

DRAFT/PROPOSED

AIR EMISSION PERMIT NO. 13700112- 008
Total Facility Oper. Permit - Reissuance

IS ISSUED TO

Western Lake Superior Sanitary District (WLSSD)

Western Lake Superior Sanitary District
2626 Courtland Street
Duluth, St. Louis County, MN 558061813

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

This permit reissuance supersedes Air Emission Permit No. 13700112-07 and authorizes the Permittee to operate the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

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

Permit Type: Federal; Pt 70/Limits to Avoid NSR;

Operating Permit Issue Date: <issue date>

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

Don A. Smith, Manager
Air Quality Permits Section
Industrial Division

for John Stine
Commissioner
Minnesota Pollution Control Agency

Permit Applications Table

Permit Type	Application Date	Permit Action
Total Facility Operating Permit - Reissuance	August 26, 2008; supplemented September 29, 2011	008

XX:xx

TABLE OF CONTENTS

Notice to the Permittee

Permit Shield

Facility Description

Table A: Limits and Other Requirements

Table B: Submittals

Table C: *not used in this permit*

Appendix A: *not used in this permit*

Appendix B: Insignificant Activities

Appendix C: NESHAP Subpart JJJJJ Requirements for New Oil-Fired Boilers < 10 MMBtu/hour

NOTICE TO THE PERMITTEE:

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

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

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

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

PERMIT SHIELD:

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

FACILITY DESCRIPTION:

Western Lake Superior Sanitary District (WLSSD) is a publicly owned treatment works whose its primary function is to treat municipal and industrial wastewater. The facility also includes household hazardous waste collection. The facility is located in Duluth, St. Louis County, Minnesota. All sewage sludge incineration operations have been removed, and sewage sludge is now processed through digesters, with the digester gas combusted through the boilers or flare.

The facility is permitted as a Title V source. Since the sludge incineration operations have been removed, the facility's potential emissions are less than the Part 70 thresholds and the facility qualifies for a state operating permit. However, the Permittee has opted to continue holding a Title V permit.

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-1 06/06/12

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

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

Subject Item: Total Facility

What to do	Why to do it
Permit Appendices: This permit contains appendices as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in the appendices.	Minn. R. 7007.0800, subp. 2
OPERATIONAL REQUIREMENTS	hdr
The Permittee shall comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080. Compliance shall be demonstrated upon written request by the MPCA.	40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subp. 7(A), 7(L), & 7(M); Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subps. 14 and 16(J)
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
PERFORMANCE TESTING	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Performance Test Notifications and Submittals: Performance Tests are due as outlined in Table A of the permit. See Table B for additional testing requirements. Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test The Notification, Test Plan, and Test Report may be submitted in an alternative format as allowed by Minn. R. 7017.2018.	Minn. R. 7017.2018; Minn. R. 7017.2030, subps. 1-4, Minn. R. 7017.2035, subps. 1-2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-2**

06/06/12

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

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
MONITORING REQUIREMENTS	hdr
Monitoring Equipment Calibration: The Permittee shall calibrate all required monitoring equipment at least once every 12 months (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
RECORDKEEPING	hdr
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)
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)
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
REPORTING/SUBMITTALS	hdr
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-3**

06/06/12

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 - 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H). 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)
Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance, to be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 - 7019.3100
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 - 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-4 06/06/12

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

Subject Item: GP 003 Heating Boilers**Associated Items:** EU 051 Heating Boiler

EU 052 Heating Boiler

What to do	Why to do it
OPERATING AND EMISSION LIMITS	hdr
Sulfur Content of Fuel: less than or equal to 0.05 percent by weight when burning oil.	Minn. R. 7007.0800, subp. 2 (limit set at a previous permit action to allow boilers to be installed through the minor amendment process of Minn. R. 7007.1450)
Sulfur Content of Fuel: less than or equal to 0.50 percent by weight when burning oil.	40 CFR Section 60.42c(d); Minn. R. 7011.0570
Opacity: less than or equal to 20 percent except for one 6 minute period per hour of not more than 27 percent.	40 CFR Section 60.43c(c); Minn. R. 7011.0570
The heating boilers may operate at a Total Combined Heat Input: less than or equal to 40.0 million Btu/hour using 1-Hour Average	Minn. R. 7007.0800, subp. 2 (limit set at a previous permit action to allow boilers to be installed through the minor amendment process of Minn. R. 7007.1450)
Fuel use limited to natural gas and distillate oil.	Minn. R. 7007.0800, subp. 2
RECORDKEEPING AND REPORTING	hdr
Obtain fuel supplier certifications for each shipment of oil, showing the sulfur content of the fuel burned.	40 CFR Section 60.42c(h)(1); Minn. R. 7011.0570
Calculate and record the heat input to each boiler each hour.	Minn. R. 7007.0800, subp. 2 (limit set at a previous permit action to allow boilers to be installed through the minor amendment process of Minn. R. 7007.1450)
Fuel supplier certification shall include the following information: - The name of the oil supplier; - A statement from the supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR Section 60.41c; and -The actual or maximum sulfur content of the oil.	40 CFR Section 60.48c(f)(1); Minn. R. 7011.0570
Record and maintain records of the amounts of each fuel delivered each month.	40 CFR Section 60.48c(g)(3); Minn. R. 7011.0570

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-5**

06/06/12

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

Subject Item: GP 004 Flare and Waste Gas Boiler**Associated Items:** EU 050 Digester Gas Boiler

EU 054 Flare

What to do	Why to do it
Total biogas flow shall not exceed 38,000 scf per hour.	Minn. R. 7007.0800, subp. 2 (limit set at a previous permit action to allow boilers to be installed through the minor amendment process of Minn. R. 7007.1450)
Flow monitors shall be installed on the flare and the waste gas boiler to measure and record the flow of biogas to each unit on an hourly basis.	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Western Lake Superior Sanitary District
Permit Number: 13700112 - 008

Subject Item: GP 005 Anaerobic Digesters

Associated Items: CE 018 Flaring
CE 019 Other - Combustion in EUs
EU 050 Digester Gas Boiler
EU 054 Flare
EU 058 Digester 1
EU 059 Digester 2
EU 060 Digester 3
EU 061 Digester 4

What to do	Why to do it
Emissions from the digesters must be routed to a combustion device (CE018/EU054 or CE019/EU050 or to the microturbines; such an assumption was used in calculations of potential to emit).	Minn. R. 7005.0100, subp. 35a

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-7 06/06/12

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

Subject Item: EU 049 Backup Generator HHW**Associated Items:** SV 076 HHW Emergency generator

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity . The permittee shall not cause or permit the emission of visible air contaminants from the engine in excess of 20 percent opacity for more than ten consecutive seconds once operating temperatures have been obtained.	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input	Minn. R. 7011.2300, subp. 2
OPERATING CONDITIONS	hdr
Fuel type: No. 2 fuel oil only, by design.	Minn. R. 7005.0100, subp. 35a
Sulfur Content of Fuel: less than or equal to 0.05 percent by weight	Minn. R. 7005.0100, subp. 35a
RECORDINGKEEPING REQUIREMENTS	hdr
Hours of Operation: The Permittee shall maintain documentation on site that the unit is an emergency diesel generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, limiting operation to 500 hours per year.	Minn. R. 7007.0800, subp. 4 & 5
Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of No. 2 fuel oil, certifying that the sulfur content does not exceed 0.05% by weight.	Minn. R. 7007.0800, subps. 4 & 5
SUBPART ZZZZ REQUIREMENTS	hdr
Comply with the applicable emission limitations and operating requirements of Subpart ZZZZ no later than May 3, 2013.	40 CFR Section 63.6595(a)(1); Minn. R. 7011.8150
The Permittee shall meet the following requirements, except during periods of startup: a. Change oil and filter every 1000 hours of operation or annually, whichever comes first; b. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	40 CFR Section 63.6603(a); Minn. R. 7011.8150
The Permittee must be in compliance with the applicable emission limitations and applicable operating limitations of 40 CFR Part 63, Subpart ZZZZ, at all times.	40 CFR Section 63.6605(a); Minn. R. 7011.8150
The Permittee must at all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not required the Permittee to make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.	40 CFR Section 63.6605(b); Minn. R. 7011.8150
The Permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions.	40 CFR Section 63.6625(e); 40 CFR Section 63.6655(d); Minn. R. 7011.8150
The Permittee must install a non-resettable hour meter if one is not already installed.	40 CFR Section 63.6625(f); Minn. R. 7011.8150
The Permittee must minimize the time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.	40 CFR Section 63.6625(h); Minn. R. 7011.8150

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-8**

06/06/12

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

<p>The Permittee must keep the following records:</p> <p>(1) A copy of each notification and report submitted to comply with Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 CFR Section 63.10(b)(2)(xiv).</p> <p>(2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.</p> <p>(3) (does not apply)</p> <p>(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.</p> <p>(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR Section 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.</p>	40 CFR Section 63.6655(a); Minn. R. 7011.8150
<p>The Permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to the maintenance plan.</p>	40 CFR Section 63.6655(e); Minn. R. 7011.8150
<p>The Permittee must keep records of the hours of operation of the engine as recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.</p>	40 CFR Section 63.6655(f); Minn. R. 7011.8150
<p>a. Records must be in a form suitable and readily available for expeditious review according to 40 CFR Section 63.10(b)(1).</p> <p>b. As specified in 40 CFR Section 63.10(b)(1), keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.</p> <p>c. Keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR Section 63.10(b)(1).</p>	40 CFR Section 63.6660; Minn. R. 7011.8150

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-9** 06/06/12

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

Subject Item: EU 050 Digester Gas Boiler**Associated Items:** GP 004 Flare and Waste Gas Boiler

GP 005 Anaerobic Digesters

SV 079 Waste gas boiler stack

What to do	Why to do it
OPERATING AND EMISSION LIMITS	hdr
Sulfur Content of Fuel: less than or equal to 0.05 percent by weight when burning oil.	Minn. R. 7007.0800, subp. 2 (limit set at a previous permit action to allow boilers to be installed through the minor amendment process of Minn. R. 7007.1450)
Sulfur Content of Fuel: less than or equal to 0.50 percent by weight when burning oil.	40 CFR Section 60.42c(d); Minn. R. 7011.0570
Opacity: less than or equal to 20 percent except for one 6 minute period per hour of not more than 27 percent.	40 CFR Section 60.43c(c); Minn. R. 7011.0570
Fuels limited to bio-gas and distillate oil.	Minn. R. 7007.0800, subp. 2
RECORDKEEPING AND REPORTING	hdr
Obtain fuel supplier certifications for each shipment of oil, showing the sulfur content of the fuel burned.	40 CFR Section 60.42c(h)(1); Minn. R. 7011.0570
Fuel supplier certification shall include the following information: - The name of the oil supplier; - A statement from the supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR Section 60.41c; and -The actual or maximum sulfur content of the oil.	40 CFR Section 60.48c(f)(1); Minn. R. 7011.0570
Record and maintain records of the amounts of each fuel delivered each month.	40 CFR Section 60.48c(g)(3); Minn. R. 7011.0570

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-10**

06/06/12

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

Subject Item: EU 054 Flare**Associated Items:** GP 004 Flare and Waste Gas Boiler

GP 005 Anaerobic Digesters

SV 082 Flare

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions 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)
Opacity: less than or equal to 20 percent except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
Performance Test Methods: Upon the request of the Commissioner testing shall be done in accordance with Minn. R. 7017.2001-2060.	Minn. R. 7017.2020, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-11 06/06/12

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

Subject Item: EU 057 Emergency Generator**Associated Items:** SV 084 Emergency Generator

What to do	Why to do it
EMISSION LIMITS	hdr
Opacity: less than or equal to 20 percent opacity . The permittee shall not cause or permit the emission of visible air contaminants from the engine in excess of 20 percent opacity for more than ten consecutive seconds once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input	Minn. R. 7011.2300, subp. 2
OPERATING CONDITIONS	hdr
Fuel type: No. 2 fuel oil only, by design.	Minn. R. 7005.0100, subp. 35a
Sulfur Content of Fuel: less than or equal to 0.05 percent by weight	Minn. R. 7005.0100, subp. 35a
RECORDINGKEEPING REQUIREMENTS	hdr
Hours of Operation: The Permittee shall maintain documentation on site that the unit is an emergency diesel generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, limiting operation to 500 hours per year.	Minn. R. 7007.0800, subp. 4 & 5
Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of No. 2 fuel oil, certifying that the sulfur content does not exceed 0.05% by weight.	Minn. R. 7007.0800, subps. 4 & 5
SUBPART ZZZZ REQUIREMENTS	hdr
Comply with the applicable emission limitations and operating requirements of Subpart ZZZZ no later than May 3, 2013.	40 CFR Section 63.6595(a)(1); Minn. R. 7011.8150
The Permittee shall meet the following requirements, except during periods of startup: a. Change oil and filter every 1000 hours of operation or annually, whichever comes first; b. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	40 CFR Section 63.6603(a); Minn. R. 7011.8150
The Permittee must be in compliance with the applicable emission limitations and applicable operating limitations of 40 CFR Part 63, Subpart ZZZZ, at all times.	40 CFR Section 63.6605(a); Minn. R. 7011.8150
The Permittee must at all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not required the Permittee to make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.	40 CFR Section 63.6605(b); Minn. R. 7011.8150
The Permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions.	40 CFR Section 63.6625(e); 40 CFR Section 63.6655(d); Minn. R. 7011.8150
The Permittee must install a non-resettable hour meter if one is not already installed.	40 CFR Section 63.6625(f); Minn. R. 7011.8150
The Permittee must minimize the time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.	40 CFR Section 63.6625(h); Minn. R. 7011.8150

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-12**

06/06/12

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

<p>The Permittee must keep the following records:</p> <p>(1) A copy of each notification and report submitted to comply with Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 CFR Section 63.10(b)(2)(xiv).</p> <p>(2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.</p> <p>(3) (does not apply)</p> <p>(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.</p> <p>(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR Section 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.</p>	40 CFR Section 63.6655(a); Minn. R. 7011.8150
<p>The Permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to the maintenance plan.</p>	40 CFR Section 63.6655(e); Minn. R. 7011.8150
<p>The Permittee must keep records of the hours of operation of the engine as recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.</p>	40 CFR Section 63.6655(f); Minn. R. 7011.8150
<p>a. Records must be in a form suitable and readily available for expeditious review according to 40 CFR Section 63.10(b)(1).</p> <p>b. As specified in 40 CFR Section 63.10(b)(1), keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.</p> <p>c. Keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR Section 63.10(b)(1).</p>	40 CFR Section 63.6660; Minn. R. 7011.8150

TABLE B: SUBMITTALS**B-1** 06/06/12

Facility Name: Western Lake Superior Sanitary District
Permit Number: 13700112 - 008

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

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

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

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

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

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

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

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

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

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

Facility Name: Western Lake Superior Sanitary District
Permit Number: 13700112 - 008

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility

TABLE B: RECURRENT SUBMITTALS**B-3** 06/06/12

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

What to send	When to send	Portion of Facility Affected
Quarterly Report	due 30 days after end of each calendar quarter starting 05/17/2005 . The reports shall include: (1) Calendar dates covered in the reporting period, (2) Records of the fuel supplier certifications, and (3) A signed statement by the owner or operator that the records submitted represent all of the oil combusted during the reporting period.	EU050
Quarterly Report	due 30 days after end of each calendar quarter starting 05/17/2005 . The reports shall include: (1) Calendar dates covered in the reporting period, (2) Records of the fuel supplier certifications, and (3) A signed statement by the owner or operator that the records submitted represent all of the oil combusted during the reporting period.	GP003
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 31 days after end of each calendar year following Permit Issuance (for the previous calendar year). The Permittee shall submit this on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility

Appendix B: Insignificant Activities
Facility Name: Western Lake Superior Sanitary District
Permit Number: 13700112-008

Insignificant Activities and Applicable Requirements

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

Minn. R. 7007.1300, subpart	Rule Description of the Activity	Likely Applicable Requirement
3(E)	Storage tanks:	
	2. non-hazardous air pollutant VOC storage tanks with a combined total tankage capacity of not more than 10,000 gallons of non-hazardous air pollutant VOCs and with a vapor pressure of not more than 1.0 psia at 60 degrees Fahrenheit.	Minn. R. 7011.0710/0715 <i>OR</i> Minn. R. 7011.1505, subp. 2(B)/1505, subp. 3 (B)
	<ul style="list-style-type: none"> Disinfection tank (formerly designated as FS005) – potential VOC = 1000 lb/yr 	
3(I)	Individual emissions units at a stationary source, each of which have a potential to emit the following pollutants in amounts less than: 1. 4,000 lbs/year of carbon monoxide; 2. 2,000 lbs/year each of nitrogen oxide, sulfur dioxide, particulate matter, particulate matter less than ten microns, volatile organic compounds (including hazardous air pollutant-containing VOC), and ozone; and 3. 1,000 tons/year of CO ₂ e	
	<ul style="list-style-type: none"> Duluth influent channel and screw pumps (formerly designated as EU001 & EU002) – negligible emissions due to nature of influent (no methanol in residential influent) Bar screen room and screen (formerly designated as EU003) – potential VOC = 328 lb/yr Bar screen channel (formerly designated as EU004, EU005, EU008, EU009, EU010, & EU012) – potential VOC = 328 lb/yr Oxidation tanks (formerly designated as EU015) – potential VOC = 10.2 lb/yr Mixed liquor channel (formerly designated as EU016 and EU018) – potential VOC = 294 lb/yr Flocculation tanks (formerly designated as EU019) – potential VOC = 19.7 lb/yr Mixed media filters (formerly designated as EU020) – negligible emissions 	Minn. R. 7911.0710/0715

Minn. R. 7007.1300, subpart	Rule Description of the Activity	Likely Applicable Requirement
	<ul style="list-style-type: none"> • Backwash water well (formerly designated as EU021) – negligible emissions • Dissolved air flocculation thickeners (formerly designated as EU022) – negligible emissions • Sludge storage tanks (formerly designated as EU023) – negligible emissions • Three Safety-kleen parts washers (2 formerly designated as EU024 & EU025) – potential VOC = 1447 lb/yr each • Paint bulking operation (formerly designated as EU048) – potential VOC = 19 lb/yr • Solid waste transfer station (formerly designated as EU053) – potential PM/PM10 = 1580 lb/yr • Compost activities (formerly designated as FS003) – potential CO₂e = 797 tpy (excludes biogenic CO₂) • Disinfection influent channel (formerly designated as FS004) – potential VOC = 10 lb/yr • Final effluent channel (formerly designated as FS007) – potential VOC = 40 lb/yr • Two sodium bisulfate tanks – potential SO₂ = 1520 lb/yr each 	
	<ul style="list-style-type: none"> • Two microturbines (formerly designated as EU055 and EU056) – potential NO_x (highest criteria pollutant) = 660 lb/yr each; potential CO₂e = 0.24 tpy each (excludes biogenic CO₂) 	Minn. R. 7011.2300
	<ul style="list-style-type: none"> • Two boilers (0.35 mmbtu/hr each) combusting used motor oil collected from citizens 	Minn. R. 7011.0515 40 CFR Section 63, Subpart JJJJ, as detailed in Appendix C of this permit

Appendix C: NESHAP Subpart JJJJJ Requirements for New Oil-Fired Boilers < 10 MMBtu/hour
Facility Name: Western Lake Superior Sanitary District
Permit Number: 13700112-008

Per 40 CFR Section 63.11194(c), a boiler is “new” if construction or reconstruction was commenced on or after June 4, 2010. The following requirements apply to each boiler subject to Subpart JJJJJJ.

What To Do	Why To Do It
Comply with applicable requirements in this subpart upon startup of the new boiler.	40 CFR Section 63.11196(c)
Conduct a tune-up of the boiler biennially as specified in 40 CFR Section 63.11223.	40 CFR Section 63.11201(b)
At all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.	40 CFR Section 63.11205(a)
Demonstrate initial compliance within 180 calendar days after startup of the new boilers.	40 CFR Section 63.11210(d)
Conduct a performance tune-up according to 40 CFR Section 63.11223(b) and submit a signed statement in the Notification of Compliance Status report that indicates that you conducted a tune-up of the boiler.	40 CFR Section 63.11214(b)
Conduct a biennial performance tune-up according to 40 CFR Section 63.11223(b) and keep records as required in 40 CFR Section 63.11225(c) to demonstrate continuous compliance. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.	40 CFR Section 63.11223(a)
<p>Conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified below:</p> <p>(1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (burner inspection may be delayed until the next scheduled unit shutdown, but each burner must be inspected at least once every 36 months).</p> <p>(2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.</p> <p>(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.</p> <p>(4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if</p>	40 CFR Section 63.11223(b)

What To Do	Why To Do It
<p>available.</p> <p>(5) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).</p> <p>(6) Maintain onsite and submit, if requested by the Administrator, biennial report containing the following information:</p> <ul style="list-style-type: none"> (i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler. (ii) A description of any corrective actions taken as a part of the tune-up of the boiler. (iii) The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler. <p>(7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.</p>	
<p>Submit the notifications specified below to the delegated authority (MPCA and EPA Region V):</p> <p>(1) Submit all of the applicable notifications in 40 CFR Sections 63.7(b); 63.8(e) and (f); 63.9(b) through (e); and 63.9(g) and (h) by the dates specified in those sections.</p> <p>(2) As specified in 40 CFR Section 63.9(b)(2), submit the Initial Notification within 120 days after the source becomes subject to the standard.</p> <p>(3) Submit the Notification of Compliance Status in accordance with 40 CFR Section 63.9(h) no later than 120 days after the applicable compliance date specified in 40 CFR Section 63.11196. In addition to the information required in 40 CFR Section 63.9(h)(2), the notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:</p> <p>"This facility complies with the requirements in 40 CFR Section 63.11214 to conduct an initial tune-up of the boiler."</p>	40 CFR Section 63.11225(a)
<p>By March 1 of each year, prepare (and submit to the delegated authority upon request) a biennial compliance report as specified in paragraphs (1) through (3).</p> <p>(1) Company name and address.</p> <p>(2) Statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart.</p> <p>(3) If the source experiences any deviations from the applicable requirements during the reporting period, include a description of</p>	40 CFR Section 63.11225(b)

What To Do	Why To Do It
<p>deviations, the time periods during which the deviations occurred, and the corrective actions taken.</p>	
<p>Maintain the records specified below:</p> <p>(1) As required in 40 CFR Section 63.10(b)(2)(xiv), keep a copy of each notification and report submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status submitted.</p> <p>(2) Keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR Section 63.11214 as specified below:.</p> <p>(i) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.</p> <p>(ii) Records documenting the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel, including whether the fuel has received a non-waste determination by you or EPA, and the total fuel usage amount with units of measure. If combusting non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR Section 241.3(b)(1), keep a record which documents how the secondary material meets each of the legitimacy criteria. If combusting a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR Section 241.3(b)(4), keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR Section 241.2. If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR Section 241.3(c), keep a record that documents how the fuel satisfies the requirements of the petition process.</p> <p>(3) Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.</p> <p>(4) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR Section 63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.</p>	<p>40 CFR Section 63.11225(c)</p>
<p>Records must be in a form suitable and readily available for expeditious review, according to 40 CFR Section 63.10(b)(1). As specified in 40 CFR Section 63.10(b)(1), keep each record for 5 years following the date of each recorded action. Keep each record onsite for at least 2 years after the date of each recorded action according to §63.10(b)(1). Records may be kept off site for the remaining 3 years.</p>	<p>40 CFR Section 63.11225(d)</p>
<p>If intending to switch fuels, and this fuel switch may result in the applicability of a different subcategory or a switch out of subpart</p>	<p>40 CFR Section 63.11225(g)</p>

What To Do	Why To Do It
<p>JJJJJ due to a switch to 100 percent natural gas, provide 30 days prior notice of the date upon which the fuel switch will occur. The notification must identify:</p> <p>(1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that will switch fuels, and the date of the notice.</p> <p>(2) The currently applicable subcategory under this subpart.</p> <p>(3) The date on which the boiler became subject to the currently applicable standards.</p> <p>(4) The date upon which the fuel switch will commence.</p>	
<p>The following sections of the General Provisions apply:</p> <p>63.1-63.5; 63.6(a); 63.6(b)(1)-(5); 63.6(b)(7); 63.6(c); 63.6(f)(2)-(3); 63.6(g); 63.6(h)(2)-(9); 63.6(i)-(j); 63.7(a)-(d); 63.7(e)(2)-(9); 63.7(f)-(h); 63.8(a)-(b); 63.8(c)(1)(ii); 63.8(c)(2)-(9), 63.8(d)(3) except that SSM plans are not required; 63.9; 63.10(a); 63.10(b)(1); 63.10(b)(2)(iii); 63.10(b)(2)(vi)-(xiv); 63.10(c)(1)-(9); 63.10(c)(12)-(13); 63.10(d)(1)-(2); 63.10(d)(4); 63.10(e)-(f); 63.10-63.16</p>	<p>40 CFR Section 63.11235</p>