0.000594	0.002602	0.002602	
					Nitrogen Oxides	3.96	17.345	17.345	
					Nitrous Oxide	0.1429	0.6257	0.625724067	
					Octachlorodibenzo-p-diox..	1.188e-06	5.203e-06	5.203e-06	
					Particulate Matter	1.85	48.811	8.143	
					PCBs (Polychlorinated bip..	1.427e-07	6.249e-07	6.249e-07	
					Pentachlorophenol (PCP)	9.18e-07	4.021e-06	4.021e-06	
					Phenanthrene	0.000126	0.0005519	0.0005519	
					Phenol	0.000918	0.004021	0.004021	
					Phosphorus	0.000486	0.002129	0.002129	
					PM < 2.5 micron	1.701	33.858	7.449	
					PM < 10 micron	1.859	37.011	8.143	
					Propionaldehyde	0.001098	0.004809	0.004809	

PTE by subject item

Agency Interest: None

Agency Interest ID: 2173

Activity: None (Administrative Amendment)

Details for:

SI Category: Equipment

SI Type: All

Subject Item Category Description	Subject Item Description	Subject Item ID	Subject Item Designation	Subject Item Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Dryer/Oven, direct fired	EQUI7	Null	Stage #1	Pyrene	6.66e-05	0.0002917	0.0002917	
				Dryer/Combustor #1	Selenium compounds	5.04e-05	0.0002208	0.0002208	
					Styrene	0.0342	0.1498	0.1498	
					Sulfur Dioxide	0.45	1.971	1.971	
					Toluene	0.01656	0.07253	0.07253	
					Vinyl chloride (chloroethe..	0.000324	0.001419	0.001419	
					Volatile Organic Compoun..	4.254	18.63	18.63	
					Xylene (o-)	0.00045	0.001971	0.001971	
		EQUI8	Null	Stage #1	1,1,2,2-Tetrachloroethane	0.0007524	0.003296	0.003296	
				Dryer/Combustor #2	2-Methylnaphthalene	3.168e-06	1.388e-05	1.388e-05	
					2,4-Dinitrophenol	3.564e-06	1.561e-05	1.561e-05	
					2,4,6-Trichlorophenol	4.356e-07	1.908e-06	1.908e-06	
					4-Nitrophenol	2.178e-06	9.54e-06	9.54e-06	
					Acenaphthene	1.802e-05	7.892e-05	7.892e-05	
					Acenaphthylene	9.9e-05	0.0004336	0.0004336	
					Acetaldehyde	0.01643	0.07198	0.07198	
					Acetophenone	6.336e-08	2.775e-07	2.775e-07	
					Acrolein	0.0792	0.3469	0.3469	
					Anthracene	5.94e-05	0.0002602	0.0002602	
					Antimony compounds	0.0001564	0.0006851	0.0006851	
					Arsenic compounds	0.0004356	0.001908	0.001908	
					Benzene	0.08316	0.3642	0.3642	
					Benzo(a)anthracene	1.287e-06	5.637e-06	5.637e-06	
					Benzo(b)fluoranthene	1.98e-06	8.672e-06	8.672e-06	
					Benzo(e)pyrene	5.148e-08	2.255e-07	2.255e-07	
					Benzo(ghi)perylene	1.841e-06	8.065e-06	8.065e-06	
					Benzo(k)fluoranthene	7.128e-07	3.122e-06	3.122e-06	
					Benzo[a]pyrene	5.148e-05	0.0002255	0.0002255	
					Beryllium Compounds	2.178e-05	9.54e-05	9.54e-05	
					Bis(2-ethylhexyl) phthalate	9.306e-07	4.076e-06	4.076e-06	
					Cadmium compounds	8.118e-05	0.0003556	0.0003556	
					Carbon Dioxide	4,094.51	17,933.95	17,933.95	
					Carbon Dioxide Equivalent	4,151.73	18,184.59	18,184.59	
					Carbon Monoxide	11.88	52.034	52.034	
					Carbon tetrachloride	0.000891	0.003903	0.003903	
					Chlorine	0.01564	0.06851	0.06851	
					Chlorobenzene (Monochlo..	0.0006534	0.002862	0.002862	
					Chloroform	0.0005544	0.002428	0.002428	
					Chromium compounds	0.0004158	0.001821	0.001821	
					Chrysene	7.524e-07	3.296e-06	3.296e-06	
					Cobalt compounds	0.0001287	0.0005637	0.0005637	
					Dibenzofuran	5.302e-08	2.322e-07	2.322e-07	
					Ethylbenzene	0.0006138	0.002688	0.002688	
					Fluoranthene	3.168e-05	0.0001388	0.0001388	
					Fluorene	6.732e-05	0.0002949	0.0002949	
					Formaldehyde	0.08712	0.3816	0.3816	
					HAPs - Total	0.7975	3.493	3.493	
					Indeno(1,2,3-cd)pyrene	1.723e-06	7.545e-06	7.545e-06	
					Lead	0.0009504	0.004163	0.004163	
					Manganese compounds	0.03168	0.1388	0.1388	
					Mercury Compounds	6.93e-05	0.0003035	0.0003035	
					Methane	0.416	1.821	1.821	
					Naphthalene	0.001921	0.008412	0.008412	
					Nickel compounds	0.0006534	0.0002862	0.0002862	
					Nitrogen Oxides	4.356	19.079	19.079	
					Nitrous Oxide	0.157	0.688	0.688	
					Octachlorodibenzo-p-diox..	1.307e-06	5.724e-06	5.724e-06	
					Particulate Matter	1.974	51.413	8.646	
					PCBs (Polychlorinated bip..	1.569e-07	6.874e-07	6.874e-07	
					Pentachlorophenol (PCP)	1.01e-06	4.423e-06	4.423e-06	
					Phenanthrene	0.0001386	0.0006071	0.0006071	
					Phenol	0.00101	0.004423	0.004423	
					Phosphorus	0.0005346	0.002342	0.002342	
					PM < 2.5 micron	1.8	35.829	7.882	

PTE by subject item

Agency Interest: None

Agency Interest ID: 2173

Activity: None (Administrative Amendment)

Details for:

SI Category: Equipment

SI Type: All

Subject Item Category Description	Subject Item Type Description	Subject Item ID	Subject Item Designation	Subject Item Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)			
Equipment	Dryer/Oven, direct fired	EQUI8	Null	Stage #1 Dryer/Combustor #2	PM < 10 micron	1.974	39.298	8.646				
					Propionaldehyde	0.001208	0.00529	0.00529				
					Pyrene	7.326e-05	0.0003209	0.0003209				
					Selenium compounds	5.544e-05	0.0002428	0.0002428				
					Styrene	0.03762	0.1648	0.1648				
					Sulfur Dioxide	0.495	2.168	2.168				
					Toluene	0.01822	0.07979	0.07979				
					Vinyl chloride (chloroethe..	0.0003564	0.001561	0.001561				
					Volatile Organic Compoun..	4.285	18.77	18.77				
					Xylene (o-)	0.000495	0.002168	0.002168				
					EQUI9	Null	Stage #2 Rotary Dryer	Carbon Dioxide	623.7201	2,731.8939	2,731.8939	
								Carbon Dioxide Equivalent	626.238	2,742.9223	2,742.9223	
	Carbon Monoxide	0.3689	1.6156	1.6156								
	Methane	0.0298	0.1304	0.1304								
	Nitrogen Oxides	0.6393	2.8003	2.8003								
	Nitrous Oxide	0.006	0.0261	0.0261								
	Particulate Matter	2.2634	71.6467	7.3004								
	PM < 2.5 micron	2.2634	44.5276	9.9137								
	PM < 10 micron	2.2634	44.5276	9.9137								
	Sulfur Dioxide	0.057	0.2499	0.2499								
	Volatile Organic Compoun..	0.0998	0.4374	0.4374								
	Dryer/Oven, indirect fired	EQUI10	Null	Stage #2 Belt Dryer				Particulate Matter	2.9472	12.9087	12.909	
					PM < 2.5 micron	0.3546	1.5532	1.553				
					PM < 10 micron	0.3456	1.5532	1.553				
Volatile Organic Compoun..					2.01	8.8	8.8					
Grinder	EQUI13	Null	Size Reduction	Particulate Matter	0.00543	1.318	0.024					
				PM < 2.5 micron	0.00543	0.34	0.024					
				PM < 10 micron	0.00543	0.34	0.024					
Process Heater	EQUI11	Null	Stage #2 Process Heater	1,1,2,2-Tetrachloroethane	0.0003648	0.001598	0.001598					
				2-Methylnaphthalene	1.536e-06	6.728e-06	6.728e-06					
				2,4-Dinitrophenol	1.728e-06	7.569e-06	7.569e-06					
				2,4,6-Trichlorophenol	2.112e-07	9.251e-07	9.251e-07					
				4-Nitrophenol	1.056e-06	4.625e-06	4.625e-06					
				Acenaphthene	8.736e-06	3.826e-05	3.826e-05					
				Acenaphthylene	4.8e-05	0.0002102	0.0002102					
				Acetaldehyde	0.007968	0.0349	0.0349					
				Acetophenone	3.072e-08	1.346e-07	1.346e-07					
				Acrolein	0.0384	0.1682	0.1682					
				Anthracene	2.88e-05	0.0001261	0.0001261					
				Antimony compounds	7.584e-05	0.0003322	0.0003322					
				Arsenic compounds	0.0002112	0.0009251	0.0009251					
				Benzene	0.04032	0.1766	0.1766					
				Benzo(a)anthracene	6.24e-07	2.733e-06	2.733e-06					
				Benzo(b)fluoranthene	9.6e-07	4.205e-06	4.205e-06					
				Benzo(e)pyrene	2.496e-08	1.093e-07	1.093e-07					
				Benzo(ghi)perylene	8.928e-07	3.91e-06	3.91e-06					
				Benzo(k)fluoranthene	3.456e-07	1.514e-06	1.514e-06					
				Benzo[a]pyrene	2.496e-05	0.0001093	0.0001093					
				Beryllium Compounds	1.056e-05	4.625e-05	4.625e-05					
				Bis(2-ethylhexyl) phthalate	4.512e-07	1.976e-06	1.976e-06					
				Cadmium compounds	3.936e-05	0.0001724	0.0001724					
				Carbon Dioxide	3,315.82	14,523.29	14,523.29					
				Carbon Dioxide Equivalent	3,348.94	14,668.34	14,668.34					
				Carbon Monoxide	6.5469	28.6754	28.6754					
				Carbon tetrachloride	0.000432	0.001892	0.001892					
				Chlorine	0.007584	0.03322	0.03322					
				Chlorobenzene (Monochlo..	0.0003168	0.001388	0.001388					
				Chloroform	0.0002688	0.001177	0.001177					
				Chromium compounds	0.0002016	0.000883	0.000883					
				Chrysene	3.648e-07	1.598e-06	1.598e-06					
				Cobalt compounds	6.24e-05	0.0002733	0.0002733					
				Dibenzofuran	2.571e-08	1.126e-07	1.126e-07					
				Ethylbenzene	0.0002976	0.001303	0.001303					
				Fluoranthene	1.536e-05	6.728e-05	6.728e-05					

PTE by subject item

Agency Interest: None

Agency Interest ID: 2173

Activity: None (Administrative Amendment)

Details for:

SI Category: Equipment

SI Type: All

Subject Item Category Description	Subject Item Type Description	Subject Item ID	Subject Item Designation	Subject Item Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Process Heater	EQUI11	Null	Stage #2 Process Heater	Fluorene	3.264e-05	0.000143	0.000143	
					Formaldehyde	0.04224	0.185	0.185	
					HAPs - Total	0.4501	1.972	1.972	
					Indeno(1,2,3-cd)pyrene	8.352e-07	3.658e-06	3.658e-06	
					Lead	0.0004608	0.002018	0.002018	
					Manganese compounds	0.01536	0.06728	0.06728	
					Mercury Compounds	3.36e-05	0.0001472	0.0001472	
					Methane	0.2651	1.1611	1.1611	
					Naphthalene	0.0009312	0.004079	0.004079	
					Nickel compounds	0.0003168	0.001388	0.001388	
					Nitrogen Oxides	3.4759	15.2246	15.2246	
					Nitrous Oxide	0.0889	0.3893	0.3893	
					Octachlorodibenzo-p-diox..	6.336e-07	2.775e-06	2.775e-06	
					Particulate Matter	3.241	14.198	14.198	
					PCBs (Polychlorinated bip..	7.609e-08	3.333e-07	3.333e-07	
					Pentachlorophenol (PCP)	4.896e-07	2.144e-06	2.144e-06	
					Phenanthrene	6.72e-05	0.0002943	0.0002943	
					Phenol	0.0004896	0.002144	0.002144	
					Phosphorus	0.0002592	0.001135	0.001135	
					PM < 2.5 micron	2.473	10.83	10.83	
					PM < 10 micron	2.857	12.52	12.52	
					Propionaldehyde	0.0005856	0.002565	0.002565	
					Pyrene	3.552e-05	0.0001556	0.0001556	
					Selenium compounds	2.688e-05	0.0001177	0.0001177	
					Styrene	0.01824	0.07989	0.07989	
					Sulfur Dioxide	0.3617	1.5843	1.5843	
					Toluene	0.008832	0.03868	0.03868	
					Vinyl chloride (chloroethe..	0.0001728	0.0007569	0.0007569	
					Volatile Organic Compoun..	0.2681	1.17444	1.17444	
					Xylene (o-)	0.00024	0.001051	0.001051	

SI - SI relationships

Agency Interest: None

Agency Interest ID: 2173

Activity: None (Administrative Amendment)

Details for:

SI Category: All

SI Type: All

Subject Item Category Description	Subject Item Type Description	Subject Item ID	Subject Item Designation	Subject Item Description	Relationship	Related Subject Item ID	% Flow	Related Subject Item Type Description	Start Date (Related Subject Item)	End Date (Related Subject Item)					
Equipment	Crusher	EQUI12	Null	Crumbler 1	is controlled by	TREA12	0	053-Venturi Scrubber	2/5/2019	Null					
						TREA13	100	007-Centrifugal Collector - High Efficiency	8/27/2010	Null					
					sends to	STRU11	100	Stack/Vent	8/27/2010	Null					
	Crusher	EQUI14	Null	Crumbler 2	is controlled by	TREA12	0	053-Venturi Scrubber	2/27/2019	Null					
						TREA13	100	007-Centrifugal Collector - High Efficiency	8/27/2010	Null					
					sends to	STRU11	100	Stack/Vent	8/27/2010	Null					
	Dryer/Oven, direct fired	EQUI7	Null	Stage #1 Dryer/Combustor #1	is controlled by	TREA9	100	007-Centrifugal Collector - High Efficiency	8/27/2010	Null					
						TREA10	0	053-Venturi Scrubber	1/25/2019	Null					
					sends to	STRU11	100	Stack/Vent	8/1/2017	Null					
						STRU12	100	Stack/Vent	8/27/2010	Null					
					Dryer/Oven, direct fired	EQUI8	Null	Stage #1 Dryer/Combustor #2	is controlled by	TREA11	100	007-Centrifugal Collector - High Efficiency	8/1/2017	Null	
										TREA12	0	053-Venturi Scrubber	1/25/2019	Null	
	sends to	STRU11	100	Stack/Vent					8/1/2017	Null					
		STRU12	0	Stack/Vent					8/1/2017	Null					
	Dryer/Oven, indirect fired	EQUI9	Null	Stage #2 Rotary Dryer	is controlled by	TREA12	0	053-Venturi Scrubber	1/25/2019	Null					
TREA13						100	007-Centrifugal Collector - High Efficiency	8/27/2010	Null						
sends to					STRU11	100	Stack/Vent	8/27/2010	Null						
Dryer/Oven, indirect fired	EQUI10	Null	Stage #2 Belt Dryer	is controlled by	TREA10	100	053-Venturi Scrubber	1/25/2019	Null						
				sends to	STRU11	100	Stack/Vent	8/27/2010	Null						
Grinder	EQUI13	Null	Size Reduction	is controlled by	TREA14	100	018-Fabric Filter - Low Temp, T<180 Degrees F	8/27/2010	Null						
				sends to	STRU13	100	Stack/Vent	8/27/2010	Null						
Process Heater	EQUI11	Null	Stage #2 Process Heater	sends to	STRU14	100	Stack/Vent	8/1/2017	Null						
Treatment	007-Centrifugal Collector - High Efficiency	TREA9	Null	Stage #1 Dryer Cyclone #1	is controlled in series by	TREA10	100	053-Venturi Scrubber	8/27/2010	Null					
		TREA11	Null	Stage #1 Dryer Cyclone #2	is controlled in series by	TREA12	100	053-Venturi Scrubber	2/5/2019	Null					
		TREA13	Null	Stage #2 Rotary Dryer Fines Cyclone	is controlled in series by	TREA12	100	053-Venturi Scrubber	2/27/2019	Null					

Emission Units 1

Agency Interest: None





Agency Interest ID: 2173

Activity: None (Administrative Amendment)

Details for:

SI Category: None

SI Type: Crusher, Grinder, Process Heater





Subject Item Type	Subject Item ID	Subject Item Designation	Subject Item Description	Manufacturer	Model	Max Design Capacity	Max Design Capacity Units (numerator)	Max Design Capacity Units (denominator)	Material	Construction Start Date	Operation Start Date	Modification Date	
Crusher	EQUI12	Null	Crumbler 1	RMS Roller Grinder	12X52 Double Pair	7920	pounds	hours	Product	4/1/2004	5/1/2004	Null	
	EQUI14	Null	Crumbler 2	RMS Roller Grinder	12X52 Double Pair	7920	pounds	hours	Product	4/1/2004	5/1/2004	Null	
Grinder	EQUI13	Null	Size Reduction	American Peat Technology	N/A	1760	pounds	hours	Product	9/1/2004	10/1/2004	Null	
Process Heater	EQUI11	Null	Stage #2 Process Heater	King Coal	Custom	9.6	million British thermal units	hours	Heat	7/1/2015	5/10/2018	Null	

Emission Units 2

Agency Interest: None  
 Agency Interest ID: 2173  
 Activity: None (Administrative Amendment)

Details for:

SI Category: Equipment  
 SI Type: Dryer/Oven, direct fired & Dryer/Oven, indirect fired

Subject Item Type Description	Subject Item ID	Subject Item Designation	Subject Item Description	Manufacturer	Model	Max Design Capacity	Max Design Capacity Units (numerator)	Max Design Capacity Units (denominator)	Material	Construction Start Date	Operation Start Date	Modification Date	
Dryer/Oven, direct fired	EQUI7	Null	Stage #1 Dryer/ Combustor #1	American Peat Technology	N/A	18	million British thermal units	hours	Heat	3/1/2010	8/27/2010	Null	
	EQUI8	Null	Stage #1 Dryer/ Combustor #2	* * * * *	Custom	19.6	million British thermal units	hours	Heat	8/3/2017	11/10/2017	Null	
	EQUI9	Null	Stage #2 Rotary Dryer	American Peat Technology	N/A	2.2	tons	hours	Product	4/1/2004	4/1/2004	Null	
Dryer/Oven, indirect fired	EQUI10	Null	Stage #2 Belt Dryer	American Peat Technology	N/A	3	tons	hours	Product	7/1/2015	5/10/2018	Null	



Emission Units 2 (continued)

Agency Interest: None





Agency Interest ID: 2173

Activity: None (Administrative Amendment)

Details for:

SI Category: Equipment

SI Type: Dryer/Oven, direct fired & Dryer/Oven, indirect fired

Subject Item Type Description	Subject Item ID	Subject Item Designation	Subject Item Description	Firing Method	Engine Use	Engine Displacement	Engine Displacement Units	Subject to CSAPR?	Electric Generating Capacity (MW)	
Dryer/Oven, direct fired	EQUI7	Null	Stage #1 Dryer/ Combustor #1	Not coal burning	Null	Null	Null	Null	Null	
	EQUI8	Null	Stage #1 Dryer/ Combustor #2	Not coal burning	Null	Null	Null	Null	Null	
	EQUI9	Null	Stage #2 Rotary Dryer	Not coal burning	Null	Null	Null	Null	Null	
Dryer/Oven, indirect fired	EQUI10	Null	Stage #2 Belt Dryer	Not coal burning	Null	Null	Null	Null	Null	

## Buildings, General

Agency Interest: American Peat Technology LLC





Agency Interest ID: 2173

Activity: IND20190002 (Administrative Amendment)

### Details for:

SI Category: Structure

SI Type: Building

Subject Item Type	Subject Item ID	Subject Item Designation	Subject Item Description	Height	Units (height)	Length	Units (length)	Width	Units (width)	
Building	STRU7	Null	Production Building	43	feet	425	feet	150	feet	
	STRU8	Null	Chip Storage Building	34	feet	90	feet	65	feet	
	STRU9	Null	Warehouse	25	feet	300	feet	120	feet	
	STRU10	Null	Main Baghouse	30	feet	20	feet	10	feet	

Stack/Vent, General

Agency Interest: None





Agency Interest ID: 2173

Activity: None (Administrative Amendment)

Details for:

SI Category: Structure

SI Type: Stack/Vent

Subject Item Type	Subject Item ID	Subject Item Designation	Subject Item Description	Stack Height (feet)	Stack Diameter (feet)	Stack Length (feet)	Stack Width (feet)	Stack Flow Rate (cubic ft/min)	Discharge Temperature (°F)	Flow Rate/Temperature Information Source	Discharge Direction	
Stack/Vent	STRU11	Null	Scrubber exhaust	52.3	4	Null	Null	35000	160	Estimate	Upwards with a cap on stack/vent	
	STRU12	Null	Combustor start up stack	51	3.96	Null	Null	40000	300	Estimate	Upwards with a cap on stack/vent	
	STRU13	Null	Size reduction air sweep exhaust	46	1.33	Null	Null	3500	55	Estimate	Upwards with a cap on stack/vent	
	STRU14	Null	Stage #2 process heater stack	39	Null	1.67	1.25	1500	300	Estimate	Upwards with a cap on stack/vent	

Scrubbers, General

Agency Interest: None







Agency Interest ID: 2173

Activity: None (Administrative Amendment)

Details for:

SI Category: Treatment

SI Type: 053-Venturi Scrubber

Subject Item Type Description	Subject Item ID	Subject Item Designation	Subject Item Description	Manufacturer	Model	Installation Start Date	Pollutant Controlled	Capture Efficiency (%)	Destruction Collect Efficiency (%)	Subject to CAM?	Large or Other PSEU?	Efficiency Basis	Scrubber Minimum Pressure Drop (in. of water column)	Scrubber Maximum Pressure Drop (in. of ...)	Minimum Liquid Flow Rate (gal/min)	
053-Venturi Scrubber	TREA10	Null	Stage #1 Dryer Scrubber #1	* * * *	Custom	TBD	Particulate Matter	100	94	No	Null	Control Equipment Rule	11	18	2	
							PM < 2.5 micron	100	84	No	Null	Control Equipment Rule	11	18	2	
							PM < 10 micron	100	84	No	Null	Control Equipment Rule	11	18	2	
	TREA12	Null	Stage #1 Dryer Scrubber #2	* * * *	Custom	TBD	Particulate Matter	100	94	Yes	Other	Control Equipment Rule	11	18	2	
							PM < 2.5 micron	100	84	No	Null	Control Equipment Rule	11	18	2	
							PM < 10 micron	100	84	No	Null	Control Equipment Rule	11	18	2	

Collectors-Cyclones, General

Agency Interest: None










Agency Interest ID: 2173

Activity: None (Administrative Amendment)

Details for:

SI Category: Treatment

SI Type: 007-Centrifugal Collector - High Efficiency

Subject Item Type	Subject Item ID	Subject Item Designation	Subject Item Description	Manufacturer	Model	Installation Start Date	Pollutant Controlled	Capture Efficiency (%)	Destruction Collect Efficiency (%)	Subject to CAM?	Large or Other PSEU?	Efficiency Basis	Cyclone Minimum Pressure Drop (in. of ..)	Cyclone Maximum Pressure Drop (in. of ..)	
007-Centrifugal Collector - High Efficiency	TREA9	Null	Stage #1 Dryer Cyclone #1	* * * *	Custom	4/1/2004	Particulate Matter	100	90	No	Null	Control Equipment Rule	4	7	
							PM < 2.5 micron	100	78	No	Null	Control Equipment Rule	4	7	
							PM < 10 micron	100	78	No	Null	Control Equipment Rule	4	7	
	TREA11	Null	Stage #1 Dryer Cyclone #2	* * * *	Custom	8/1/2017	Particulate Matter	100	90	No	Null	Control Equipment Rule	4	7	
							PM < 2.5 micron	100	78	No	Null	Control Equipment Rule	4	7	
							PM < 10 micron	100	78	No	Null	Control Equipment Rule	4	7	
	TREA13	Null	Stage #2 Rotary Dryer Fines Cyclone	American Peat Technology	N/A	4/1/2004	Particulate Matter	100	90	No	Null	Control Equipment Rule	2	5	
							PM < 2.5 micron	100	78	No	Null	Control Equipment Rule	2	5	
							PM < 10 micron	100	78	No	Null	Control Equipment Rule	2	5	

Fabric Filters, General

Agency Interest: None

Agency Interest ID: 2173

Activity: None (Administrative Amendment)

Details for:

SI Category: Treatment

SI Type: 018-Fabric Filter - Low Temp, T<180 Degrees F

Subject Item Type	Subject Item ID	Subject Item Designation	Subject Item Description	Manufacturer	Model	Installation Start Date	Pollutant Controlled	Capture Efficiency (%)	Destruction Collect Efficiency (%)	Subject to CAM?	Large or Other PSEU?	Efficiency Basis	Fabric Filter Minimum Pressure Drop (in. of ..)	Fabric Filter Maximum Pressure Drop (in. of ..)	Bag leak detector in use?	
018-Fabric Filter - Low Temp, T<180 Degrees F	TREA14	Null	Size Reduction Baghouse	American Peat Technology	N/A	4/1/2004	Particulate Matter	100	99	No	Null	Control Equipment Rule	1	3	No	<input type="checkbox"/>
							PM < 2.5 micron	100	93	No	Null	Control Equipment Rule	1	3	No	<input type="checkbox"/>
							PM < 10 micron	100	93	No	Null	Control Equipment Rule	1	3	No	<input type="checkbox"/>

SI Id	Sequence	Requirement
TFAC 1	1240	Permit Appendices: This permit contains appendices as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in Appendix A, Insignificant Activities and General Applicable Requirements. [Minn. R. 7007.0800, subp. 2]
TFAC 1	1260	<p>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.</p> <p>This permit shall not alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance. [Minn. R. 7007.1800(A)(2)]</p>
TFAC 1	1300	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 7009.0090. Compliance shall be demonstrated upon written request by the MPCA. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
TFAC 1	1380	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]
TFAC 1	1390	Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated. [Minn. R. 7007.0800, subp. 16(J), Minn. R. 7007.0800, subp. 2]
TFAC 1	1400	Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 16(J)]
TFAC 1	1410	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]
TFAC 1	1420	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]
TFAC 1	1430	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]
TFAC 1	1440	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)]
TFAC 1	1450	The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16. [Minn. R. 7007.0800, subp. 16]
TFAC 1	1460	Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in this permit. [Minn. R. ch. 7017]

SI Id	Sequence	Requirement
TFAC 1	1470	<p>Performance Test Notifications and Submittals:</p> <p>Performance Test Notification and 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</p> <p>The Notification, Test Plan, and Test Report must be submitted in a format specified by the commissioner.  [Minn. R. 7017.2017, Minn. R. 7017.2030, subps. 1-4, Minn. R. 7017.2035, subps. 1-2]</p>
TFAC 1	1480	<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. [Minn. R. 7017.2025, subp. 3]</p>
TFAC 1	1490	<p>Monitoring Equipment Calibration - The Permittee shall either:</p> <ol style="list-style-type: none"> <li>1. Calibrate or replace required monitoring equipment every 12 months; or</li> <li>2. Calibrate at the frequency stated in the manufacturer's specifications.</li> </ol> <p>For each monitor, the Permittee shall maintain a record of all calibrations, including the date conducted, and any corrective action that resulted. The Permittee shall include the calibration frequencies, procedures, and manufacturer's specifications (if applicable) in the Operations and Maintenance Plan. Any requirements applying to continuous emission monitors are listed separately in this permit. [Minn. R. 7007.0800, subp. 4(D)]</p>
TFAC 1	1500	<p>Operation of Monitoring Equipment: Unless noted elsewhere in this permit, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system. [Minn. R. 7007.0800, subp. 4(D)]</p>
TFAC 1	1510	<p>Recordkeeping: Retain all records at the stationary source, unless otherwise specified within this permit, for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A). [Minn. R. 7007.0800, subp. 5(C)]</p>
TFAC 1	1520	<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. [Minn. R. 7007.0800, subp. 5(B)]</p>
TFAC 1	1610	<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. [Minn. R. 7007.1200, subp. 4]</p>
TFAC 1	1620	<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.  [Minn. R. 7019.1000, subp. 3]</p>



SI Id	Sequence	Requirement
TFAC 1	1630	<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. [Minn. R. 7019.1000, subp. 2]</p>
TFAC 1	1640	<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. [Minn. R. 7019.1000, subp. 1]</p>
TFAC 1	1650	<p>The Permittee shall submit a semiannual deviations report : Due semiannually, by the 30th of January and July. 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. Submit this on form DRF-2 (Deviation Reporting Form). If no deviations have occurred, submit the signed report certifying that there were no deviations. [Minn. R. 7007.0800, subp. 6(A)(2)]</p>
TFAC 1	1670	<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> <p>Upon adoption of a new or amended federal applicable requirement, and if there are 3 or more years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150 - 7007.1500]</p>
TFAC 1	1680	<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). [Minn. R. 7007.1400, subp. 1(H)]</p>
TFAC 1	1700	<p>The Permittee shall submit a compliance certification : Due annually, by the 31st of January (for the previous calendar year). Submit this on form CR-04 (Annual Compliance Certification Report). This report covers all deviations experienced during the calendar year. If no deviations have occurred, submit the signed report certifying that there were no deviations. [Minn. R. 7007.0800, subp. 6(C)]</p>
TFAC 1	1720	<p>The Permittee shall submit an application for permit reissuance : Due 180 calendar days before Permit Expiration Date. [Minn. R. 7007.0400, subp. 2]</p>
TFAC 1	1730	<p>Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance. Submit in a format specified by the Commissioner. [Minn. R. 7019.3000-7019.3100]</p>
TFAC 1	1740	<p>Emission Fees: due 30 days after receipt of an MPCA bill. [Minn. R. 7002.0005-7002.0085]</p>
EQUI 7	3450	<p>Opacity &lt;= 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0610, subp. 1(A)(2)]</p>
EQUI 7	3460	<p>Particulate Matter &lt;= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. [Minn. R. 7011.0610, subp. 1(A)(1)]</p>
EQUI 7	19650	<p>The Permittee shall vent emissions from EQUI 7 to control equipment meeting the requirements of TREA 9 and TREA 10 (once installed) whenever EQUI 7 operates. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0075, subp. 1]</p>
EQUI 8	3450	<p>Opacity &lt;= 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0610, subp. 1(A)(2)]</p>

SI Id	Sequence	Requirement
EQUI 8	3460	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. [Minn. R. 7011.0610, subp. 1(A)(1)]
EQUI 8	19650	The Permittee shall vent emissions from EQUI 8 to control equipment meeting the requirements of TREA 11 and TREA 12 (once installed) whenever EQUI 8 operates. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0075, subp. 1]
EQUI 9	3450	Opacity <= 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0610, subp. 1(A)(2)]
EQUI 9	3460	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. [Minn. R. 7011.0610, subp. 1(A)(1)]
EQUI 9	19650	The Permittee shall vent emissions from EQUI 9 to control equipment meeting the requirements of TREA 12 (once installed) and TREA 13 whenever EQUI 9 operates. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0075, subp. 1]
EQUI 10	3680	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
EQUI 10	3690	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. [Minn. R. 7011.0715, subp. 1(A)]
EQUI 10	19650	The Permittee shall vent emissions from EQUI 10 to control equipment meeting the requirements of TREA 10 (once installed) whenever EQUI 10 operates. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0075, subp. 1]
EQUI 11	3570	Fuel type: Natural gas only, by design. [Minn. R. 7005.0100, subp. 35a]
EQUI 11	3580	The Permittee shall keep records of fuel purchases showing fuel types. [Minn. R. 7007.0800, subp. 5]
EQUI 11	3590	Filterable Particulate Matter <= 0.40 pounds per million Btu heat input. The potential to emit from the unit is 0.33 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.0515, subp. 1]
EQUI 11	3632	Opacity <= 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0515, subp. 2]
EQUI 11	3637	Sulfur Dioxide <= 4.0 pounds per million Btu heat input while burning wood chips. The potential to emit from the unit is 0.025 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.0515, subp. 1]
EQUI 11	20050	Opacity: The Permittee shall conduct a performance test due before 180 days after 6/21/2019 and every 60 months thereafter to measure opacity.  The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below, unless further testing is not required. Further testing will not be required if the first test measures opacity less than 10%. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval.  Testing conducted during the 60 days prior to the performance test due date will not reset the test due date for future testing as required by this permit or within a Notice of Compliance letter.  Testing conducted more than 60 days prior to the performance test due date satisfies this test due date requirement but will reset future performance test due dates based on the performance test date. [Minn. R. 7017.2020, subp. 1, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
EQUI 12	3680	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
EQUI 12	3690	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. [Minn. R. 7011.0715, subp. 1(A)]

SI Id	Sequence	Requirement
EQUI 12	19650	The Permittee shall vent emissions from EQUI 12 to control equipment meeting the requirements of TREA 12 (once installed) and TREA 13 whenever EQUI 12 operates. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0075, subp. 1]
EQUI 13	3680	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
EQUI 13	3690	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. [Minn. R. 7011.0715, subp. 1(A)]
EQUI 13	19650	The Permittee shall vent emissions from EQUI 13 to control equipment meeting the requirements of TREA 14 whenever EQUI 13 operates. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0075, subp. 1]
EQUI 14	3680	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
EQUI 14	3690	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. [Minn. R. 7011.0715, subp. 1(A)]
EQUI 14	19660	The Permittee shall vent emissions from EQUI 14 to control equipment meeting the requirements of TREA 12 (once installed) and TREA 13 whenever EQUI 14 operates. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0075, subp. 1]
STRU 11	19810	<p>PM &lt; 10 micron: The Permittee shall conduct a performance test due 180 days after permit issuance and every 120 months thereafter to verify the STRU 11 emission factor for PM &lt; 10 micron.</p> <p>The deadline for the first test is extended to 4/16/2020. Subsequent tests are due 12/18/2029 and every 120 months thereafter.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 120 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval.</p> <p>Testing conducted during the 60 days prior to the performance test due date will not reset the test due date for future testing as required by this permit or within a Notice of Compliance letter.</p> <p>Testing conducted more than 60 days prior to the performance test due date satisfies this test due date requirement but will reset future performance test due dates based on the performance test date. [Minn. R. 7017.2020, subp. 1, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]</p>
STRU 11	19820	<p>PM &lt; 2.5 micron: The Permittee shall conduct a performance test due 180 days after permit issuance and every 120 months thereafter to verify the emission factor of PM &lt; 2.5 microns.</p> <p>The deadline for the first test is extended to 4/16/2020. Subsequent tests are due 12/18/2029 and every 120 months thereafter.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 120 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval.</p> <p>Testing conducted during the 60 days prior to the performance test due date will not reset the test due date for future testing as required by this permit or within a Notice of Compliance letter.</p> <p>Testing conducted more than 60 days prior to the performance test due date satisfies this test due date requirement but will reset future performance test due dates based on the performance test date. [Minn. R. 7017.2020, subp. 1, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]</p>

SI Id	Sequence	Requirement
STRU 11	19830	<p>Particulate Matter: The Permittee shall conduct a performance test due 180 days after permit issuance and every 120 months thereafter to verify the emission factor of Particulate Matter.</p> <p>The deadline for the first test is extended to 4/16/2020. Subsequent tests are due 12/18/2029 and every 120 months thereafter.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5 and 202, or other method approved by MPCA in the performance test plan approval.</p> <p>Testing conducted during the 60 days prior to the performance test due date will not reset the test due date for future testing as required by this permit or within a Notice of Compliance letter.</p> <p>Testing conducted more than 60 days prior to the performance test due date satisfies this test due date requirement but will reset future performance test due dates based on the performance test date. [Minn. R. 7017.2020, subp. 1, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]</p>
STRU 11	19870	<p>Volatile Organic Compounds: The Permittee shall conduct a performance test due 180 days after permit issuance and every 120 months thereafter to verify the emission factor of Volatile Organic Compounds.</p> <p>The deadline for the first test is extended to 4/16/2020. Subsequent tests are due 12/18/2029 and every 120 months thereafter.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 120 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 25A, or other method approved by MPCA in the performance test plan approval.</p> <p>Testing conducted during the 60 days prior to the performance test due date will not reset the test due date for future testing as required by this permit or within a Notice of Compliance letter.</p> <p>Testing conducted more than 60 days prior to the performance test due date satisfies this test due date requirement but will reset future performance test due dates based on the performance test date. [Minn. R. 7017.2020, subp. 1, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]</p>
STRU 11	19871	<p>After the initial testing for PM, PM10, PM2.5, and VOC is complete, the Permittee shall verify that the facility potential emissions do not exceed the major source thresholds under 40 CFR 52.21(b)(1)(i). The Permittee shall do this by calculating the total facility potential to emit for each pollutant by taking the measured hourly emission rate multiplied by 8760 and adding that to the annual potential emissions from EQUI 11 and 13, which are the only emission units that do not vent to STRU 11. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]</p>
TREA 9	17615	<p>If the Permittee replaces TREA 9, the replacement control must meet or exceed the control efficiency requirements of TREA 9 as well as comply with all other requirements of TREA 9. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Minn. R. 7007.0800, subp. 2(B)]</p>

SI Id	Sequence	Requirement
TREA 9	27040	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for Particulate Matter $\geq$ 90 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
TREA 9	27050	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 10 micron $\geq$ 78 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
TREA 9	27060	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 2.5 micron $\geq$ 78 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B)]
TREA 9	27090	<p>Pressure Drop <math>\geq</math> 4.0 and <math>\leq</math> 7.0 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.</p> <p>The Permittee shall record the pressure drop at least once every 24 hours when in operation. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation, as defined by Minn. R. 7007.0100, subp. 8a. [Minn. R. 7011.0075, subp. 1, Minn. R. 7011.0080(A)]</p>
TREA 9	27250	The control equipment is listed control equipment under Minn. R. 7011.0060 to 7011.0080. The Permittee shall vent emissions from EQUI 7 to TREA 9 whenever EQUI 7 operates, and operate and maintain TREA 9 at all times that any emissions are vented to TREA 9. The Permittee shall document periods of non-operation of the control equipment TREA 9 whenever EQUI 7 is operating. [Minn. R. 7011.0075, subp. 1]
TREA 9	27260	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the recorded values were within the ranges specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Minn. R. 7011.0080]
TREA 9	27270	<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"> <li>- the recorded pressure drop is outside the required operating range; or</li> <li>- the cyclone or any of its components are found during the inspections to need repair.</li> </ul> <p>Corrective actions shall return the pressure drop 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 Operation and Maintenance (O &amp; M) Plan for the cyclone. The Permittee shall keep a record of the type and date of any corrective action taken for each cyclone. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p>
TREA 9	27280	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 cyclone is in operation. [Minn. R. 7011.0075, subp. 3]

SI Id	Sequence	Requirement
TREA 9	27290	<p>The Permittee shall maintain each piece of control equipment according to the control equipment manufacturer's specifications, and shall:</p> <p>A. maintain an inventory of spare parts that are subject to frequent replacement, as required by the manufacturing specification or documented in records under items H and I;</p> <p>B. train staff on the operation and monitoring of control equipment and troubleshooting, and train and require staff to respond to indications of malfunctioning equipment;</p> <p>C. thoroughly inspect all control equipment at least annually, or as required by the manufacturing specification;</p> <p>D. inspect monthly, or as required by the manufacturing specification, components that are subject to wear or plugging, for example: bearings, belts, hoses, fans, nozzles, orifices, and ducts;</p> <p>E. inspect quarterly, or as required by the manufacturing specification, components that are not subject to wear including structural components, housings, ducts, and hoods;</p> <p>F. check daily, or as required by the manufacturing specification, monitoring equipment, for example: pressure gauges, chart recorders, temperature indicators, and recorders;</p> <p>G. calibrate (or replace) annually, or as required by the manufacturing specification, all monitoring equipment;</p> <p>H. maintain a record of activities conducted in items A to G consisting of the activity completed, the date the activity was completed, and any corrective action taken; and</p> <p>I. maintain a record of parts replaced, repaired, or modified for the previous five years. [Minn. R. 7011.0075, subp. 2]</p>
TREA 10	17615	<p>If the Permittee replaces TREA 10, the replacement control must meet or exceed the control efficiency requirements of TREA 10 as well as comply with all other requirements of TREA 10. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Minn. R. 7007.0800, subp. 2(B)]</p>
TREA 10	27040	<p>The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for Particulate Matter <math>\geq</math> 94 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]</p>
TREA 10	27050	<p>The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM &lt; 10 micron <math>\geq</math> 84 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]</p>
TREA 10	27060	<p>The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM &lt; 2.5 micron <math>\geq</math> 84 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B)]</p>
TREA 10	27080	<p>Water flow rate <math>\geq</math> 2.0 gallons per minute, unless a new limit 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 limit shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The limit is final upon issuance of a permit amendment incorporating the change.</p> <p>The Permittee shall record the water flow rate at least once every 24 hours when in operation. If the recorded flow rate is below the minimum flow rate limit, the emissions during that time shall be considered uncontrolled until the flow rate is once again above the minimum flow rate limit. The period of time for which the flow rate is below the minimum limit shall be reported as a deviation, as defined by Minn. R. 7007.0100, subp. 8a. [Minn. R. 7011.0075, subp. 1, Minn. R. 7011.0080(A)]</p>

SI Id	Sequence	Requirement
TREA 10	27090	<p>Pressure Drop <math>\geq 11.0</math> and <math>\leq 18.0</math> inches of water, 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.</p> <p>The Permittee shall record the pressure drop at least once every 24 hours when in operation. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation, as defined by Minn. R. 7007.0100, subp. 8a. [Minn. R. 7011.0075, subp. 1, Minn. R. 7011.0080(A)]</p>
TREA 10	27250	<p>The control equipment is listed control equipment under Minn. R. 7011.0060 to 7011.0080. The Permittee shall vent emissions from EQUI 7 and EQUI 10 to TREA 10 (once installed) whenever EQUI 7 or EQUI 10 operates, and operate and maintain TREA 10 at all times that any emissions are vented to TREA 10. The Permittee shall document periods of non-operation of the control equipment TREA 10 whenever EQUI 7 or EQUI 10 is operating. [Minn. R. 7011.0075, subp. 1]</p>
TREA 10	27260	<p>Recordkeeping of Pressure Drop and Water Flow Rate: The Permittee shall record the time and date of each pressure drop reading and water flow rate reading, and whether or not the recorded values were within the ranges specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Minn. R. 7011.0080]</p>
TREA 10	27270	<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"> <li>- the recorded flow rate is below the required rate;</li> <li>- the recorded pressure drop is outside the required operating range; or</li> <li>- the scrubber or any of its components are found during the inspections to need repair.</li> </ul> <p>Corrective actions shall return the pressure drop and/or water flow rate to within the permitted range(s), 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 Operation and Maintenance (O &amp; M) Plan for the scrubber. The Permittee shall keep a record of the type and date of any corrective action taken for the scrubber. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p>
TREA 10	27280	<p>Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop and water flow rate as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored scrubber is in operation. [Minn. R. 7011.0075, subp. 3]</p>

SI Id	Sequence	Requirement
TREA 10	27290	<p>The Permittee shall maintain each piece of control equipment according to the control equipment manufacturer's specifications, and shall:</p> <p>A. maintain an inventory of spare parts that are subject to frequent replacement, as required by the manufacturing specification or documented in records under items H and I;</p> <p>B. train staff on the operation and monitoring of control equipment and troubleshooting, and train and require staff to respond to indications of malfunctioning equipment;</p> <p>C. thoroughly inspect all control equipment at least annually, or as required by the manufacturing specification;</p> <p>D. inspect monthly, or as required by the manufacturing specification, components that are subject to wear or plugging, for example: bearings, belts, hoses, fans, nozzles, orifices, and ducts;</p> <p>E. inspect quarterly, or as required by the manufacturing specification, components that are not subject to wear including structural components, housings, ducts, and hoods;</p> <p>F. check daily, or as required by the manufacturing specification, monitoring equipment, for example: pressure gauges, chart recorders, temperature indicators, and recorders;</p> <p>G. calibrate (or replace) annually, or as required by the manufacturing specification, all monitoring equipment;</p> <p>H. maintain a record of activities conducted in items A to G consisting of the activity completed, the date the activity was completed, and any corrective action taken; and</p> <p>I. maintain a record of parts replaced, repaired, or modified for the previous five years. [Minn. R. 7011.0075, subp. 2]</p>
TREA 11	17615	<p>If the Permittee replaces TREA 11, the replacement control must meet or exceed the control efficiency requirements of TREA 11 as well as comply with all other requirements of TREA 11. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Minn. R. 7007.0800, subp. 2(B)]</p>
TREA 11	27040	<p>The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for Particulate Matter <math>\geq</math> 90 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]</p>
TREA 11	27050	<p>The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM &lt; 10 micron <math>\geq</math> 78 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]</p>
TREA 11	27060	<p>The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM &lt; 2.5 micron <math>\geq</math> 78 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B)]</p>
TREA 11	27090	<p>Pressure Drop <math>\geq</math> 4.0 and <math>\leq</math> 7.0 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.</p> <p>The Permittee shall record the pressure drop at least once every 24 hours when in operation. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation, as defined by Minn. R. 7007.0100, subp. 8a. [Minn. R. 7011.0075, subp. 1, Minn. R. 7011.0080(A)]</p>
TREA 11	27250	<p>The control equipment is listed control equipment under Minn. R. 7011.0060 to 7011.0080. The Permittee shall vent emissions from EQUI 8 to TREA 11 whenever EQUI 8 operates, and operate and maintain TREA 11 at all times that any emissions are vented to TREA 11. The Permittee shall document periods of non-operation of the control equipment TREA 11 whenever EQUI 8 is operating. [Minn. R. 7011.0075, subp. 1]</p>



SI Id	Sequence	Requirement
TREA 11	27260	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the recorded values were within the ranges specified in this permit. [Minn. R. 7007.0800, subs. 4-5, Minn. R. 7011.0080]
TREA 11	27270	<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"> <li>- the recorded pressure drop is outside the required operating range; or</li> <li>- the cyclone or any of its components are found during the inspections to need repair.</li> </ul> <p>Corrective actions shall return the pressure drop 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 Operation and Maintenance (O &amp; M) Plan for the cyclone. The Permittee shall keep a record of the type and date of any corrective action taken for the cyclone. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p>
TREA 11	27280	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 cyclone is in operation. [Minn. R. 7011.0075, subp. 3]
TREA 11	27290	<p>The Permittee shall maintain each piece of control equipment according to the control equipment manufacturer's specifications, and shall:</p> <ul style="list-style-type: none"> <li>A. maintain an inventory of spare parts that are subject to frequent replacement, as required by the manufacturing specification or documented in records under items H and I;</li> <li>B. train staff on the operation and monitoring of control equipment and troubleshooting, and train and require staff to respond to indications of malfunctioning equipment;</li> <li>C. thoroughly inspect all control equipment at least annually, or as required by the manufacturing specification;</li> <li>D. inspect monthly, or as required by the manufacturing specification, components that are subject to wear or plugging, for example: bearings, belts, hoses, fans, nozzles, orifices, and ducts;</li> <li>E. inspect quarterly, or as required by the manufacturing specification, components that are not subject to wear including structural components, housings, ducts, and hoods;</li> <li>F. check daily, or as required by the manufacturing specification, monitoring equipment, for example: pressure gauges, chart recorders, temperature indicators, and recorders;</li> <li>G. calibrate (or replace) annually, or as required by the manufacturing specification, all monitoring equipment;</li> <li>H. maintain a record of activities conducted in items A to G consisting of the activity completed, the date the activity was completed, and any corrective action taken; and</li> <li>I. maintain a record of parts replaced, repaired, or modified for the previous five years. [Minn. R. 7011.0075, subp. 2]</li> </ul>
TREA 12	16445	<p>If the Permittee replaces TREA 12, the replacement control must meet or exceed the control efficiency requirements of TREA 12 as well as comply with all other requirements of TREA 12. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Minn. R. 7007.0800, subp. 2(B)]</p>
TREA 12	16450	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the 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 or water flow rate, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]

SI Id	Sequence	Requirement
TREA 12	16460	As required by 40 CFR Section 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by 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 64.9(a)(2), Minn. R. 7017.0200]
TREA 12	16470	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain 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 64.9(b), Minn. R. 7017.0200]
TREA 12	17420	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for Particulate Matter $\geq$ 94 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
TREA 12	17430	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 10 micron $\geq$ 84 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
TREA 12	17440	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 2.5 micron $\geq$ 84 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B)]
TREA 12	17442	Pressure Drop $\geq$ 11.0 and $\leq$ 18.0 inches of water, 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.  If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation, as defined by Minn. R. 7007.0100, subp. 8a. [Minn. R. 7011.0075, subp. 1, Minn. R. 7011.0080(A)]
TREA 12	17444	Water flow rate $\geq$ 2.0 gallons per minute, unless a new limit 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 limit shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The limit is final upon issuance of a permit amendment incorporating the change.  If the recorded water flow rate is below the Water Flow Rate Limit, the emissions during that time shall be considered uncontrolled until the water flow rate is above the Water Flow Rate Limit. The period of time for which emissions are considered uncontrolled shall be reported as a deviation. [Minn. R. 7011.0075, subp. 1, Minn. R. 7011.0080(A)]
TREA 12	17450	The Permittee shall operate and maintain the scrubber 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]
TREA 12	17460	Daily Inspections: The Permittee shall do the following, once each day of operation: 1). Read and record the scrubber liquid flow rate; and 2). Read and record the gas pressure drop across the scrubber. [Minn. R. 7007.0800, subs. 4-5]
TREA 12	17470	Recordkeeping of Pressure Drop and Water Flow Rate: The Permittee shall record the time and date of each pressure drop reading and water flow rate reading, and whether or not the observed value was within the range specified in this permit. Recorded values outside any range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [40 CFR 64.9(b), Minn. R. 7011.0080, Minn. R. 7017.0200]

SI Id	Sequence	Requirement
TREA 12	17475	The control equipment is listed control equipment under Minn. R. 7011.0060 to 7011.0080. The Permittee shall vent emissions from EQUI 8, EQUI 9, EQUI 12, and EQUI 14 to TREA 12 (once installed) whenever EQUI 8, EQUI 9, EQUI 12, or EQUI 14 operates, and operate and maintain TREA 12 at all times that any emissions are vented to TREA 12. The Permittee shall document periods of non-operation of the control equipment TREA 12 whenever EQUI 8, EQUI 9, EQUI 12, or EQUI 14 is operating. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0075, subp. 1]
TREA 12	17480	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop, water flow rate, and water supply pressure as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored scrubber is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
TREA 12	17490	The Permittee shall calibrate the gauges at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
TREA 12	17500	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
TREA 12	17510	<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"> <li>- the recorded water flow rate is below the water flow rate limit; or</li> <li>- the recorded pressure drop is outside the required operating range; or</li> <li>- the scrubber or any of its components are found during the inspections to need repair.</li> </ul> <p>Corrective actions shall return the pressure drop and/or water flow rate 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 &amp; M Plan for the scrubber. The Permittee shall keep a record of the type and date of any corrective action taken for the filter. [40 CFR 64.7(d), Minn. R. 7017.0200]</p>
TREA 13	17615	<p>If the Permittee replaces TREA 13, the replacement control must meet or exceed the control efficiency requirements of TREA 13 as well as comply with all other requirements of TREA 13. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Minn. R. 7007.0800, subp. 2(B)]</p>
TREA 13	27040	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for Particulate Matter $\geq$ 90 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
TREA 13	27050	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 10 micron $\geq$ 78 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
TREA 13	27060	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 2.5 micron $\geq$ 78 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B)]
TREA 13	27090	<p>Pressure Drop <math>\geq</math> 4.0 and <math>\leq</math> 7.0 inches of water, 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.</p> <p>The Permittee shall record the pressure drop at least once every 24 hours when in operation. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation, as defined by Minn. R. 7007.0100, subp. 8a. [Minn. R. 7011.0075, subp. 1, Minn. R. 7011.0080(A)]</p>

SI Id	Sequence	Requirement
TREA 13	27250	The control equipment is listed control equipment under Minn. R. 7011.0060 to 7011.0080. The Permittee shall vent emissions from EQUI 9 and EQUI 12 to TREA 13 whenever EQUI 9 or EQUI 12 operates, and operate and maintain TREA 13 at all times that any emissions are vented to TREA 13. The Permittee shall document periods of non-operation of the control equipment TREA 13 whenever EQUI 9 or EQUI 12 is operating. [Minn. R. 7011.0075, subp. 1]
TREA 13	27260	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the recorded values were within the ranges specified in this permit. [Minn. R. 7007.0800, subs. 4-5, Minn. R. 7011.0080]
TREA 13	27270	<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"> <li>- the recorded pressure drop is outside the required operating range; or</li> <li>- the cyclone or any of its components are found during the inspections to need repair.</li> </ul> <p>Corrective actions shall return the pressure drop 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 Operation and Maintenance (O &amp; M) Plan for the cyclone. The Permittee shall keep a record of the type and date of any corrective action taken for each cyclone. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p>
TREA 13	27280	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 cyclone is in operation. [Minn. R. 7011.0075, subp. 3]
TREA 13	27290	<p>The Permittee shall maintain each piece of control equipment according to the control equipment manufacturer's specifications, and shall:</p> <ul style="list-style-type: none"> <li>A. maintain an inventory of spare parts that are subject to frequent replacement, as required by the manufacturing specification or documented in records under items H and I;</li> <li>B. train staff on the operation and monitoring of control equipment and troubleshooting, and train and require staff to respond to indications of malfunctioning equipment;</li> <li>C. thoroughly inspect all control equipment at least annually, or as required by the manufacturing specification;</li> <li>D. inspect monthly, or as required by the manufacturing specification, components that are subject to wear or plugging, for example: bearings, belts, hoses, fans, nozzles, orifices, and ducts;</li> <li>E. inspect quarterly, or as required by the manufacturing specification, components that are not subject to wear including structural components, housings, ducts, and hoods;</li> <li>F. check daily, or as required by the manufacturing specification, monitoring equipment, for example: pressure gauges, chart recorders, temperature indicators, and recorders;</li> <li>G. calibrate (or replace) annually, or as required by the manufacturing specification, all monitoring equipment;</li> <li>H. maintain a record of activities conducted in items A to G consisting of the activity completed, the date the activity was completed, and any corrective action taken; and</li> <li>I. maintain a record of parts replaced, repaired, or modified for the previous five years. [Minn. R. 7011.0075, subp. 2]</li> </ul>
TREA 14	17615	<p>If the Permittee replaces TREA 14, the replacement control must meet or exceed the control efficiency requirements of TREA 14 as well as comply with all other requirements of TREA 14. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Minn. R. 7007.0800, subp. 2(B)]</p>
TREA 14	18310	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for Particulate Matter $\geq$ 99 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]

SI Id	Sequence	Requirement
TREA 14	18320	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 10 micron $\geq$ 93 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7011.0070, subp. 1(A)]
TREA 14	18330	The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for PM < 2.5 micron $\geq$ 93 percent control efficiency. [Minn. R. 7007.0800, subp. 2(B)]
TREA 14	18335	<p>Pressure Drop <math>\geq</math> 1.0 and <math>\leq</math> 3.0 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.</p> <p>If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Minn. R. 7011.0080]</p>
TREA 14	18340	Visible Emissions: The Permittee shall check the fabric filter stack (STRU 13) for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7011.0080]
TREA 14	18360	Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7011.0080]
TREA 14	18370	The control equipment is listed control equipment under Minn. R. 7011.0060 to 7011.0080. The Permittee shall vent emissions from EQUI 13 to TREA 14 whenever EQUI 13 operates, and operate and maintain TREA 14 at all times that any emissions are vented to TREA 14. The Permittee shall document periods of non-operation of the control equipment TREA 14 whenever EQUI 13 is operating. [Minn. R. 7011.0075, subp. 1]
TREA 14	18380	<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"> <li>- visible emissions are observed;</li> <li>- the recorded pressure drop is outside the required operating range; or</li> <li>- the fabric filter or any of its components are found during the inspections to need repair.</li> </ul> <p>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 &amp; 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. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p>
TREA 14	18390	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. 7011.0075, subp. 3]

SI Id	Sequence	Requirement
TREA 14	18400	<p>The Permittee shall maintain each piece of control equipment according to the control equipment manufacturer's specifications, and shall:</p> <ul style="list-style-type: none"> <li>A. maintain an inventory of spare parts that are subject to frequent replacement, as required by the manufacturing specification or documented in records under items H and I;</li> <li>B. train staff on the operation and monitoring of control equipment and troubleshooting, and train and require staff to respond to indications of malfunctioning equipment;</li> <li>C. thoroughly inspect all control equipment at least annually, or as required by the manufacturing specification;</li> <li>D. inspect monthly, or as required by the manufacturing specification, components that are subject to wear or plugging, for example: bearings, belts, hoses, fans, nozzles, orifices, and ducts;</li> <li>E. inspect quarterly, or as required by the manufacturing specification, components that are not subject to wear including structural components, housings, ducts, and hoods;</li> <li>F. check daily, or as required by the manufacturing specification, monitoring equipment, for example: pressure gauges, chart recorders, temperature indicators, and recorders;</li> <li>G. calibrate (or replace) annually, or as required by the manufacturing specification, all monitoring equipment;</li> <li>H. maintain a record of activities conducted in items A to G consisting of the activity completed, the date the activity was completed, and any corrective action taken; and</li> <li>I. maintain a record of parts replaced, repaired, or modified for the previous five years. [Minn. R. 7011.0075, subp. 2]</li> </ul>