

TECHNICAL SUPPORT DOCUMENT
For
DRAFT/PROPOSED AIR EMISSION PERMIT NO. 13700112-008

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

1. General Information

1.1 Applicant and Stationary Source Location:

Table 1. Applicant and Source Address

Applicant/Address	Stationary Source/Address (SIC Code: 4952)
Western Lake Superior Sanitary District 2626 Courtland Street Duluth, MN 55806	Western Lake Superior Sanitary District 2626 Courtland Street Duluth, St. Louis County
Contact: Joe Mayasich Phone: 218-740-4806	

1.2 Facility Description

Western Lake Superior Sanitary District (WLSSD) is a publicly owned treatment works whose 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.

The wastewater treatment facility was constructed between 1975 and 1978. The plant officially began operations in January of 1979. The plant provides advance secondary treatment to domestic and industrial wastewater from ten municipalities and three major wood product industries. Wastewater is collected by an extensive interceptor system. The municipalities serviced are in St. Louis and Carlton counties and include the cities of Duluth, Cloquet, Carlton, Esko, (Thomson Township), Scanlon, Wrenshall, Hermantown, Proctor, and Thompson.

WLSSD treats an average daily flow of wastewater of approximately 43 million gallons per day (MGD). The facility was designed to handle a peak flow of 87 MGD. Municipal customers account for 50 percent (at 43 MGD) of wastewater flow received by the facility with industry contributions accounting for the remaining inflow to the facility.

The wastewater treatment facility generates an average of 200 wet tons (moisture content of approximately 84 percent) of sewage sludge each day. At one time, WLSSD incinerated its sludge in fluidized bed boilers, along with coal, wood waste, refuse derived fuel and oil. Those incinerators have been decommissioned as of 2003. The sludge is now treated with biodigestors. WLSSD installed anaerobic digesters to handle the sludge that was previously combusted. Anaerobic digesters biologically decompose the sludge, producing a product that is sufficiently stable for storage and application to land. The by-products of anaerobic digestion are methane, carbon dioxide, and small amounts of nitrogen, hydrogen, hydrogen sulfide and water.

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.

1.3 Description of any Changes Allowed with this Permit Issuance

This permit action incorporates two new oil-fired boilers which qualify as insignificant activities. Installation is allowed as in insignificant modification under Minn. R. 7007.1250, subpart 1.A. The boilers can be found in Appendix B of the permit.

1.4 Description of All Amendments Issued Since the Issuance of the Last Total Facility Permit and to be Included in the Part 70 Permit

Permit Number and Issuance Date	Action Authorized
13700112-006, February 23, 2004	Reissuance of Title V permit
13700112-007, May 17, 2005	Installation of emergency generator

1.5 Facility Emissions:

Table 2. Total Facility Potential to Emit Summary

	PM tpy	PM ₁₀ tpy	PM _{2.5} tpy	SO ₂ tpy	NO _x tpy	CO tpy	CO _{2e} tpy	VOC tpy	Single HAP tpy	All HAPs tpy
Total Facility Limited Potential Emissions	6.9	5.2	4.0	39.5	48.4	25.6	63950	20.5	3.6	4.5
Total Facility Actual Emissions (2010 ⁽²⁾)	0.81	0.81	NR ⁽¹⁾	0.12	10.67	8.78	NR ⁽¹⁾	21.4 ⁽³⁾	NR ⁽¹⁾	

⁽¹⁾ NR = Not reported in MN emission inventory.

⁽²⁾ As extracted from the CEDR database

⁽³⁾ Includes emissions from equipment that is designated as insignificant activities and will not be counted in the future, and "old" emission calculation methods (permit calculations utilize EPA's WATER9 model).

Table 3. Facility Classification

Classification	Major/Affected Source	Synthetic Minor/Area	Minor/Area
PSD			PM, PM ₁₀ , PM _{2.5} , SO ₂ , NO _x , CO, VOC, CO _{2e}
Part 70 Permit Program			HAP, PM ₁₀ , PM _{2.5} , SO ₂ , NO _x , CO, VOC, CO _{2e}
Part 63 NESHAP			X

1.6 Changes to Permit

No significant changes have been made to the requirements in the permit. The following types of changes have been made:

- updated to reflect current MPCA templates and standard citation formatting;
- completed requirements and the requirements for equipment that has been removed have been deleted;
- some requirements have been reordered to help with clarity (i.e., similar requirements are grouped);
- emission units that were originally listed as emission units and designated “insignificant activities” have been removed from the list of emission units and added to the table of insignificant activities in the permit appendix;
- tanks that were originally listed in the facility description and designated “insignificant activities” have been removed from the list; these were not added to the table of insignificant activities in the permit, because they are insignificant under Minn. R. 7007.1300, subpart 2.E.(3);
- two new boilers qualifying as insignificant activities were added to the permit appendix.

2. Regulatory and/or Statutory Basis

New Source Review

The existing facility is a true minor source of all pollutants except greenhouse gases (measured as carbon dioxide equivalent, CO₂e). This excludes biogenic sources of carbon dioxide. Existing federally enforceable conditions on operation of the existing boilers also limit the CO₂e emissions to below major source thresholds. Therefore, the facility is a non-major source under New Source Review.

Part 70 Permit Program

The facility is a major source under the Part 70 permit program. However, the Permittee has elected to retain a Part 70 permit, as allowed under Minn. R. 7007.0200, subp. 6.

New Source Performance Standards (NSPS)

The boilers are subject to NSPS Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The facility is an area source of HAP emissions.

The three primary boilers are not subject to NESHAP Subpart JJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources. These boilers all meet the definition of “gas-fired boiler” under 40 CFR § 63.11237, which means that they are not subject to the requirements of Subpart JJJJJ, per 40 CFR § 63.11195(e). There are also two oil-fired boilers subject to Subpart JJJJJ; these boilers qualify as insignificant activities and the Subpart JJJJJ requirements appear in Appendix C to the permit.

The emergency generators are subject to NESHAP Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Compliance Assurance Monitoring (CAM)

No sources at the facility are subject to CAM. The digesters’ exhaust (methane) is controlled by the flare and boilers, but uncontrolled emissions are below major source thresholds, therefore CAM does not apply.

Environmental Review & AERA

The facility is installing two new oil-fired boilers. However, the boilers qualify as insignificant activities and no construction permit is required to install them. Environmental review does not apply.

Minnesota State Rules

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

- Minn. R. 7011.0610 Standards of Performance for Fossil-Fuel-Burning Direct Heating Equipment
- Minn. R. 7011.2300 Standards of Performance for Stationary Internal Combustion Engines

Table 4. Regulatory Overview of Facility

Level*	Applicable Regulations	Comments:
GP003 (EU051, EU052)	40 CFR pt. 60, subp. Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. Determination of applicable limits from rule: <ul style="list-style-type: none"> • The units were constructed in 2000; • The heat input capacity is 30 MMBtu/hr each; and • The fuel burned is gas or oil
	Minn. R. 7007.0800	Limit set on the combined heat input of the two boilers. This limit was set through a previous permit action to allow the boilers to be installed through the minor amendment process.
GP004 (EU050, EU054)	Minn. R. 7007.0800	Limit set on the total quantity of waste gas allowed to be combusted. This limit was set through a previous permit action to allow the boilers to be installed through the minor amendment process.
GP005 (EU058, EU059, EU060, EU061)	Minn. R. 7005.0100, subp. 35a (definition of potential to emit)	No specific emission limits apply to these units. The methane emissions are controlled by the combustion devices, and that control is the basis of the potential CO ₂ e. However, even if the methane were not controlled, the CO ₂ e for the facility would be less than 100,000 tpy, because biogenic sources of CO ₂ are excluded from the calculation.
EU049, EU057	40 CFR pt. 63, Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
	Minn. R. 7011.2300	Standards of Performance for Stationary Internal Combustion Engines
EU050	40 CFR pt. 60, subp. Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. Determination of applicable limits from rule: <ul style="list-style-type: none"> • The unit was constructed in 2000; • The heat input capacity is 30 MMBtu/hr; and • The fuel burned is biogas or oil
EU054	Minn. R. 7011.0610	Standards of Performance for Fossil-Fuel-Burning Direct Heating Equipment

*Where the requirement appears in the permit (e.g., EU, SV, GP, etc.).

3. Technical Information

3.1 Calculations of Potential to Emit

Attachment 1 to this TSD a summary of the facility potential-to-emit, as well as detailed spreadsheets and supporting information prepared by the MPCA and the Permittee.

The emission calculations exclude biogenic CO₂. On July 20, 2011, in response to comments received and a petition on the subject of biogenic CO₂ emissions, the EPA decided that further analysis is needed related to permitting requirements for biogenic CO₂ emissions. Consequently, the EPA decided to defer biogenic CO₂ emissions in permitting while it studied the question further. Under the federal deferral, biogenic CO₂ emissions will be excluded when determining whether a stationary source meets the PSD and Title V applicability thresholds. This deferral lasts until July 21, 2014. For more information, see the July 20, 2011, Federal Register. At this time, the MPCA is proceeding with the permanent state rulemaking process needed to implement the tailoring rule. That permanent rule will include the biogenic deferral. Until that rule is final, the MPCA will implement the deferral as a policy per the November 3, 2011, Program Management Decision Memorandum, which is attached as Attachment 3 to this document.

3.3 Periodic Monitoring

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

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

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

Table 5 summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or inadequate.

Table 5. Periodic Monitoring

Level*	Requirement (basis)	Additional Monitoring	Discussion
GP003 (Heating Boilers EU051 and EU052)	Sulfur content o f fuel oil: ≤ 0.5 percent by weight Opacity: ≤ 20% with excursions (NSPS Subpart Dc)	Recordkeeping: fuel certifications	NSPS Subpart Dc prescribes the records that must be kept of the fuel sulfur content.

Level*	Requirement (basis)	Additional Monitoring	Discussion
	<p>Sulfur content of fuel oil: ≤ 0.05 percent by weight</p> <p>Total Heat Input: ≤ 40 MMBtu/hour</p> <p>(Minn. R. 7007.0800)</p>	<p>Recordkeeping: fuel certifications</p> <p>Recordkeeping: hourly fuel usage rates</p>	<p>Recordkeeping required for NSPS sulfur content limit is sufficient for this limit.</p> <p>Recordkeeping of the hourly fuel input and calculated heat input to the boilers, on a 1-hour average basis.</p>
GP004 (EU050, EU054))	<p>Total Biogas flow: < 38000 scf per hour</p> <p>(Minn. R. 7007.0800)</p>	Recordkeeping: biogas flow	Flow monitors installed
EU049	<p>Sulfur content of fuel: ≤ 0.05 percent by weight</p> <p>(Minn. R. 0100, subp. 35a)</p>	Recordkeeping: sulfur content	Fuel supplier certifications can be used to record sulfur content of fuel.
	<p>Opacity: $\leq 20\%$</p> <p>SO₂: ≤ 0.50 lb/MMBtu heat input</p> <p>(Minn. R. 7011.2300)</p>	None	Fuel meeting the sulfur content requirements will result in emissions well below the limit.
	<p>Operating and work practice standards</p> <p>(NESHAP Subpart ZZZZ)</p>	None	Monitoring and recordkeeping as prescribed by the federal standard is adequate.

Level*	Requirement (basis)	Additional Monitoring	Discussion
EU050	Sulfur content of fuel oil: \leq 0.5 percent by weight Opacity: \leq 20% with excursions (NSPS Subpart Dc)	Recordkeeping: fuel certifications	NSPS Subpart Dc prescribes the records that must be kept of the fuel sulfur content.
	Sulfur content of fuel oil: \leq 0.05 percent by weight (Minn. R. 7007.0800)	Recordkeeping: fuel certifications	Recordkeeping required for NSPS sulfur content limit is sufficient for this limit. Recordkeeping of the hourly fuel input and calculated heat input to the boilers, on a 1-hour average basis.
EU054	PM: variable Opacity: $<$ 20% with excursions	None	Combustion of methane is not expected to result in significant particulate emissions
EU057	Sulfur content of fuel: \leq 0.05 percent by weight (Minn. R. 0100, subp. 35a)	Recordkeeping: sulfur content	Fuel supplier certifications can be used to record sulfur content of fuel.
	Opacity: \leq 20% SO_2 : \leq 0.50 lb/MMBtu heat input (Minn. R. 7011.2300)	None	Fuel meeting the sulfur content requirements will result in emissions well below the limit.
	Operating and work practice standards (NESHAP Subpart ZZZZ)	None	Monitoring and recordkeeping as prescribed by the federal standard is adequate.

*Where the requirement appears in the permit (e.g., EU, SV, GP, etc.).

3.4 Insignificant Activities

WLSSD has several operations which are classified as insignificant activities under the MPCA's permitting rules. These are listed in Appendix B to the permit.

The permit is required to include periodic monitoring for all emissions units, including insignificant activities, per EPA guidance. The insignificant activities at this Facility are only subject to general applicable requirements. Using the criteria outlined earlier in this TSD, the following table documents the justification why no additional periodic monitoring is necessary for the current insignificant activities. See Attachment 1 of this TSD for PTE information for the insignificant activities.

Table 6. Insignificant Activities

Insignificant Activity	General Applicable Emission limit	Discussion
Disinfection tanks	PM limit is variable with process rate and air flow. (Minn. R. 7011.0710/0715)	It is very unlikely that these tanks would generate particulate matter emissions.
Individual units with potential emissions less than 2000 lb/year of certain pollutants <ul style="list-style-type: none">Duluth influent channel and screw pumpsBar screen room and screenBar screen channelOxidation tanksMixed liquor channelFlocculation tanksMixed media filtersBackwash water wellDissolved air flocculation thickenersSludge storage tanksThree Safety-kleen parts washers	PM limit is variable with process rate and air flow. (Minn. R. 7011.0710/0715)	These operations are insignificant sources of particulate matter emissions. Emission calculations can be found in Attachment 1.

Insignificant Activity	General Applicable Emission limit	Discussion
<ul style="list-style-type: none"> • Paint bulking operation • Solid waste transfer station • Compost activities • Disinfection influent channel • Final effluent channel • bisulfate tanks 		
<ul style="list-style-type: none"> • Two microturbines 	$\text{SO}_2 \leq 0.50 \text{ lb/MMBtu}$ (Minn. R. 7011.2300)	These gas-fired units are very small, with potential SO_2 emissions of 0.094 lb/mmbtu. It is not expected that they would violate the standard.
<ul style="list-style-type: none"> • Two boilers 	$\text{PM} \leq 0.4 \text{ lb/MMBtu}$ $\text{SO}_2 \leq 2.0 \text{ lb/MMBtu}$ (Minn. R. 7011.0515, subp. 1)	<p>These boilers are very small, with potential PM emissions of 0.024 lb/mmbtu (each), and potential SO_2 emissions of 0.22 lb/mmbtu (each). It is not expected that they would violate the standard.</p> <p>In addition, these boilers are subject to the work practice standards of 40 CFR 63, subpart JJJJJJ.</p>

3.5 Permit Organization

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

Exception: GP005 does not appear in the permit as a group of units with common requirements. It is used only for purposes of documenting greenhouse gas emissions from the wastewater treatment process. It is allowable to report GHG emissions as a group because the facility is not a major source of GHG (because biogenic CO_2 is not counted prior to 2014).

3.6 Comments Received

Public Notice Period: <start date> - <end date>

EPA 45-day Review Period: <start date> - <end date>

Comments were <not> received from the public during the public notice period. <The comments received did <not> include adverse comments on any applicable requirements of the permit. Changes to the permit were <not> made as a result of the comments. *Provide summary of changes.* >

<The revised permit was sent to EPA for their 45-day review on <date>.> Comments were <not> received from EPA during their review period. Changes to the permit were <not> made as a result of the comments. *Provide summary of changes.* >

4. **Permit Fee Assessment**

This permit action is the reissuance of an individual Part 70; therefore, no application fees apply under Minn. R. 7002.0016, subp. 1.

5. **Conclusion**

Based on the information provided by Western Lake Superior Sanitary District, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 13700112-008 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Toni Volkmeier (permit writer/engineer)
 Steven Palzkill (enforcement)
 Steve Gorg (peer reviewer)
 Laurie O'Brien (administrative support)

AQ File No. 1232A; DQ 2208

Attachments: 1. PTE Summary and Calculation Spreadsheets
 2. Facility Description and CD-01 Forms
 3. Biogenic CO₂ Deferral Policy Memo

Attachment 1

Calculations and PTE Summary

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Acetaldehyde							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 049	PER 008		1.340E-04	3.360E-05	3.360E-05	
	EU 057	PER 008		4.950E-04	1.240E-04	1.240E-04	
Totals					1.576E-04	1.576E-04	0.000E+00
Acetophenone							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Acrolein							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 049	PER 008		1.620E-05	4.050E-06	4.050E-06	
	EU 057	PER 008		1.550E-04	3.870E-05	3.870E-05	
Totals					4.275E-05	4.275E-05	0.000E+00
Benzene							
	EU 006	PER 008		1.450E-04	6.340E-04	6.340E-04	
	EU 007	PER 008		1.450E-04	6.340E-04	6.340E-04	
	EU 017	PER 008		1.250E-05	5.470E-05	5.470E-05	
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 049	PER 008		1.630E-04	4.080E-05	4.080E-05	
	EU 050	PER 008		0.000E+00	1.700E-04	0.000E+00	
	EU 051	PER 008			3.000E-04		
	EU 052	PER 008			3.000E-04		
	EU 054	PER 008		0.000E+00	8.100E-04	0.000E+00	
	EU 057	PER 008		1.520E-02	3.810E-03	3.810E-03	
	GP 003	PER 008		8.240E-05	0.000E+00	3.600E-04	
	GP 004	PER 008		9.900E-05		4.330E-04	
Totals					6.754E-03	5.967E-03	0.000E+00
Arsenic compounds							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 050	PER 008		0.000E+00	2.200E-04	0.000E+00	
	EU 051	PER 008			5.900E-04		
	EU 052	PER 008			5.900E-04		

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Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Arsenic compounds							
	EU 054	PER 008		0.000E+00	7.700E-05	0.000E+00	
	GP 003	PER 008		2.200E-05	0.000E+00	9.600E-05	
	GP 004	PER 008		5.770E-05		2.530E-04	
	SV 055	PER 007					0.000E+00
	SV 061	PER 007					0.000E+00
Totals					1.477E-03	3.490E-04	0.000E+00
Benzyl chloride							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Bis(2-ethylhexyl) phthalate							
	EU 006	PER 008		2.140E-07	9.360E-07	9.360E-07	
	EU 007	PER 008		2.140E-07	9.360E-07	9.360E-07	
	EU 017	PER 008		3.830E-05	1.680E-04	1.680E-04	
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					1.699E-04	1.699E-04	0.000E+00
Bromoform							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Bromomethane							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
1,3-Butadiene							
	EU 049	PER 008		6.840E-06	1.710E-06	1.710E-06	
Totals					1.710E-06	1.710E-06	0.000E+00
Beryllium							
	EU 041	PER 007					0.000E+00
	EU 042	PER 007					0.000E+00
	SV 055	PER 007					0.000E+00
	SV 061	PER 007					0.000E+00
Totals					0.000E+00	0.000E+00	0.000E+00
Beryllium Compounds							
	EU 050	PER 008		0.000E+00	1.600E-04	0.000E+00	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Beryllium Compounds							
	EU 051	PER 008			4.400E-04		
	EU 052	PER 008			4.400E-04		
	EU 054	PER 008		0.000E+00	4.600E-06	0.000E+00	
	GP 003	PER 008		1.650E-05	0.000E+00	7.200E-05	
	GP 004	PER 008		3.800E-05		1.670E-04	
Totals					1.045E-03	2.390E-04	0.000E+00
Carbon disulfide							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Carbon Dioxide Equivalent							
	EU 049	PER 008		2.860E+01	7.140E+00	7.140E+00	
	EU 050	PER 008		0.000E+00	8.960E+03	0.000E+00	
	EU 051	PER 008			2.403E+04		
	EU 052	PER 008			2.403E+04		
	EU 054	PER 008		0.000E+00	2.989E+04	0.000E+00	
	EU 057	PER 008		3.206E+03	8.020E+02	8.020E+02	
	EU 058	PER 008		3.610E+01	7.896E+03	1.580E+02	
	EU 059	PER 008		3.610E+01	7.896E+03	1.580E+02	
	EU 060	PER 008		3.610E+01	7.896E+03	1.580E+02	
	EU 061	PER 008		3.610E+01	7.896E+03	1.580E+02	
	GP 003	PER 008		6.530E+03	0.000E+00	2.860E+04	
	GP 004	PER 008		2.049E+03		8.973E+03	
	GP 006	PER 008		2.692E+03	2.493E+04	2.493E+04	
Totals					1.442E+05	6.395E+04	0.000E+00
Chlorobenzene							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Chloroform							
	EU 001	PER 007		2.500E-04	1.000E-03	1.000E-03	
	EU 001	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 002	PER 007		2.500E-04	1.000E-03	1.000E-03	
	EU 002	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 003	PER 007		6.300E-05	2.500E-04	2.500E-04	
	EU 003	PER 008		0.000E+00	0.000E+00	0.000E+00	0.000E+00

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Chloroform	EU 004	PER 007		6.300E-05	2.500E-04	2.500E-04	
	EU 004	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 005	PER 007		6.300E-05	2.500E-04	2.500E-04	
	EU 005	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 006	PER 007		1.500E-03	7.500E-03	7.500E-03	
	EU 006	PER 008		2.370E-03	1.040E-02	1.040E-02	
	EU 007	PER 007		1.500E-03	7.500E-03	7.500E-03	
	EU 007	PER 008		2.370E-03	1.040E-02	1.040E-02	
	EU 008	PER 007		6.300E-05	2.500E-04	2.500E-04	
	EU 008	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 009	PER 007		6.300E-05	2.500E-04	2.500E-04	
	EU 009	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 010	PER 007		6.300E-05	2.500E-04	2.500E-04	
	EU 010	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 011	PER 007		6.300E-05	2.500E-04	2.500E-04	
	EU 011	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 012	PER 007		6.300E-05	2.500E-04	2.500E-04	
	EU 012	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 013	PER 007		4.000E-03	1.800E-02	1.800E-02	
	EU 013	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 014	PER 007		5.400E-03	1.800E-02	1.800E-02	
	EU 014	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 015	PER 001		2.100E-02	9.000E-02		
	EU 015	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 016	PER 001		9.000E-03	4.000E-02		
	EU 016	PER 008		0.000E+00	0.000E+00		
	EU 017	PER 001		8.500E-02	3.720E-01		
	EU 017	PER 008		3.460E-04	1.510E-03	1.510E-03	
	EU 018	PER 001		3.100E-02	1.350E-01		
	EU 018	PER 008		0.000E+00	0.000E+00		
	EU 019	PER 001		9.300E-02	4.070E-01		
	EU 019	PER 008		0.000E+00	0.000E+00		
	EU 020	PER 001		1.000E-03	3.000E-03		
	EU 020	PER 008		0.000E+00	0.000E+00		
	EU 022	PER 001		1.840E-01	8.050E-01		

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Chloroform							
	EU 022	PER 008		0.000E+00	0.000E+00		
	EU 023	PER 001		2.000E-03	7.000E-03		
	EU 023	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	FS 004	PER 001		3.000E-03	1.500E-02		
	FS 004	PER 008		0.000E+00	0.000E+00		
	FS 005	PER 001		3.000E-03	1.500E-02		
	FS 005	PER 008		0.000E+00	0.000E+00		
	FS 006	PER 001		3.200E-02	1.410E-01		
	FS 006	PER 008		0.000E+00	0.000E+00	0.000E+00	
	FS 007	PER 001		5.000E-04	2.000E-03		
	FS 007	PER 008		0.000E+00	0.000E+00		
	SV 001	PER 007		0.000E+00	0.000E+00		
	SV 002	PER 007		0.000E+00	0.000E+00		
	SV 003	PER 007		0.000E+00	0.000E+00		
	SV 004	PER 007		0.000E+00	0.000E+00	0.000E+00	
	SV 005	PER 007		0.000E+00	0.000E+00		
	SV 006	PER 007		0.000E+00	0.000E+00		
	SV 007	PER 007		0.000E+00	0.000E+00		
	SV 008	PER 007		0.000E+00	0.000E+00	0.000E+00	
	SV 055	PER 007		0.000E+00	0.000E+00	0.000E+00	
	SV 061	PER 007		0.000E+00	0.000E+00	0.000E+00	
Totals					2.231E-02	2.231E-02	0.000E+00
Cadmium compounds							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 050	PER 008		0.000E+00	1.600E-04	0.000E+00	
	EU 051	PER 008			4.400E-04		
	EU 052	PER 008			4.400E-04		
	EU 054	PER 008		0.000E+00	4.200E-04	0.000E+00	
	GP 003	PER 008		4.310E-05	0.000E+00	1.900E-04	
	GP 004	PER 008		7.940E-05		3.480E-04	
	SV 055	PER 007					0.000E+00

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Cadmium compounds							
	SV 061	PER 007					0.000E+00
Totals					1.460E-03	5.380E-04	0.000E+00
Methane							
	EU 049	PER 008		1.160E-03	2.890E-04	2.890E-04	
	EU 050	PER 008		0.000E+00	3.600E-01	0.000E+00	
	EU 051	PER 008			9.700E-01		
	EU 052	PER 008			9.700E-01		
	EU 054	PER 008		0.000E+00	5.600E-01	0.000E+00	
	EU 057	PER 008		1.300E-01	3.200E-02	3.200E-02	
	EU 058	PER 008		1.720E+00	3.760E+02	7.520E+00	
	EU 059	PER 008		1.720E+00	3.760E+02	7.520E+00	
	EU 060	PER 008		1.720E+00	3.760E+02	7.520E+00	
	EU 061	PER 008		1.720E+00	3.760E+02	7.520E+00	
	GP 003	PER 008		2.600E-01	0.000E+00	1.160E+00	
	GP 004	PER 008		1.400E-01		6.000E-01	
Totals					1.507E+03	3.187E+01	0.000E+00
Carbon Monoxide							
	EU 036	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 049	PER 001		3.800E-02	1.650E-01	1.650E-01	
	EU 049	PER 008		1.700E-01	4.200E-02	4.200E-02	
	EU 050	PER 006		4.470E-01	1.960E+00	1.960E+00	
	EU 050	PER 008		0.000E+00	6.770E+00	0.000E+00	
	EU 051	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 051	PER 008		0.000E+00	1.212E+01	0.000E+00	
	EU 052	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 052	PER 008		0.000E+00	1.212E+01	0.000E+00	
	EU 054	PER 007		1.853E+01	8.114E+01	8.114E+01	
	EU 054	PER 008		0.000E+00	1.150E+01	0.000E+00	
	EU 057	PER 007		1.666E+01	4.170E+00	4.170E+00	
	EU 057	PER 008		1.700E+01	4.200E+00	4.200E+00	
	GP 003	PER 007		3.200E+00	1.402E+02	1.402E+01	
	GP 003	PER 008		3.290E+00	0.000E+00	1.443E+01	
	GP 004	PER 008		1.580E+00		6.940E+00	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Carbon Monoxide							
	SV 055	PER 007		0.000E+00	0.000E+00	0.000E+00	
	SV 061	PER 007		0.000E+00	0.000E+00	0.000E+00	
Totals					4.675E+01	2.561E+01	0.000E+00
Carbon Dioxide							
	EU 049	PER 008		2.850E+01	7.120E+00	7.120E+00	
	EU 050	PER 008		0.000E+00	8.930E+03	0.000E+00	
	EU 051	PER 008			2.395E+04		
	EU 052	PER 008			2.395E+04		
	EU 054	PER 008		0.000E+00	2.986E+04	0.000E+00	
	EU 057	PER 008		3.196E+03	7.990E+02	7.990E+02	
	GP 003	PER 008		6.508E+03	0.000E+00	2.851E+04	
	GP 004	PER 008		2.039E+03		8.930E+03	
Totals					8.749E+04	3.824E+04	0.000E+00
Cobalt compounds							
	EU 050	PER 008		0.000E+00	6.800E-06	0.000E+00	
	EU 051	PER 008			1.200E-05		
	EU 052	PER 008			1.200E-05		
	EU 054	PER 008		0.000E+00	3.200E-05	0.000E+00	
	GP 003	PER 008		3.290E-06	0.000E+00	1.400E-05	
	GP 004	PER 008		3.190E-06		1.400E-05	
Totals					6.280E-05	2.800E-05	0.000E+00
Chromium compounds							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 051	PER 008			4.400E-04		
	EU 052	PER 008			4.400E-04		
	GP 003	PER 008		5.490E-05	0.000E+00	2.400E-04	
	GP 004	PER 008		9.080E-05		3.980E-04	
	SV 055	PER 007					0.000E+00
	SV 061	PER 007					0.000E+00
Totals					8.800E-04	6.380E-04	0.000E+00
1,4-Dichlorobenzene							
	EU 050	PER 008		0.000E+00	9.700E-05	0.000E+00	
	EU 051	PER 008			1.700E-04		
	EU 052	PER 008			1.700E-04		
	EU 054	PER 008		0.000E+00	4.600E-04	0.000E+00	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
1,4-Dichlorobenzene							
	GP 003	PER 008		4.710E-05	0.000E+00	2.100E-04	
	GP 004	PER 008		4.560E-05		2.000E-04	
Totals					8.970E-04	4.100E-04	0.000E+00
Dimethyl sulfate							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Ethylbenzene							
	EU 006	PER 008		3.050E-04	1.340E-03	1.340E-03	
	EU 007	PER 008		3.050E-04	1.340E-03	1.340E-03	
	EU 017	PER 008		1.360E-05	5.950E-05	5.950E-05	
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 050	PER 008		0.000E+00	2.500E-05	0.000E+00	
	EU 051	PER 008			6.700E-05		
	EU 052	PER 008			6.700E-05		
	GP 003	PER 008		2.490E-06	0.000E+00	1.100E-05	
	GP 004	PER 008		5.690E-06		2.490E-05	
Totals					2.899E-03	2.775E-03	0.000E+00
Formaldehyde							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 049	PER 008		2.070E-04	5.160E-05	5.160E-05	
	EU 050	PER 008		0.000E+00	1.900E-01	0.000E+00	
	EU 051	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 051	PER 008		0.000E+00	5.000E-02	0.000E+00	
	EU 052	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 052	PER 008		0.000E+00	5.000E-02	0.000E+00	
	EU 054	PER 008		0.000E+00	2.900E-02	0.000E+00	
	EU 057	PER 008		1.550E-03	3.870E-04	3.870E-04	
	GP 003	PER 007		8.800E-03	3.850E-02	3.850E-02	
	GP 003	PER 008		2.940E-03	0.000E+00	1.000E-02	
	GP 004	PER 008		4.580E-02		2.010E-01	
Totals					3.194E-01	2.114E-01	0.000E+00
Heptachlor							
	EU 006	PER 008		7.130E-07	3.120E-06	3.120E-06	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Heptachlor							
	EU 007	PER 008		7.130E-07	3.120E-06	3.120E-06	
	EU 017	PER 008		7.660E-05	3.550E-04	3.550E-04	
Totals					3.612E-04	3.612E-04	0.000E+00
Hexane							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 050	PER 008		0.000E+00	1.500E-01	0.000E+00	
	EU 051	PER 008			2.600E-01		
	EU 052	PER 008			2.600E-01		
	EU 054	PER 008		0.000E+00	6.900E-01	0.000E+00	
	GP 003	PER 008		7.060E-02	0.000E+00	3.100E-01	
	GP 004	PER 008		6.840E-02		3.000E-01	
Totals					1.360E+00	6.100E-01	0.000E+00
Front-half Particulate Matter							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Hydrogen fluoride							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Methanol							
	EU 001	PER 007		2.500E-02	1.070E-01	1.070E-01	
	EU 001	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 002	PER 007		2.500E-02	1.070E-01	1.070E-01	
	EU 002	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 003	PER 007		6.875E-03	3.000E-02	3.000E-02	
	EU 003	PER 008		0.000E+00	0.000E+00	0.000E+00	0.000E+00
	EU 004	PER 007		6.875E-03	3.000E-02	3.000E-02	
	EU 004	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 005	PER 007		6.875E-03	3.000E-02	3.000E-02	
	EU 005	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 006	PER 007		4.630E-01	2.030E+00	2.030E+00	
	EU 006	PER 008		2.590E-01	1.130E+00	1.130E+00	
	EU 007	PER 007		4.630E-01	2.030E+00	2.030E+00	
	EU 007	PER 008		2.590E-01	1.130E+00	1.130E+00	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Methanol	EU 008	PER 007		6.875E-03	3.000E-02	3.000E-02	
	EU 008	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 009	PER 007		6.875E-03	3.000E-02	3.000E-02	
	EU 009	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 010	PER 007		6.875E-03	3.000E-02	3.000E-02	
	EU 010	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 011	PER 007		6.875E-03	3.000E-02	3.000E-02	
	EU 011	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 012	PER 007		6.875E-03	3.000E-02	3.000E-02	
	EU 012	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 013	PER 007		7.600E-02	3.345E-01	3.345E-01	
	EU 013	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 014	PER 007		7.600E-02	3.345E-01	3.345E-01	
	EU 014	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 015	PER 001		5.100E-02	2.240E-01		
	EU 015	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 016	PER 001		2.000E-03	1.000E-02		
	EU 016	PER 008		0.000E+00	0.000E+00		
	EU 017	PER 001		2.700E-02	1.200E-01		
	EU 017	PER 008		3.010E-01	1.320E+00	1.320E+00	
	EU 018	PER 001		3.000E-03	1.500E-02		
	EU 018	PER 008		0.000E+00	0.000E+00		
	EU 019	PER 001		2.500E-02	1.110E-01		
	EU 019	PER 008		0.000E+00	0.000E+00		
	EU 020	PER 001		1.000E-03	3.000E-03		
	EU 020	PER 008		0.000E+00	0.000E+00		
	EU 022	PER 001		5.000E-03	2.200E-02		
	EU 022	PER 008		0.000E+00	0.000E+00		
	EU 023	PER 001		5.000E-04	2.000E-03		
	EU 023	PER 008		0.000E+00	0.000E+00		
	FS 004	PER 001		8.000E-03	3.500E-02		
	FS 004	PER 008		0.000E+00	0.000E+00		
	FS 005	PER 001		8.000E-03	3.500E-02		
	FS 005	PER 008		0.000E+00	0.000E+00		
	FS 006	PER 001		3.200E-02	1.400E-01		

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Methanol							
	FS 006	PER 008		0.000E+00	0.000E+00	0.000E+00	
	FS 007	PER 001		2.000E-04	1.000E-03		
	FS 007	PER 008		0.000E+00	0.000E+00		
	SV 001	PER 007		0.000E+00	0.000E+00		
	SV 002	PER 007		0.000E+00	0.000E+00		
	SV 003	PER 007		0.000E+00	0.000E+00		
	SV 004	PER 007		0.000E+00	0.000E+00		
	SV 005	PER 007		0.000E+00	0.000E+00	0.000E+00	
	SV 006	PER 007		0.000E+00	0.000E+00	0.000E+00	
	SV 007	PER 007		0.000E+00	0.000E+00		
	SV 008	PER 007		0.000E+00	0.000E+00		
	SV 055	PER 007		0.000E+00	0.000E+00		
	SV 061	PER 007		0.000E+00	0.000E+00		
Totals					3.580E+00	3.580E+00	0.000E+00
Methyl ethyl ketone (MEK)							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Methyl methacrylate							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Methylhydrazine							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Naphthalene							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
HAPs - Total							
	EU 006	PER 008		2.640E-01	1.160E+00	1.160E+00	
	EU 007	PER 008		2.640E-01	1.160E+00	1.160E+00	
	EU 017	PER 008		3.020E-01	1.320E+00	1.320E+00	
	EU 041	PER 006				0.000E+00	
	EU 042	PER 006				0.000E+00	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
HAPs - Total							
	EU 049	PER 008		6.780E-04	1.690E-04	1.690E-04	
	EU 050	PER 008		0.000E+00	1.900E-01	0.000E+00	
	EU 051	PER 008			2.800E-01		
	EU 052	PER 008			2.800E-01		
	EU 054	PER 008		0.000E+00	7.450E-01	0.000E+00	
	EU 057	PER 008		2.700E-02	6.690E-03	6.690E-03	
	GP 003	PER 008		7.570E-02	0.000E+00	3.300E-01	
	GP 004	PER 008		1.200E-01		5.200E-01	
Totals					5.142E+00	4.497E+00	0.000E+00
Mercury							
	EU 041	PER 007					0.000E+00
	EU 042	PER 007					0.000E+00
	EU 050	PER 008		0.000E+00	1.600E-04	0.000E+00	
	EU 051	PER 008			4.400E-04		
	EU 052	PER 008			4.400E-04		
	EU 054	PER 008		0.000E+00	1.000E-04	0.000E+00	
	GP 003	PER 008		1.650E-05	0.000E+00	7.200E-05	
	GP 004	PER 008		4.750E-05		2.080E-04	
	SV 055	PER 007					0.000E+00
	SV 061	PER 007					0.000E+00
Totals					1.140E-03	2.800E-04	0.000E+00
Pentachlorophenol (PCP)							
	EU 006	PER 007		4.500E-03	1.900E-02	1.900E-02	
	EU 006	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 007	PER 007		4.500E-03	1.900E-02	1.900E-02	
	EU 007	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 015	PER 001		4.000E-03	1.700E-02		
	EU 015	PER 008		0.000E+00	0.000E+00		
	FS 005	PER 001		1.000E-03	3.000E-03		
	FS 005	PER 008		0.000E+00	0.000E+00		
	FS 006	PER 001		3.000E-03	1.400E-02		
	FS 006	PER 008		0.000E+00	0.000E+00	0.000E+00	
	SV 005	PER 007		0.000E+00	0.000E+00		
	SV 006	PER 007		0.000E+00	0.000E+00		
Totals					0.000E+00	0.000E+00	0.000E+00

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Phenol							
	EU 006	PER 007		1.410E-01	6.170E-01	6.170E-01	
	EU 006	PER 008		9.000E-09	3.940E-08	3.940E-08	
	EU 007	PER 007		1.410E-01	6.170E-01	6.170E-01	
	EU 007	PER 008		9.000E-09	3.940E-08	3.940E-08	
	EU 013	PER 007		1.000E-04	5.000E-04	5.000E-04	
	EU 013	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 014	PER 007		1.000E-04	5.000E-04	5.000E-04	
	EU 014	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 015	PER 001		2.000E-04	1.000E-03		
	EU 015	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 017	PER 008		7.530E-07	3.300E-06	3.300E-06	
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	FS 006	PER 001		2.000E-04	1.000E-03		
	FS 006	PER 008		0.000E+00	0.000E+00	0.000E+00	
	SV 005	PER 007		0.000E+00	0.000E+00		
	SV 006	PER 007		0.000E+00	0.000E+00		
	SV 055	PER 007		0.000E+00	0.000E+00		
	SV 061	PER 007		0.000E+00	0.000E+00		
Totals					3.379E-06	3.379E-06	0.000E+00
Styrene							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
1,1,2,2-Tetrachloroethane							
	EU 006	PER 007		2.350E-02	1.020E-01	1.020E-01	
	EU 006	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 007	PER 007		2.350E-02	1.020E-01	1.020E-01	
	EU 007	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 015	PER 001		4.000E-03	1.800E-02		
	EU 015	PER 008		0.000E+00	0.000E+00		
	SV 005	PER 007		0.000E+00	0.000E+00		
	SV 006	PER 007		0.000E+00	0.000E+00		
Totals					0.000E+00	0.000E+00	0.000E+00

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Tetrachloroethylene							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Toluene							
	EU 001	PER 007		5.000E-04	1.500E-03	1.500E-03	
	EU 001	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 002	PER 007		5.000E-04	1.500E-03	1.500E-03	
	EU 002	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 003	PER 007		6.300E-05	2.500E-04	2.500E-04	
	EU 003	PER 008		0.000E+00	0.000E+00	0.000E+00	0.000E+00
	EU 004	PER 007		6.300E-05	2.500E-04	2.500E-04	
	EU 004	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 005	PER 007		6.300E-05	2.500E-04	2.500E-04	
	EU 005	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 006	PER 007		2.500E-04	1.000E-03	1.000E-03	
	EU 006	PER 008		1.110E-03	4.880E-03	4.880E-03	
	EU 007	PER 007		2.500E-04	1.000E-03	1.000E-03	
	EU 007	PER 008		1.110E-03	4.880E-03	4.880E-03	
	EU 008	PER 007		6.300E-05	2.500E-04	2.500E-04	
	EU 008	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 009	PER 007		6.300E-05	2.500E-04	2.500E-04	
	EU 009	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 010	PER 007		6.300E-05	2.500E-04	2.500E-04	
	EU 010	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 011	PER 007		6.300E-05	2.500E-04	2.500E-04	
	EU 011	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 012	PER 007		6.300E-05	2.500E-04	2.500E-04	
	EU 012	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 013	PER 007		1.050E-02	4.600E-02	4.600E-02	
	EU 013	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 014	PER 007		1.050E-02	4.600E-02	4.600E-02	
	EU 014	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 015	PER 001		1.000E-03	3.000E-03		
	EU 015	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 016	PER 001		2.000E-04	1.000E-03		

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Toluene	EU 016	PER 008		0.000E+00	0.000E+00		
	EU 017	PER 001		1.000E-03	6.000E-03		
	EU 017	PER 008		4.810E-05	2.110E-04	2.110E-04	
	EU 018	PER 001		1.000E-03	4.000E-03		
	EU 018	PER 008		0.000E+00	0.000E+00		
	EU 019	PER 001		2.000E-03	7.000E-03		
	EU 019	PER 008		0.000E+00	0.000E+00		
	EU 022	PER 001		2.000E-03	7.000E-03		
	EU 022	PER 008		0.000E+00	0.000E+00		
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 049	PER 008		7.160E-05	1.790E-05	1.790E-05	
	EU 050	PER 008		0.000E+00	2.400E-03	0.000E+00	
	EU 051	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 051	PER 008		0.000E+00	6.500E-03	0.000E+00	
	EU 052	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 052	PER 008		0.000E+00	6.500E-03	0.000E+00	
	EU 054	PER 008		0.000E+00	1.300E-03	0.000E+00	
	EU 057	PER 008		5.520E-03	1.380E-03	1.380E-03	
	FS 006	PER 001		1.000E-03	3.000E-03		
	FS 006	PER 008		0.000E+00	0.000E+00	0.000E+00	
	GP 003	PER 007		1.700E-03	7.240E-03	7.240E-03	
	GP 003	PER 008		2.430E-04	0.000E+00	1.100E-03	
	GP 004	PER 008		6.840E-04		3.000E-03	
	SV 001	PER 007		0.000E+00	0.000E+00		
	SV 002	PER 007		0.000E+00	0.000E+00		
	SV 003	PER 007		0.000E+00	0.000E+00		
	SV 004	PER 007		0.000E+00	0.000E+00		
	SV 005	PER 007		0.000E+00	0.000E+00		
	SV 006	PER 007		0.000E+00	0.000E+00		
	SV 007	PER 007		0.000E+00	0.000E+00		
	SV 008	PER 007		0.000E+00	0.000E+00		
	SV 055	PER 007		0.000E+00	0.000E+00		
	SV 061	PER 007		0.000E+00	0.000E+00		
Totals					2.807E-02	1.547E-02	0.000E+00

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
1,1,1-Trichloroethane							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 050	PER 008		0.000E+00	9.300E-05	0.000E+00	
	EU 051	PER 008			2.500E-04		
	EU 052	PER 008			2.500E-04		
	GP 003	PER 008		9.250E-06	0.000E+00	4.100E-05	
	GP 004	PER 008		2.110E-05		9.250E-05	
Totals					5.930E-04	1.335E-04	0.000E+00
2,4,5-Trichlorophenol							
	EU 006	PER 007		1.750E-02	7.700E-02	7.700E-02	
	EU 006	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 007	PER 007		1.750E-02	7.700E-02	7.700E-02	
	EU 007	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 015	PER 001		1.150E-01	5.020E-01		
	EU 015	PER 008		0.000E+00	0.000E+00		
	EU 017	PER 001		2.000E-04	1.000E-03		
	EU 017	PER 008		0.000E+00	0.000E+00		
	EU 019	PER 001		2.000E-04	1.000E-03		
	EU 019	PER 008		0.000E+00	0.000E+00		
	FS 005	PER 001		2.100E-02	9.200E-02		
	FS 005	PER 008		0.000E+00	0.000E+00		
	FS 006	PER 001		7.700E-02	3.390E-01		
	FS 006	PER 008		0.000E+00	0.000E+00	0.000E+00	
	SV 005	PER 007		0.000E+00	0.000E+00		
	SV 006	PER 007		0.000E+00	0.000E+00		
Totals					0.000E+00	0.000E+00	0.000E+00
Xylenes (mixed isomers)							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 049	PER 008		4.990E-05	1.250E-05	1.250E-05	
	EU 050	PER 008		0.000E+00	4.300E-05	0.000E+00	
	EU 051	PER 008			1.100E-04		
	EU 052	PER 008			1.100E-04		
	EU 057	PER 008		3.790E-03	9.480E-04	9.480E-04	
	GP 003	PER 008		4.270E-06	0.000E+00	1.900E-05	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Xylenes (mixed isomers)							
	GP 004	PER 008		9.760E-06		4.270E-05	
Totals					1.224E-03	1.022E-03	0.000E+00
Hydrochloric acid							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Manganese compounds							
	EU 050	PER 008		0.000E+00	3.300E-04	0.000E+00	
	EU 051	PER 008			8.800E-04		
	EU 052	PER 008			8.800E-04		
	EU 054	PER 008		0.000E+00	1.500E-04	0.000E+00	
	GP 003	PER 008		3.290E-05	0.000E+00	1.400E-04	
	GP 004	PER 008		8.960E-05		3.930E-04	
Totals					2.240E-03	5.330E-04	0.000E+00
Nitrous Oxide							
	EU 049	PER 008		2.310E-04	5.780E-05	5.780E-05	
	EU 050	PER 008		0.000E+00	7.000E-02	0.000E+00	
	EU 051	PER 008			1.900E-01		
	EU 052	PER 008			1.900E-01		
	EU 054	PER 008		0.000E+00	5.600E-02	0.000E+00	
	EU 057	PER 008		2.600E-02	6.500E-03	6.500E-03	
	GP 003	PER 008		5.000E-02	0.000E+00	2.300E-01	
	GP 004	PER 008		2.210E-02		9.670E-02	
	GP 006	PER 008		1.800E+01	8.000E+01	8.000E+01	
Totals					8.051E+01	8.033E+01	0.000E+00
Isophorone							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Lead Compounds							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Methyl chloride (chloromethane)							
	EU 006	PER 008		4.820E-04	2.110E-03	2.110E-03	
	EU 007	PER 008		4.820E-04	2.110E-03	2.110E-03	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Methyl chloride (chloromethane)							
	EU 017	PER 008		4.090E-05	1.790E-04	1.790E-04	
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					4.399E-03	4.399E-03	0.000E+00
Methyl tert butyl ether							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Methylene chloride (dichlorome							
	EU 006	PER 008		9.140E-04	4.000E-03	4.000E-03	
	EU 007	PER 008		9.140E-04	4.000E-03	4.000E-03	
	EU 017	PER 008		3.320E-04	1.450E-03	1.450E-03	
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					9.450E-03	9.450E-03	0.000E+00
Propionaldehyde							
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Nickel compounds							
	EU 041	PER 007					0.000E+00
	EU 042	PER 007					0.000E+00
	EU 050	PER 008		0.000E+00	1.700E-04	0.000E+00	
	EU 051	PER 008			4.400E-04		
	EU 052	PER 008			4.400E-04		
	EU 054	PER 008		0.000E+00	8.100E-04	0.000E+00	
	GP 003	PER 008		8.240E-05	0.000E+00	3.600E-04	
	GP 004	PER 008		1.170E-04		5.140E-04	
	SV 055	PER 007					0.000E+00
	SV 061	PER 007					0.000E+00
Totals					1.860E-03	8.740E-04	0.000E+00
Nitrogen Oxides							
	EU 036	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 041	PER 006		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 049	PER 001		1.740E-01	7.600E-01	7.600E-01	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Nitrogen Oxides							
	EU 049	PER 008		7.720E-01	1.930E-01	1.930E-01	
	EU 050	PER 006		1.790E+00	7.840E+00	7.840E+00	
	EU 050	PER 008		0.000E+00	8.060E+00	0.000E+00	
	EU 051	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 051	PER 008		0.000E+00	2.102E+01	0.000E+00	
	EU 052	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 052	PER 008		0.000E+00	2.102E+01	0.000E+00	
	EU 054	PER 007		9.900E-01	4.330E+00	4.330E+00	
	EU 054	PER 008		0.000E+00	9.790E+00	0.000E+00	
	EU 057	PER 007		4.430E+01	1.108E+01	1.108E+01	
	EU 057	PER 008		4.430E+01	1.110E+01	1.110E+01	
	GP 003	PER 007		5.710E+00	2.503E+01	2.503E+01	
	GP 003	PER 008		5.710E+00	0.000E+00	2.503E+01	
	GP 004	PER 008		2.750E+00		1.206E+01	
	SV 055	PER 007		0.000E+00	0.000E+00	0.000E+00	
	SV 061	PER 007		0.000E+00	0.000E+00	0.000E+00	
Totals					7.118E+01	4.838E+01	0.000E+00
PM < 2.5 micron							
	EU 049	PER 008		5.400E-02	1.400E-02	1.400E-02	
	EU 050	PER 008		0.000E+00	6.100E-01	0.000E+00	
	EU 051	PER 008			1.630E+00		
	EU 052	PER 008			1.630E+00		
	EU 054	PER 008		0.000E+00	3.760E+00	0.000E+00	
	EU 057	PER 008		1.130E+00	3.000E-01	3.000E-01	
	GP 003	PER 008		4.400E-01	0.000E+00	1.940E+00	
	GP 004	PER 008		3.900E-01	0.000E+00	1.720E+00	
Totals					7.944E+00	3.974E+00	0.000E+00
Lead							
	EU 041	PER 007		0.000E+00	0.000E+00	0.000E+00	0.000E+00
	EU 042	PER 007		0.000E+00	0.000E+00	0.000E+00	0.000E+00
	EU 050	PER 008		0.000E+00	4.900E-04	0.000E+00	
	EU 051	PER 008			1.300E-03		
	EU 052	PER 008			1.300E-03		
	EU 054	PER 008		0.000E+00	1.930E-04	0.000E+00	
	GP 003	PER 007		1.000E-02	1.000E-02	1.000E-02	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Lead							
	GP 003	PER 008		4.940E-05	0.000E+00	2.200E-04	
	GP 004	PER 008		1.320E-04		5.770E-04	
	SV 055	PER 007		0.000E+00	0.000E+00	0.000E+00	0.000E+00
	SV 061	PER 007		0.000E+00	0.000E+00	0.000E+00	0.000E+00
Totals					3.283E-03	7.970E-04	0.000E+00
PM < 10 micron							
	EU 026	PER 006		0.000E+00	0.000E+00	0.000E+00	
	EU 027	PER 006		0.000E+00	0.000E+00	0.000E+00	
	EU 036	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 037	PER 006		0.000E+00	0.000E+00	0.000E+00	
	EU 038	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 039	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 040	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 041	PER 007		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 044	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 045	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 046	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 047	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 049	PER 001		1.200E-02	5.200E-02	5.200E-02	
	EU 049	PER 008		5.400E-02	1.400E-02	1.400E-02	
	EU 050	PER 006		1.780E-01	7.800E-01	7.800E-01	
	EU 050	PER 008		0.000E+00	6.100E-01	0.000E+00	
	EU 051	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 051	PER 008		0.000E+00	2.420E+00	0.000E+00	
	EU 052	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 052	PER 008		0.000E+00	2.420E+00	0.000E+00	
	EU 053	PER 007		1.800E-01	7.900E-01	7.900E-01	
	EU 053	PER 008		0.000E+00	0.000E+00	0.000E+00	0.000E+00
	EU 054	PER 007		4.200E-01	1.840E+00	1.840E+00	
	EU 054	PER 008		0.000E+00	3.760E+00	0.000E+00	
	EU 057	PER 007		1.130E+00	2.800E-01	2.800E-01	
	EU 057	PER 008		1.130E+00	3.000E-01	3.000E-01	
	FS 001	PER 007		0.000E+00	0.000E+00	0.000E+00	
	FS 002	PER 001		1.460E-01	6.400E-01	6.400E-01	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
PM < 10 micron							
	FS 002	PER 008		0.000E+00	0.000E+00	0.000E+00	
	FS 003	PER 001		6.000E-02	2.800E-01	2.800E-01	
	FS 003	PER 008		0.000E+00	0.000E+00	0.000E+00	
	FS 008	PER 001		1.200E-01	8.500E-01	8.500E-01	
	FS 008	PER 008		0.000E+00	0.000E+00	0.000E+00	
	GP 003	PER 007		5.700E-01	2.500E+00	2.500E+00	
	GP 003	PER 008		6.600E-01	0.000E+00	2.880E+00	
	GP 004	PER 008		4.600E-01	0.000E+00	2.010E+00	
	SV 055	PER 007		0.000E+00	0.000E+00	0.000E+00	0.000E+00
	SV 061	PER 007		0.000E+00	0.000E+00	0.000E+00	0.000E+00
Totals					9.524E+00	5.204E+00	0.000E+00
Polycyclic organic matter							
	EU 049	PER 008		2.940E-05	7.350E-06	7.350E-06	
	EU 050	PER 008		0.000E+00	3.500E-03	0.000E+00	
	EU 051	PER 008			6.200E-03		
	EU 052	PER 008			6.200E-03		
	EU 054	PER 008		0.000E+00	1.700E-02	0.000E+00	
	GP 003	PER 008		1.690E-03	0.000E+00	7.400E-03	
	GP 004	PER 008		1.740E-03		7.630E-03	
Totals					3.291E-02	1.504E-02	0.000E+00
Total Particulate Matter							
	EU 026	PER 006		0.000E+00	0.000E+00	0.000E+00	
	EU 027	PER 006		0.000E+00	0.000E+00	0.000E+00	
	EU 036	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 037	PER 006		0.000E+00	0.000E+00	0.000E+00	
	EU 038	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 039	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 040	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 041	PER 007		0.000E+00	0.000E+00	0.000E+00	0.000E+00
	EU 042	PER 007		0.000E+00	0.000E+00	0.000E+00	0.000E+00
	EU 044	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 045	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 046	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 047	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 049	PER 001		1.200E-02	5.400E-02	5.400E-02	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Total Particulate Matter							
	EU 049	PER 008		5.400E-02	1.400E-02	1.400E-02	
	EU 050	PER 006		1.780E-01	7.800E-01	7.800E-01	
	EU 050	PER 008		0.000E+00	7.800E-01	0.000E+00	
	EU 051	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 051	PER 008		0.000E+00	3.470E+00	0.000E+00	
	EU 052	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 052	PER 008		0.000E+00	3.470E+00	0.000E+00	
	EU 053	PER 007		1.800E-01	7.900E-01	7.900E-01	
	EU 053	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 054	PER 007		4.200E-01	1.840E+00	1.840E+00	
	EU 054	PER 008		0.000E+00	3.760E+00	0.000E+00	
	EU 057	PER 007		1.370E+00	3.400E-01	3.400E-01	
	EU 057	PER 008		1.130E+00	3.000E-01	3.000E-01	
	FS 001	PER 007		0.000E+00	0.000E+00	0.000E+00	
	FS 002	PER 001		1.255E+00	5.500E+00	5.500E+00	
	FS 002	PER 008		0.000E+00	0.000E+00	0.000E+00	
	FS 003	PER 001		1.260E+00	5.540E+00	5.540E+00	
	FS 003	PER 008		0.000E+00	0.000E+00	0.000E+00	
	FS 008	PER 001		2.600E-01	1.140E+00	1.140E+00	
	FS 008	PER 008		0.000E+00	0.000E+00	0.000E+00	
	GP 003	PER 007		5.700E-01	2.500E+00	2.500E+00	
	GP 003	PER 008		9.400E-01	0.000E+00	4.130E+00	
	GP 004	PER 008		5.500E-01		2.410E+00	
	SV 055	PER 007		0.000E+00	0.000E+00	0.000E+00	0.000E+00
	SV 061	PER 007		0.000E+00	0.000E+00	0.000E+00	0.000E+00
Totals					1.179E+01	6.854E+00	0.000E+00
Selenium compounds							
	EU 041	PER 007					0.000E+00
	EU 042	PER 007					0.000E+00
	EU 050	PER 008		0.000E+00	8.200E-04	0.000E+00	
	EU 051	PER 008			2.200E-03		
	EU 052	PER 008			2.200E-03		
	EU 054	PER 008		0.000E+00	9.300E-06	0.000E+00	
	GP 003	PER 008		8.240E-05	0.000E+00	3.600E-04	
	GP 004	PER 008		1.890E-04		8.270E-04	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

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AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Selenium compounds							
	SV 055	PER 007					0.000E+00
	SV 061	PER 007					0.000E+00
Totals					5.229E-03	1.187E-03	0.000E+00
Sulfur Dioxide							
	EU 036	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 041	PER 007		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 049	PER 001		1.200E-02	5.100E-02	5.100E-02	
	EU 049	PER 008		5.100E-02	1.300E-02	1.300E-02	
	EU 050	PER 006		6.440E-01	2.820E+00	2.820E+00	
	EU 050	PER 008		0.000E+00	1.333E+01	0.000E+00	
	EU 051	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 051	PER 008		0.000E+00	7.460E+00	0.000E+00	
	EU 052	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 052	PER 008		0.000E+00	7.460E+00	0.000E+00	
	EU 054	PER 007		6.310E+00	2.765E+01	2.765E+01	
	EU 054	PER 008		0.000E+00	6.385E+01	0.000E+00	
	EU 057	PER 007		9.900E-01	2.500E-01	2.500E-01	
	EU 057	PER 008		9.900E-01	2.480E-01	2.480E-01	
	GP 003	PER 007		2.060E+00	9.010E+00	9.010E+00	
	GP 003	PER 008		2.030E+01	0.000E+00	8.890E+00	
	GP 004	PER 008		6.920E+00		3.031E+01	
	SV 055	PER 007		0.000E+00	0.000E+00	0.000E+00	0.000E+00
	SV 061	PER 007		0.000E+00	0.000E+00	0.000E+00	0.000E+00
Totals					9.236E+01	3.946E+01	0.000E+00
Volatile Organic Compounds							
	EU 001	PER 007		2.500E-02	1.100E-01	1.100E-01	
	EU 001	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 002	PER 007		2.500E-02	1.100E-01	1.100E-01	
	EU 002	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 003	PER 007		7.125E-03	3.100E-02	3.100E-02	
	EU 003	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 004	PER 007		7.125E-03	3.100E-02	3.100E-02	
	EU 004	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 005	PER 007		7.125E-03	3.100E-02	3.100E-02	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

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AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Volatile Organic Compounds							
	EU 005	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 006	PER 007		7.000E-01	3.060E+00	3.060E+00	
	EU 006	PER 008		2.640E-01	1.160E+00	1.160E+00	
	EU 007	PER 007		7.000E-01	3.060E+00	3.060E+00	
	EU 007	PER 008		2.640E-01	1.160E+00	1.160E+00	
	EU 008	PER 007		7.125E-03	3.100E-02	3.100E-02	
	EU 008	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 009	PER 007		7.125E-03	3.100E-02	3.100E-02	
	EU 009	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 010	PER 007		7.125E-03	3.100E-02	3.100E-02	
	EU 010	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 011	PER 007		7.125E-03	3.100E-02	3.100E-02	
	EU 011	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 012	PER 007		7.125E-03	3.100E-02	3.100E-02	
	EU 012	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 013	PER 007		9.100E-02	3.990E-01	3.900E-01	
	EU 013	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 014	PER 007		9.100E-02	3.990E-01	3.990E-01	
	EU 014	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 015	PER 001		2.520E-01	1.103E+00	1.103E+00	
	EU 015	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 016	PER 001		1.200E-02	5.200E-02	5.200E-02	
	EU 016	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 017	PER 001		1.140E-01	5.000E-01	5.000E-01	
	EU 017	PER 008		3.020E-01	1.320E+00	1.320E+00	
	EU 018	PER 001		3.500E-02	1.540E-01	1.540E-01	
	EU 018	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 019	PER 001		1.200E-01	5.270E-01	5.270E-01	
	EU 019	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 020	PER 001		1.000E-03	6.000E-03	6.000E-03	
	EU 020	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 022	PER 001		1.910E-01	8.350E-01	8.350E-01	
	EU 022	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 023	PER 001		2.000E-03	9.000E-03	9.000E-03	
	EU 023	PER 008		0.000E+00	0.000E+00	0.000E+00	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Volatile Organic Compounds							
	EU 024	PER 001		5.000E-02	2.400E-01	2.400E-01	
	EU 024	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 025	PER 001		5.000E-02	2.400E-01	2.400E-01	
	EU 025	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 036	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 041	PER 007		0.000E+00		0.000E+00	
	EU 042	PER 006		0.000E+00		0.000E+00	
	EU 048	PER 001		2.000E-03	9.500E-03	9.500E-03	
	EU 048	PER 008		0.000E+00	0.000E+00	0.000E+00	
	EU 049	PER 001		1.200E-02	5.200E-02	5.200E-02	
	EU 049	PER 008		6.300E-02	1.600E-02	1.600E-02	
	EU 050	PER 006		4.560E-01	2.000E-01	2.000E-01	
	EU 050	PER 008		0.000E+00	4.400E-01	0.000E+00	
	EU 051	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 051	PER 008		0.000E+00	7.900E-01	0.000E+00	
	EU 052	PER 007		0.000E+00	0.000E+00	0.000E+00	
	EU 052	PER 008		0.000E+00	7.900E-01	0.000E+00	
	EU 054	PER 007		1.400E-01	6.000E-01	6.000E-01	
	EU 054	PER 008		0.000E+00	3.580E+01	0.000E+00	
	EU 057	PER 007		1.610E+00	4.000E-01	4.000E-01	
	EU 057	PER 008		2.000E+00	4.000E-01	4.000E-01	
	FS 004	PER 001		1.000E-03	5.000E-03	5.000E-03	
	FS 004	PER 008		0.000E+00	0.000E+00	0.000E+00	
	FS 005	PER 001		1.020E-01	4.470E-01	4.470E-01	
	FS 005	PER 008		0.000E+00	0.000E+00	0.000E+00	
	FS 006	PER 001		5.220E-01	2.287E+00	2.287E+00	
	FS 006	PER 008		0.000E+00	0.000E+00	0.000E+00	
	FS 007	PER 001		5.000E-03	2.000E-02	2.000E-02	
	FS 007	PER 008		0.000E+00	0.000E+00	0.000E+00	
	GP 003	PER 007		2.100E-01	9.200E-01	9.200E-01	
	GP 003	PER 008		2.200E-01	0.000E+00	9.400E-01	
	GP 004	PER 008		3.550E+00		1.553E+01	
	SV 001	PER 007		0.000E+00	0.000E+00	0.000E+00	
	SV 002	PER 007		0.000E+00	0.000E+00	0.000E+00	
	SV 003	PER 007		0.000E+00	0.000E+00	0.000E+00	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Volatile Organic Compounds							
	SV 004	PER 007		0.000E+00	0.000E+00	0.000E+00	
	SV 005	PER 007		0.000E+00	0.000E+00	0.000E+00	
	SV 006	PER 007		0.000E+00	0.000E+00	0.000E+00	
	SV 007	PER 007		0.000E+00	0.000E+00	0.000E+00	
	SV 008	PER 007		0.000E+00	0.000E+00	0.000E+00	0.000E+00
	SV 055	PER 007		0.000E+00	0.000E+00	0.000E+00	
	SV 061	PER 007		0.000E+00	0.000E+00	0.000E+00	
Totals					4.188E+01	2.053E+01	0.000E+00

Western Lake Superior Sanitary District

Digester Gas Boiler (EU 050)

Maximum Capacity

Digester Gas

Fuel Oil

0.0184	MMscf/hr
12.53	MMBtu/hr

Fuel Type	Heat Value ¹	Maximum Fuel Consumption Rate	Maximum Sulfur Content ²
Digester Gas	663 Btu/scf	0.018 MMscf/hr	1000 PPM H ₂ S
No. 2 Fuel Oil	140 MMBtu/kgal	0.09 kgal/hr	0.05%

Pollutant	Digester Gas			No. 2 Fuel Oil			Worst-Case Emissions	
	Emission Factor ³ (lb/MMscf)	Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)	Emission Factor ⁴ (lb/kgal)	Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)	Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)
PM	7.60	0.140	0.61	2.0	0.179	0.78	0.18	0.78
PM ₁₀	7.60	0.140	0.61	1.0	0.090	0.39	0.14	0.61
PM _{2.5}	7.60	0.140	0.61	0.3	0.022	0.10	0.14	0.61
NO _x	100	1.840	8.06	20	1.790	7.84	1.84	8.06
SO ₂	165.4	3.043	13.328	7.1	0.635	2.783	3.04	13.33
CO	84	1.546	6.77	5	0.448	1.96	1.55	6.77
VOC	5.50	0.101	0.44	0.2	0.018	0.08	0.10	0.44
CO ₂ ⁵	--	--	--	22,780	2,039	8,930	2,039	8,930
Biogenic CO ₂ ⁶	77,335	1,423	6,233	--	--	--	1,423	6,233
CH ₄ ⁶	1.5	0.027	0.12	0.92	0.083	0.36	0.08	0.36
N ₂ O ⁶	0.15	0.003	0.012	0.18	0.017	0.072	0.02	0.07
CO ₂ e ⁶	76	1	6	22,856	2,046	8,960	2,046	8,960
1,1,1-Trichloroethane	--	--	--	2.36E-04	2.1E-05	9.3E-05	2.1E-05	9.3E-05
Arsenic	2.0E-04	3.7E-06	1.6E-05	6E-04	5.0E-05	2.2E-04	5.0E-05	2.2E-04
Benzene	2.1E-03	3.9E-05	1.7E-04	2.14E-04	1.9E-05	8.4E-05	3.9E-05	1.7E-04
Beryllium	1.2E-05	2.2E-07	9.7E-07	4E-04	3.8E-05	1.6E-04	3.8E-05	1.6E-04
Cadmium	1.1E-03	2.0E-05	8.9E-05	4E-04	3.8E-05	1.6E-04	3.8E-05	1.6E-04
Chromium	1.4E-03	2.6E-05	1.1E-04	4E-04	3.8E-05	1.6E-04	3.8E-05	1.6E-04
Cobalt	8.4E-05	1.5E-06	6.8E-06	--	--	--	1.5E-06	6.8E-06
Dichlorobenzene	1.2E-03	2.2E-05	9.7E-05	--	--	--	2.2E-05	9.7E-05
Ethyl benzene	--	--	--	6.36E-05	5.7E-06	2.5E-05	5.7E-06	2.5E-05
Formaldehyde	7.5E-02	1.4E-03	6.0E-03	0.48	0.04	0.19	0.04	0.19
Hexane	1.80	0.03	0.15	--	--	--	0.03	0.15
Lead	5.0E-04	9.2E-06	4.03E-05	1.3E-03	1.1E-04	4.94E-04	1.1E-04	4.9E-04
Manganese	3.8E-04	7.0E-06	3.1E-05	8.4E-04	7.5E-05	3.3E-04	7.5E-05	3.3E-04
Mercury	2.6E-04	4.8E-06	2.1E-05	4.2E-04	3.8E-05	1.6E-04	3.8E-05	1.6E-04
Nickel	2.1E-03	3.9E-05	1.7E-04	4.2E-04	3.8E-05	1.6E-04	3.9E-05	1.7E-04
POM ⁷	4.3E-02	7.9E-04	3.5E-03	1.2E-03	1.1E-04	4.7E-04	7.9E-04	3.5E-03
Selenium	2.4E-05	4.4E-07	1.9E-06	2.1E-03	1.9E-04	8.2E-04	1.9E-04	8.2E-04
Toluene	3.4E-03	6.3E-05	2.7E-04	6.20E-03	5.5E-04	2.4E-03	5.5E-04	2.4E-03
Xylene	--	--	--	1.09E-04	9.8E-06	4.3E-05	9.8E-06	4.3E-05
HAP Totals	--	0.036	0.156	--	0.044	0.194	0.04	0.19

¹ Digester gas heating value based methane content of 65%. No. 2 Fuel Oil heat value from AP-42, Section 1.3 (May 2010).

² Maximum sulfur content of digester gas and maximum permitted sulfur content of No. 2 Fuel Oil. Actual values are significantly lower.

³ Emission factors, except SO₂, from AP-42, Section 1.4 (07/98). Natural gas emission factors assumed representative for digester gas.

SO₂ EF = (ppm H₂S/1000000) x (1 lb-mole H₂S/387 ft³ H₂S) x (1 lb-mole SO₂ / 1 lb-mole H₂S) x (64 lbs SO₂ / 1 lb-mole SO₂) x (1,000,000 ft³ / MMscf)

⁴ Emission factors from AP-42, Section 1.3 (05/10)

⁵ CO₂, CH₄ and N₂O emission factors converted from Tables C-1 and C-2 to Subpart C of Part 98. CO₂ emissions are from combustion only.

Does not account for pass through of biogenic CO₂ from the digester.

⁶ CO₂e is the sum of non-biogenic-CO₂, CH₄ and N₂O emissions times their respective global warming potential as listed in Table A-1 to Subpart A of Part 98

⁷ Sum of all Polycyclic Organic Material emission factors in the respective AP-42 sections

Digester Gas Flare (EU 054)

Maximum Capacity

58.4 MMBtu/hr

Fuel Type	Heat Value ¹	Maximum Fuel Consumption Rate	Maximum Sulfur Content ²	Methane Content of Digester Gas
Digester Gas	663 Btu/scf	0.088 MMscf/hr	1000 PPM H ₂ S	65%

Pollutant	Emission Factor ³ (lb/MMscf)	Maximum Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)
PM	15 lb/MMscf methane	0.859	3.76
PM ₁₀	15 lb/MMscf methane	0.859	3.76
PM _{2.5}	15 lb/MMscf methane	0.859	3.76
NO _x	39 lb/MMscf methane	2.235	9.79
SO ₂	165.4	14.578	63.851
CO	46 lb/MMscf methane	2.6	11.5
VOC	0.14 lb/MMBtu	8.2	35.8
Biogenic CO ₂ ⁴	77,335	6,817	29,859
CH ₄ ⁴	1.5	0.129	0.56
N ₂ O ⁴	0.15	0.013	0.056
CO ₂ e ⁵	--	7	29
Arsenic	2.0E-04	1.8E-05	7.7E-05
Benzene	2.1E-03	1.9E-04	8.1E-04
Beryllium	1.2E-05	1.1E-06	4.6E-06
Cadmium	1.1E-03	9.7E-05	4.2E-04
Chromium	1.4E-03	1.2E-04	5.4E-04
Cobalt	8.4E-05	7.4E-06	3.2E-05
Dichlorobenzene	1.2E-03	1.1E-04	4.6E-04
Formaldehyde	7.5E-02	6.6E-03	2.9E-02
Hexane	1.80	0.16	0.69
Lead	5.0E-04	4.4E-05	1.93E-04
Manganese	3.8E-04	3.3E-05	1.5E-04
Mercury	2.6E-04	2.3E-05	1.0E-04
Nickel	2.1E-03	1.9E-04	8.1E-04
POM ⁶	4.3E-02	3.8E-03	1.7E-02
Selenium	2.4E-05	2.1E-06	9.3E-06
Toluene	3.4E-03	3.0E-04	1.3E-03
HAP Totals	--	0.170	0.745

¹ Digester gas heating value based methane content of 65%.

² Maximum sulfur content of digester gas. Actual values are significantly lower.

³ VOC emission factors taken from AP-42, Section 13-5 (09/91). PM, NO_x and CO emission factors from AP-42, Section 2.4 (10/08). All other emission factors from AP-42, Section 1.4 (07/98). Natural gas emission factors, where used, are assumed representative. SO₂ EF = (ppm H₂S/1000000) x (1 lb-mole H₂S/387 ft³ H₂S) x (1 lb-mole SO₂ / 1 lb-mole H₂S) x (64 lbs SO₂ / 1 lb-mole SO₂) x (1,000,000 ft³ / MMscf)

⁴ CO₂, CH₄ and N₂O emission factors converted from Tables C-1 and C-2 to Subpart C of Part 98. CO₂ emissions are from combustion only.

Does not account for pass through of biogenic CO₂ from the digester.

⁵ CO₂e is the sum of non-biogenic-CO₂, CH₄ and N₂O emissions times their respective global warming potential as listed in Table A-1 to Subpart A of Part 98.

⁶ Sum of all Polycyclic Organic Material emission factors in the AP-42 sections

GP004 - digester gas usage limit

Worst Case emissions occur when flare uses all of the allowed digester gas, and EU050 operates at max capacity on fuel oil.

Max Capacity - digester gas

25.2 MMBtu/hr

Fuel Type	Heat Value ¹	Maximum Fuel Consumption Rate	Limited Fuel Consumption Rate	Maximum Sulfur Content ²	Methane Content of Digester Gas
Digester Gas	663 Btu/scf	0.088 MMscf/hr	0.038 MMscf/hr	1000 PPM H ₂ S	65%

Pollutant	Emission Factor ³ (lb/MMscf)	EU054 on max allowed digester gas		EU050 on fuel oil		GP004	
		Limited Potential Emissions (tons/yr)	Limited Potential Emissions (lb/hr)	Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)	Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)
PM	15 lb/MMscf methane	1.62	0.37	0.18	0.78	0.55	2.41
PM ₁₀	15 lb/MMscf methane	1.62	0.37	0.09	0.39	0.46	2.01
PM _{2.5}	15 lb/MMscf methane	1.62	0.37	0.02	0.10	0.39	1.72
NO _x	39 lb/MMscf methane	4.22	0.96	1.79	7.84	2.75	12.06
SO ₂	165.4	27.52	6.28E+00	0.64	2.78	6.92	30.31
CO	46 lb/MMscf methane	4.98	1.14	0.45	1.96	1.58	6.94
VOC	0.14 lb/MMBtu	15.45	3.53	0.02	0.08	3.55	15.53
CO ₂				2038.78	8929.86	2038.78	8929.86
Biogenic CO ₂ ⁴	77,335	12871.63	2938.73			2938.73	12871.63
CH ₄ ⁴	1.5	2.43E-01	5.54E-02	0.08	0.36	0.14	0.60
N ₂ O ⁴	0.15	2.43E-02	5.54E-03	0.02	0.07	2.21E-02	9.67E-02
CO ₂ e ⁵	--	13	3	2045.65	8959.93	2048.53	8972.55
1,1,1-Trichloroethane				2.11E-05	9.25E-05	2.11E-05	9.25E-05
Arsenic	2.0E-04	3.33E-05	7.60E-06	5.01E-05	2.20E-04	5.77E-05	2.53E-04
Benzene	2.1E-03	3.50E-04	7.98E-05	1.92E-05	8.39E-05	9.90E-05	4.33E-04
Beryllium	1.2E-05	2.00E-06	4.56E-07	3.76E-05	1.65E-04	3.80E-05	1.67E-04
Cadmium	1.1E-03	1.83E-04	4.18E-05	3.76E-05	1.65E-04	7.94E-05	3.48E-04
Chromium	1.4E-03	2.33E-04	5.32E-05	3.76E-05	1.65E-04	9.08E-05	3.98E-04
Cobalt	8.4E-05	1.40E-05	3.19E-06			3.19E-06	1.40E-05
Ethyl benzene				5.69E-06	2.49E-05	5.69E-06	2.49E-05
Dichlorobenzene	1.2E-03	2.00E-04	4.56E-05			4.56E-05	2.00E-04
Formaldehyde	7.5E-02	1.25E-02	2.85E-03	4.30E-02	1.88E-01	4.58E-02	2.01E-01
Hexane	1.80	3.00E-01	6.84E-02			6.84E-02	3.00E-01
Lead	5.0E-04	8.32E-05	1.90E-05	1.13E-04	4.94E-04	1.32E-04	5.77E-04
Manganese	3.8E-04	6.32E-05	1.44E-05	7.52E-05	3.29E-04	8.96E-05	3.93E-04
Mercury	2.6E-04	4.33E-05	9.88E-06	3.76E-05	1.65E-04	4.75E-05	2.08E-04
Nickel	2.1E-03	3.50E-04	7.98E-05	3.76E-05	1.65E-04	1.17E-04	5.14E-04
POM ⁶	4.3E-02	7.16E-03	1.63E-03	1.07E-04	4.70E-04	1.74E-03	7.63E-03

Selenium	2.4E-05	3.99E-06	9.12E-07	1.88E-04	8.23E-04	1.89E-04	8.27E-04
Toluene	3.4E-03	5.66E-04	1.29E-04	5.55E-04	2.43E-03	6.84E-04	3.00E-03
Xylene				9.76E-06	4.27E-05	9.76E-06	4.27E-05
HAP Totals	--	0.32	0.073	4.43E-02	1.94E-01	0.12	0.52

¹ Digester gas heating value based methane content of 65%.

² Maximum sulfur content of digester gas. Actual values are significantly lower.

³ VOC emission factors taken from AP-42, Section 13-5 (09/91). PM, NO_x and CO emission factors from AP-42, Section 2.4 (10/08).

All other emission factors from AP-42, Section 1.4 (07/98). Natural gas emission factors, where used, are assumed representative.

SO₂ EF = (ppm H₂S/1000000) x (1 lb-mole H₂S/387 ft³ H₂S) x (1 lb-mole SO₂ / 1 lb-mole H₂S) x (64 lbs SO₂ / 1 lb-mole SO₂) x (1,000,000 ft³ / MMscf)

⁴ CO₂, CH₄ and N₂O emission factors converted from Tables C-1 and C-2 to Subpart C of Part 98. CO₂ emissions are from combustion only.

Does not account for pass through of biogenic CO₂ from the digester.

⁵ CO₂e is the sum of non-biogenic-CO₂, CH₄ and N₂O emissions times their respective global warming potential as listed in Table A-1 to Subpart A of Part 98

⁶ Sum of all Polycyclic Organic Material emission factors in the AP-42 sections

Western Lake Superior Sanitary District

Heating Boiler 1 (EU 051)

Maximum Capacity¹

33.6 MMBtu/hr

Fuel Type	Heat Value ²	Maximum Fuel Consumption Rate	Maximum Sulfur Content ³
Natural Gas	1,020 Btu/scf	0.033 MMscf/hr	NA
No. 2 Fuel Oil	140 MMBtu/kgal	0.24 kgal/hr	0.05%

Pollutant	Natural Gas			No. 2 Fuel Oil			Worst-Case Emissions	
	Emission Factor ⁴ (lb/MMscf)	Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)	Emission Factor ⁵ (lb/kgal)	Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)	Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)
PM	7.60	0.25	1.10	3.3	0.792	3.47	0.79	3.47
PM ₁₀	7.60	0.25	1.10	2.3	0.552	2.42	0.55	2.42
PM _{2.5}	7.60	0.25	1.10	1.6	0.372	1.63	0.37	1.63
NO _x	100	3.29	14.43	20	4.800	21.02	4.80	21.02
SO ₂	0.6	0.02	0.087	7.1	1.704	7.464	1.70	7.46
CO	84	2.77	12.12	5	1.200	5.26	2.77	12.12
VOC	5.50	0.18	0.79	0.2	0.048	0.21	0.18	0.79
CO ₂ ⁶	118,977	3,919	17,166	22,780	5,467	23,946	5,467	23,946
CH ₄ ⁶	2.2	0.074	0.32	0.92	0.222	0.97	0.22	0.97
N ₂ O ⁷	0.22	0.007	0.032	0.18	0.044	0.194	0.04	0.19
CO _{2e} ⁸	119,094	3,923	17,183	--	5,486	24,027	5,486	24,027
1,1,1-Trichloroethane	--	--	--	2.36E-04	5.7E-05	2.5E-04	5.7E-05	2.5E-04
Arsenic	2.0E-04	6.6E-06	2.9E-05	6E-04	1.3E-04	5.9E-04	1.3E-04	5.9E-04
Benzene	2.1E-03	6.9E-05	3.0E-04	2.14E-04	5.1E-05	2.2E-04	6.9E-05	3.0E-04
Beryllium	1.2E-05	4.0E-07	1.7E-06	4E-04	1.0E-04	4.4E-04	1.0E-04	4.4E-04
Cadmium	1.1E-03	3.6E-05	1.6E-04	4E-04	1.0E-04	4.4E-04	1.0E-04	4.4E-04
Chromium	1.4E-03	4.6E-05	2.0E-04	4E-04	1.0E-04	4.4E-04	1.0E-04	4.4E-04
Cobalt	8.4E-05	2.8E-06	1.2E-05	--	--	--	2.8E-06	1.2E-05
Dichlorobenzene	1.2E-03	4.0E-05	1.7E-04	--	--	--	4.0E-05	1.7E-04
Ethyl benzene	--	--	--	6.36E-05	1.5E-05	6.7E-05	1.5E-05	6.7E-05
Formaldehyde	7.5E-02	2.5E-03	1.1E-02	0.048	0.01	0.05	0.01	0.05
Hexane	1.80	0.06	0.26	--	--	--	0.06	0.26
Lead	5.0E-04	1.6E-05	7.21E-05	1.3E-03	3.0E-04	1.32E-03	3.0E-04	1.3E-03
Manganese	3.8E-04	1.3E-05	5.5E-05	8.4E-04	2.0E-04	8.8E-04	2.0E-04	8.8E-04
Mercury	2.6E-04	8.6E-06	3.8E-05	4.2E-04	1.0E-04	4.4E-04	1.0E-04	4.4E-04
Nickel	2.1E-03	6.9E-05	3.0E-04	4.2E-04	1.0E-04	4.4E-04	1.0E-04	4.4E-04
POM ⁸	4.3E-02	1.4E-03	6.2E-03	1.2E-03	2.9E-04	1.3E-03	1.4E-03	6.2E-03
Selenium	2.4E-05	7.9E-07	3.5E-06	2.1E-03	5.0E-04	2.2E-03	5.0E-04	2.2E-03
Toluene	3.4E-03	1.1E-04	4.9E-04	6.20E-03	1.5E-03	6.5E-03	1.5E-03	6.5E-03
Xylene	--	--	--	1.09E-04	2.6E-05	1.1E-04	2.6E-05	1.1E-04
HAP Totals	--	0.064	0.279	--	0.015	0.066	0.06	0.28

¹ The two heating boilers are limited to a total combined heat input of 40 MMBtu/hour. See GP003 for limited hourly and annual PTE.² Natural gas heat value AP-42 Section 1.4 (July 1998). No. 2 Fuel Oil heat value from AP-42, Section 1.3 (May 2010).³ Maximum permitted sulfur content of No. 2 Fuel Oil. Actual values are significantly lower sine they use ultra low sulfur diesel with a sulfur content of 0.0015%.⁴ Emission factors from AP-42, Section 1.4 (07/98)⁵ Emission factors from AP-42, Section 1.3 (05/10)⁶ CO₂, CH₄ and N₂O emission factors converted from Tables C-1 and C-2 to Subpart C of Part 98⁷ CO_{2e} is the sum of non-biogenic-CO₂, CH₄ and N₂O emissions times their respective global warming potential as listed in Table A-1 to Subpart A of Part 98⁸ Sum of all Polycyclic Organic Material emission factors in the respective AP-42 sections

Western Lake Superior Sanitary District

Heating Boiler 2 (EU 052)

Maximum Capacity¹

33.6 MMBtu/hr

Fuel Type	Heat Value ²	Maximum Fuel Consumption Rate	Maximum Sulfur Content ³
Natural Gas	1,020 Btu/scf	0.033 MMscf/hr	NA
No. 2 Fuel Oil	140 MMBtu/kgal	0.24 kgal/hr	0.05%

Pollutant	Natural Gas			No. 2 Fuel Oil			Worst-Case Emissions	
	Emission Factor ⁴ (lb/MMscf)	Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)	Emission Factor ⁵ (lb/kgal)	Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)	Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)
PM	7.60	0.250	1.10	3.3	0.792	3.47	0.79	3.47
PM ₁₀	7.60	0.250	1.10	2.3	0.552	2.42	0.55	2.42
PM _{2.5}	7.60	0.250	1.10	1.6	0.372	1.63	0.37	1.63
NO _x	100	3,294	14.43	20	4,800	21.02	4.80	21.02
SO ₂	0.6	0.020	0.087	7.1	1.704	7.464	1.70	7.46
CO	84	2,767	12.12	5	1,200	5.26	2.77	12.12
VOC	5.50	0.181	0.79	0.2	0.048	0.21	0.18	0.79
CO ₂ ⁶	118,977	3,919	17,166	22,780	5,467	23,946	5,467	23,946
CH ₄ ⁶	2.2	0.074	0.32	0.92	0.222	0.97	0.22	0.97
N ₂ O ⁶	0.22	0.007	0.032	0.18	0.044	0.194	0.04	0.19
CO _{2e} ⁷	119,094	3,923	17,183	--	5,486	24,027	5,486	24,027
1,1,1-Trichloroethane	--	--	--	2.36E-04	5.7E-05	2.5E-04	5.7E-05	2.5E-04
Arsenic	2.0E-04	6.6E-06	2.9E-05	6E-04	1.3E-04	5.9E-04	1.3E-04	5.9E-04
Benzene	2.1E-03	6.9E-05	3.0E-04	2.14E-04	5.1E-05	2.2E-04	6.9E-05	3.0E-04
Beryllium	1.2E-05	4.0E-07	1.7E-06	4E-04	1.0E-04	4.4E-04	1.0E-04	4.4E-04
Cadmium	1.1E-03	3.6E-05	1.6E-04	4E-04	1.0E-04	4.4E-04	1.0E-04	4.4E-04
Chromium	1.4E-03	4.6E-05	2.0E-04	4E-04	1.0E-04	4.4E-04	1.0E-04	4.4E-04
Cobalt	8.4E-05	2.8E-06	1.2E-05	--	--	--	2.8E-06	1.2E-05
Dichlorobenzene	1.2E-03	4.0E-05	1.7E-04	--	--	--	4.0E-05	1.7E-04
Ethyl benzene	--	--	--	6.36E-05	1.5E-05	6.7E-05	1.5E-05	6.7E-05
Formaldehyde	7.5E-02	2.5E-03	1.1E-02	0.048	0.01	0.05	0.01	0.05
Hexane	1.80	0.06	0.26	--	--	--	0.06	0.26
Lead	5.0E-04	1.6E-05	7.21E-05	1.3E-03	3.0E-04	1.32E-03	3.0E-04	1.3E-03
Manganese	3.8E-04	1.3E-05	5.5E-05	8.4E-04	2.0E-04	8.8E-04	2.0E-04	8.8E-04
Mercury	2.6E-04	8.6E-06	3.8E-05	4.2E-04	1.0E-04	4.4E-04	1.0E-04	4.4E-04
Nickel	2.1E-03	6.9E-05	3.0E-04	4.2E-04	1.0E-04	4.4E-04	1.0E-04	4.4E-04
POM ⁸	4.3E-02	1.4E-03	6.2E-03	1.2E-03	2.9E-04	1.3E-03	1.4E-03	6.2E-03
Selenium	2.4E-05	7.9E-07	3.5E-06	2.1E-03	5.0E-04	2.2E-03	5.0E-04	2.2E-03
Toluene	3.4E-03	1.1E-04	4.9E-04	6.20E-03	1.5E-03	6.5E-03	1.5E-03	6.5E-03
Xylene	--	--	--	1.09E-04	2.6E-05	1.1E-04	2.6E-05	1.1E-04
HAP Totals	--	0.064	0.279	--	0.015	0.066	0.06	0.28

¹ The two heating boilers are limited to a total combined heat input of 40 MMBtu/hour. See GP003 for limited hourly and annual PTE.² Natural gas heat value AP-42 Section 1.4 (July 1998). No. 2 Fuel Oil heat value from AP-42, Section 1.3 (May 2010).³ Maximum permitted sulfur content of No. 2 Fuel Oil. Actual values are significantly lower since they use ultra low sulfur diesel with a sulfur content of 0.0015%.⁴ Emission factors from AP-42, Section 1.4 (07/98)⁵ Emission factors from AP-42, Section 1.3 (05/10)⁶ CO₂, CH₄ and N₂O emission factors converted from Tables C-1 and C-2 to Subpart C of Part 98⁷ CO_{2e} is the sum of non-biogenic-CO₂, CH₄ and N₂O emissions times their respective global warming potential as listed in Table A-1 to Subpart A of Part 98⁸ Sum of all Polycyclic Organic Material emission factors in the respective AP-42 sections

Western Lake Superior Sanitary District

GP003 - Heating Boilers 1 & 2 (EU051 and EU052)

Maximum Capacity	67.2 MMBtu/hr	Limited by permit condition
Limited Capacity ¹	40.0 MMBtu/hr	

Fuel Type	Heat Value ²	Maximum Fuel Consumption Rate	Maximum Sulfur Content ³
Natural Gas	1,020 Btu/scf	0.039 MMscf/hr	NA
No. 2 Fuel Oil	140 MMBtu/kgal	0.29 kgal/hr	0.05%

Pollutant	Natural Gas			No. 2 Fuel Oil			Worst-Case Emissions	
	Emission Factor ⁴ (lb/MMscf)	Emission Rate (lbs/hr)	Limited Potential Emissions (tons/yr)	Emission Factor ⁵ (lb/kgal)	Emission Rate (lbs/hr)	Limited Potential Emissions (tons/yr)	Maximum Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)
PM	7.60	0.298	1.31	3.3	0.943	4.13	0.94	4.13
PM ₁₀	7.60	0.298	1.31	2.3	0.657	2.88	0.66	2.88
PM _{2.5}	7.60	0.298	1.31	1.6	0.443	1.94	0.44	1.94
NO _x	100	3.922	17.18	20	5.714	25.03	5.71	25.03
SO ₂	0.6	0.024	0.103	7.1	2.029	8.885	2.03	8.89
CO	84	3.294	14.43	5	1.429	6.26	3.29	14.43
VOC	5.50	0.216	0.94	0.2	0.057	0.25	0.22	0.94
CO ₂ ⁶	118,977	4,666	20,436	22,780	6,508	28,507	6,508	28,507
CH ₄ ⁶	2.2	0.088	0.39	0.92	0.264	1.16	0.26	1.16
N ₂ O ⁶	0.22	0.009	0.039	0.18	0.053	0.231	0.05	0.23
CO _{2e} ⁷	119,094	4,670	20,456	--	6,530	28,603	6,530	28,603
1,1,1-Trichloroethane	--	--	--	2.36E-04	6.7E-05	3.0E-04	6.7E-05	3.0E-04
Arsenic	2.0E-04	7.8E-06	3.4E-05	6E-04	1.6E-04	7.0E-04	1.6E-04	7.0E-04
Benzene	2.1E-03	8.2E-05	3.6E-04	2.14E-04	6.1E-05	2.7E-04	8.2E-05	3.6E-04
Beryllium	1.2E-05	4.7E-07	2.1E-06	4E-04	1.2E-04	5.3E-04	1.2E-04	5.3E-04
Cadmium	1.1E-03	4.3E-05	1.9E-04	4E-04	1.2E-04	5.3E-04	1.2E-04	5.3E-04
Chromium	1.4E-03	5.5E-05	2.4E-04	4E-04	1.2E-04	5.3E-04	1.2E-04	5.3E-04
Cobalt	8.4E-05	3.3E-06	1.4E-05	--	--	--	3.3E-06	1.4E-05
Dichlorobenzene	1.2E-03	4.7E-05	2.1E-04	--	--	--	4.7E-05	2.1E-04
Ethyl benzene	--	--	--	6.36E-05	1.8E-05	8.0E-05	1.8E-05	8.0E-05
Formaldehyde	7.5E-02	2.9E-03	1.3E-02	0.048	0.01	0.06	0.01	0.06
Hexane	1.80	0.07	0.31	--	--	--	0.07	0.31
Lead	5.0E-04	2.0E-05	8.59E-05	1.3E-03	3.6E-04	1.58E-03	3.6E-04	1.6E-03
Manganese	3.8E-04	1.5E-05	6.5E-05	8.4E-04	2.4E-04	1.1E-03	2.4E-04	1.1E-03
Mercury	2.6E-04	1.0E-05	4.5E-05	4.2E-04	1.2E-04	5.3E-04	1.2E-04	5.3E-04
Nickel	2.1E-03	8.2E-05	3.6E-04	4.2E-04	1.2E-04	5.3E-04	1.2E-04	5.3E-04
POM ⁸	4.3E-02	1.7E-03	7.4E-03	1.2E-03	3.4E-04	1.5E-03	1.7E-03	7.4E-03
Selenium	2.4E-05	9.4E-07	4.1E-06	2.1E-03	6.0E-04	2.6E-03	6.0E-04	2.6E-03
Toluene	3.4E-03	1.3E-04	5.8E-04	6.20E-03	1.8E-03	7.8E-03	1.8E-03	7.8E-03
Xylene	--	--	--	1.09E-04	3.1E-05	1.4E-04	3.1E-05	1.4E-04
HAP Totals	--	0.076	0.332	--	0.018	0.079	0.08	0.33

¹ The two heating boilers are limited to a total combined heat input of 40 MMBtu/hour.

² Natural gas heat value AP-42 Section 1.4 (July 1998). No. 2 Fuel Oil heat value from AP-42, Section 1.3 (May 2010).

³ Maximum permitted sulfur content of No. 2 Fuel Oil. Actual values are significantly lower sine they use ultra low sulfur diesel with a sulfur content of 0.0015%.

⁴ Emission factors from AP-42, Section 1.4 (07/98)

⁵ Emission factors from AP-42, Section 1.3 (05/10)

⁶ CO₂, CH₄ and N₂O emission factors converted from Tables C-1 and C-2 to Subpart C of Part 98

⁷ CO_{2e} is the sum of non-biogenic-CO₂, CH₄ and N₂O emissions times their respective global warming potential as listed in Table A-1 to Subpart A of Part 98

⁸ Sum of all Polycyclic Organic Material emission factors in the respective AP-42 sections

Western Lake Superior Sanitary District

Emergency Generator (EU 057)

Engine Rating	2806 BHP
	19.6 MMBtu/hr

Fuel	Operating Hours	Maximum Sulfur Content ¹
Diesel	500	0.05%

Pollutant	Emission Factor ² (lb/MMBtu)	Emission Rate (lb/hr)	Potential Emissions (tpy)
PM	1.13 lb/hr	1.13	0.3
PM ₁₀	1.13 lb/hr	1.13	0.3
PM _{2.5}	1.13 lb/hr	1.13	0.3
NO _x	44.3 lb/hr	44.30	11.1
SO ₂	0.0505	0.992	0.248
CO	0.85	17	4.2
VOC	0.08	2	0.4
CO ₂ ³	163	3,196	799
CH ₄ ³	6.6E-03	0.13	0.032
N ₂ O ³	1.3E-03	0.026	6.5E-03
CO ₂ e ⁴	--	3,206	802
Acetaldehyde	2.52E-05	4.95E-04	1.24E-04
Acrolien	7.88E-06	1.55E-04	3.87E-05
Benzene	7.76E-04	1.52E-02	3.81E-03
Formaldehyde	7.89E-05	1.55E-03	3.87E-04
Toluene	2.81E-04	5.52E-03	1.38E-03
Xylenes	1.93E-04	3.79E-03	9.48E-04
Total HAPS	--	0.027	6.69E-03

¹ Maximum permitted sulfur content of No. 2 Fuel Oil.

Actual values are significantly lower

since they use ultra low sulfur diesel with a sulfur content of 0.0015%.

² lb/hr emission factors from emergency generator permit amendment, issued May, 2005.

All other emission factors from AP-42, Section 3.4

³ CO₂, CH₄ and N₂O emission factors converted from Tables C-1 and C-2 to Subpart C of Part 98.

⁴ CO₂e is the sum of CO₂, CH₄ and N₂O emissions times their respective global warming potential as listed in Table A-1 to Subpart A of Part 98

Western Lake Superior Sanitary District

HHW Emergency Generator (EU049)

Engine Rating	25 BHP
	0.18 MMBtu/hr

Fuel	Operating Hours	Maximum Sulfur Content ¹
Diesel	500	0.05%

Pollutant	Emission Factor ² (lb/MMBtu)	Emission Rate (lb/hr)	Potential Emissions (tpy)
PM	0.31	0.054	0.014
PM ₁₀	0.31	0.054	0.014
PM _{2.5}	0.31	0.054	0.014
NO _x	4.41	0.772	0.193
SO ₂	0.29	0.051	0.013
CO	0.95	0.17	0.042
VOC	0.36	0.063	0.016
CO ₂ ³	163	28.5	7.12
CH ₄ ³	6.60E-03	1.16E-03	2.89E-04
N ₂ O ³	1.32E-03	2.31E-04	5.78E-05
CO ₂ e ⁴	--	28.6	7.14
1,3-Butadiene	3.91E-05	6.84E-06	1.71E-06
Acetaldehyde	7.67E-04	1.34E-04	3.36E-05
Acrolin	9.25E-05	1.62E-05	4.05E-06
Benzene	9.33E-04	1.63E-04	4.08E-05
Formaldehyde	1.18E-03	2.07E-04	5.16E-05
POM	1.68E-04	2.94E-05	7.35E-06
Toluene	4.09E-04	7.16E-05	1.79E-05
Xylenes	2.85E-04	4.99E-05	1.25E-05
Total HAPS	--	6.78E-04	1.69E-04

¹ Maximum permitted sulfur content of No. 2 Fuel Oil. Actual values are significantly lower.

² Emission factors from AP-42, Section 3.3

³ CO₂, CH₄ and N₂O emission factors converted from Tables C-1 and C-2 to Subpart C of Part 98.

⁴ CO₂e is the sum of CO₂, CH₄ and N₂O emissions times their respective global warming potential as listed in Table A-1 to Subpart A of Part 98

Western Lake Superior Sanitary District

Wastewater Treatment HAP and VOC Emissions

The following emission were generated using EPA's WATER9 model (output summary attached).
Where one WATER9 emission unit covers several permit emission units, emission are split equally.

Annual Emissions (tpy)

Description		Duluth Influent Channel and Screw Pumps ¹	Bar Screens Room and Screens ²	Bar Screens Channel ²	Grit Tanks ³	Grit Collector ³	EU006 and EU007 lb/hr	Oxidation Tanks (ie Aeration)	Mixed Liquor Channel ⁴	Secondary Settling Tanks ⁴	EU017 lb/hr	Flocculation Tanks ⁵	Mixed Media Filters ⁵	Backwash Water Well ⁵	Dissolved Air Flocculation Thickeners ⁵	Sludge Storage Tanks ⁵	
								EU 015 (IA)	EU 016 (IA)	EU 017		EU 019 (IA)	EU 020 (IA)	EU 021 (IA)	EU 022 (IA)	EU 023 (IA)	
								Flocculation Tank	NA	NA		NA	NA	NA	NA	Total	
Emission Unit Number		EU 001 (IA)	EU 003 (IA)	EU 004 (IA)	EU 006	EU 007											
WATER9 Emission Unit Name	Hazardous Air Pollutant (Y/N)	NA	Bar Screens		Grit Separators			Aeration Tanks	Secondary Clarifiers								
2,4 DIMETHYLPHENOL	N	Neg.	1.87E-08	1.87E-08	1.17E-09	1.17E-09		1.73E-09	1.05E-08	9.45E-08		2.34E-08	Neg.	Neg.	Neg.	Neg.	1.70E-07
ALDRIN	N	Neg.	2.55E-08	2.55E-08	2.02E-07	2.02E-07		8.88E-07	4.71E-06	4.24E-05		5.48E-07	Neg.	Neg.	Neg.	Neg.	4.90E-05
BENZENE	Y	Neg.	8.79E-05	8.79E-05	6.34E-04	6.34E-04	1.45E-04	1.16E-05	6.08E-06	5.47E-05	1.25E-05	2.45E-05	Neg.	Neg.	Neg.	Neg.	1.70E-03
BHC, alpha-	N	Neg.	4.63E-08	4.63E-08	3.68E-07	3.68E-07		2.08E-07	1.22E-06	1.10E-05		1.01E-06	Neg.	Neg.	Neg.	Neg.	1.43E-05
BHC, beta-	N	Neg.	2.18E-08	2.18E-08	1.73E-07	1.73E-07		9.78E-08	5.92E-07	5.33E-06		5.59E-07	Neg.	Neg.	Neg.	Neg.	6.97E-06
BHC, delta-	N	Neg.	9.18E-10	9.18E-10	7.29E-09	7.29E-09		4.49E-09	2.71E-08	2.44E-07		5.04E-08	Neg.	Neg.	Neg.	Neg.	3.42E-07
BIS(2-ETHYLHEXYL)PHTHALATE	Y	Neg.	6.16E-07	6.16E-07	9.36E-07	9.36E-07	2.14E-07	1.23E-06	1.86E-05	1.68E-04	3.83E-05	1.75E-06	Neg.	Neg.	Neg.	Neg.	2.31E-04
BUTYL BENZYL PHTHALATE	N	Neg.	7.16E-09	7.16E-09	5.69E-08	5.69E-08		5.16E-08	3.07E-07	2.76E-06		2.15E-07	Neg.	Neg.	Neg.	Neg.	3.47E-06
CHLORDANE	N	Neg.	9.85E-07	9.85E-07	7.82E-06	7.82E-06		4.28E-06	2.12E-05	1.91E-04		1.40E-05	Neg.	Neg.	Neg.	Neg.	2.48E-04
CHLOROFORM	Y	Neg.	1.43E-03	1.43E-03	1.04E-02	1.04E-02	2.37E-03	2.84E-04	1.68E-04	1.51E-03	3.46E-04	5.17E-04	Neg.	Neg.	Neg.	Neg.	2.88E-02
METHYL CHLORIDE	Y	Neg.	2.99E-04	2.99E-04	2.11E-03	2.11E-03	4.82E-04	9.20E-05	1.99E-05	1.79E-04	4.09E-05	1.69E-04	Neg.	Neg.	Neg.	Neg.	5.80E-03
DDD, p,p'-	N	Neg.	3.90E-10	3.90E-10	3.10E-09	3.10E-09		8.71E-09	5.09E-08	4.58E-07		2.45E-08	Neg.	Neg.	Neg.	Neg.	5.49E-07
DDE, p,p'-	Y	Neg.	1.56E-07	1.56E-07	1.24E-06	1.24E-06	2.83E-07	2.64E-06	8.93E-06	8.04E-05	1.84E-05	2.22E-06	Neg.	Neg.	Neg.	Neg.	1.16E-04
DDT	N	Neg.	1.55E-10	1.55E-10	1.23E-09	1.23E-09		7.59E-09	4.42E-08	3.98E-07		1.31E-08	Neg.	Neg.	Neg.	Neg.	4.65E-07
DIELDRIN	N	Neg.	1.17E-08	1.17E-08	9.26E-08	9.26E-08		1.49E-07	8.44E-07	7.59E-06		3.12E-07	Neg.	Neg.	Neg.	Neg.	9.11E-06
DIETHYL PHTHALATE	N	Neg.	9.51E-08	9.51E-08	7.55E-07	7.55E-07		4.14E-07	2.52E-06	2.27E-05		1.80E-06	Neg.	Neg.	Neg.	Neg.	2.91E-05
ENDOSULFAN	N	Neg.	1.02E-16	1.02E-16	8.09E-16	8.09E-16		2.83E-19	0.00E+00	0.00E+00		2.89E-20	Neg.	Neg.	Neg.	Neg.	1.82E-15
ENDOSULFAN SULFATE	N	Neg.	1.58E-17	1.58E-17	1.25E-16	1.25E-16		4.28E-20	0.00E+00	0.00E+00		0.00E+00	Neg.	Neg.	Neg.	Neg.	2.82E-16
ENDRIN	N	Neg.	1.25E-10	1.25E-10	9.90E-10	9.90E-10		1.93E-09	1.14E-08	1.02E-07		1.16E-08	Neg.	Neg.	Neg.	Neg.	1.29E-07
ETHYLBENZENE	Y	Neg.	1.87E-04	1.87E-04	1.34E-03	1.34E-03	3.05E-04	2.19E-05	6.61E-06	5.95E-05	1.36E-05	4.54E-05	Neg.	Neg.	Neg.	Neg.	3.50E-03
HEPTACHLOR	Y	Neg.	3.93E-07	3.93E-07	3.12E-06	3.12E-06	7.13E-07	9.70E-06	3.73E-05	3.35E-04	7.66E-05	4.89E-06	Neg.	Neg.	Neg.	Neg.	4.72E-04
HEPTACHLOR EPOXIDE	N	Neg.	2.31E-06	2.31E-06	1.83E-05	1.83E-05		1.98E-05	7.56E-05	6.81E-04		2.35E-05	Neg.	Neg.	Neg.	Neg.	8.41E-04
METHANOL (Highest Single HAP)	Y	Neg.	1.61E-01	1.61E-01	1.13E+00	1.13E+00	2.59E-01	4.44E-03	1.47E-01	1.32E+00	3.01E-01	8.62E-03	Neg.	Neg.	Neg.	Neg.	4.63E+00
METHYLENE CHLORIDE	Y	Neg.	5.41E-04	5.41E-04	4.00E-03	4.00E-03	9.14E-04	1.55E-04	1.62E-04	1.45E-03	3.32E-04	2.86E-04	Neg.	Neg.	Neg.	Neg.	1.24E-02
PHENOL	Y	Neg.	1.81E-06	1.81E-06	3.94E-08	3.94E-08	9.00E-09	1.43E-08	3.66E-07	3.30E-06	7.53E-07	1.04E-07	Neg.	Neg.	Neg.	Neg.	8.24E-06
TOLUENE	Y	Neg.	6.82E-04	6.82E-04	4.88E-03	4.88E-03	1.11E-03	5.91E-05	2.34E-05	2.11E-04	4.81E-05	1.15E-04	Neg.	Neg.	Neg.	Neg.	1.27E-02
	Total VOC	Neg.	1.64E-01	1.64E-01	1.16E+00	1.16E+00	2.64E-01	5.11E-03	1.47E-01	1.32E+00	3.02E-01	9.83E-03	Neg.	Neg.	Neg.	Neg.	4.70E+00
	Total HAP	Neg.	1.64E-01	1.64E-01	1.16E+00	1.16E+00	2.64E-01	5.08E-03	1.47E-01	1.32E+00	3.02E-01	9.79E-03	Neg.	Neg.	Neg.	Neg.	4.70E+00

1.02E+01

¹ Screw pumps were excluded from the WATER9 analysis as air emissions are expected to be low as they only move residential wastewater. Methanol laden industrial wastewater, responsible for the majority of VOC emissions, enters the facility just after this point.

² Bar Screen emissions from WATER9 as split equally between EU 003 and EU 004

³ Grit separator emissions from WATER9 as split equally between EU 006 and EU 007

⁴ 10% of the Secondary Classifier emissions from WATER9 as associated with EU 016 (Mixed Liquor Channel) and 90% to EU 017 (Secondary Settling Tanks).

This is a conservative engineering estimate since the channel has a relatively small surface area compared to the tanks

⁵ Unit was excluded from WATER9 analysis since methanol is largely removed from the system after the flocculations tanks.

Air Emissions

Compound	Influent Concentration (ppmw)	Bar Screens (g/s)	Grit Separators (g/s)	Aeration Tanks (g/s)	Secondary Clarifiers (g/s)	Flocculation Tanks (g/s)	Total (g/s)	Total (lb/hr)	Total (ton/yr)	HAP
2,4 DIMETHYLPHENOL	3.90E-04	1.08E-09	6.71E-11	4.97E-11	3.02E-09	6.72E-10	4.89E-09	3.88E-08	1.70E-07	
ALDRIN	1.20E-04	1.47E-09	1.16E-08	2.56E-08	1.36E-06	1.58E-08	1.41E-06	1.12E-05	4.90E-05	
BENZENE	1.50E-04	5.06E-06	3.65E-05	3.35E-07	1.75E-06	7.05E-07	4.43E-05	3.52E-04	1.54E-03	x
BHC,alpha-	9.20E-05	2.66E-09	2.12E-08	5.99E-09	3.52E-07	2.90E-08	4.11E-07	3.26E-06	1.43E-05	
BHC,beta-	1.20E-03	1.25E-09	9.96E-09	2.81E-09	1.70E-07	1.61E-08	2.00E-07	1.59E-06	6.97E-06	
BHC,delta-	6.30E-05	5.28E-11	4.20E-10	1.29E-10	7.79E-09	1.45E-09	9.84E-09	7.81E-08	3.42E-07	
BIS(2-ETHYLHEXYL)PHTHALATE	2.50E-03	3.55E-08	5.38E-08	3.53E-08	5.36E-06	5.04E-08	5.54E-06	4.40E-05	1.93E-04	x
BUTYL BENZYL PHTHALATE	3.50E-04	4.12E-10	3.27E-09	1.48E-09	8.83E-08	6.20E-09	9.97E-08	7.91E-07	3.47E-06	
CHLORDANE	2.40E-04	5.67E-08	4.50E-07	1.23E-07	6.10E-06	4.04E-07	7.13E-06	5.66E-05	2.48E-04	
CHLOROFORM	2.50E-03	8.24E-05	5.97E-04	8.17E-06	4.84E-05	1.49E-05	7.51E-04	5.96E-03	2.61E-02	x
CHLOROMETHANE (methylchloride)	4.00E-04	1.72E-05	1.21E-04	2.65E-06	5.72E-06	4.85E-06	1.52E-04	1.21E-03	5.28E-03	x
DDD,p,p'-	4.30E-05	2.24E-11	1.78E-10	2.51E-10	1.46E-08	7.05E-10	1.58E-08	1.25E-07	5.49E-07	
DDE,p,p'-	4.80E-05	8.98E-09	7.13E-08	7.59E-08	2.57E-06	6.38E-08	2.79E-06	2.21E-05	9.70E-05	x
DDT	1.10E-04	8.93E-12	7.09E-11	2.18E-10	1.27E-08	3.77E-10	1.34E-08	1.06E-07	4.65E-07	
DIELDRIN	4.70E-05	6.71E-10	5.33E-09	4.29E-09	2.43E-07	8.96E-09	2.62E-07	2.08E-06	9.11E-06	
DIETHYL PHTHALATE	3.10E-03	5.47E-09	4.34E-08	1.19E-08	7.26E-07	5.19E-08	8.38E-07	6.65E-06	2.91E-05	
ENDOSULFAN	2.00E-04	5.87E-18	4.65E-17	8.14E-21	0.00E+00	8.32E-22	5.24E-17	4.16E-16	1.82E-15	
ENDOSULFAN SULFATE	3.10E-05	9.10E-19	7.21E-18	1.23E-21	0.00E+00	0.00E+00	8.12E-18	6.45E-17	2.82E-16	
ENDRIN	7.70E-05	7.17E-12	5.69E-11	5.56E-11	3.27E-09	3.34E-10	3.72E-09	2.95E-08	1.29E-07	
ETHYLBENZENE	2.90E-04	1.08E-05	7.68E-05	6.31E-07	1.90E-06	1.31E-06	9.14E-05	7.26E-04	3.18E-03	x
HEPTACHLOR	2.50E-04	2.26E-08	1.80E-07	2.79E-07	1.07E-05	1.41E-07	1.13E-05	9.00E-05	3.94E-04	x
HEPTACHLOR EPOXIDE	4.70E-04	1.33E-07	1.05E-06	5.70E-07	2.18E-05	6.76E-07	2.42E-05	1.92E-04	8.41E-04	
METHANOL	6.40E+01	9.25E-03	6.53E-02	1.28E-04	4.22E-02	2.48E-04	1.17E-01	9.29E-01	4.07E+00	x
METHYLENE CHLORIDE, dichloromethane	1.22E-03	3.11E-05	2.30E-04	4.47E-06	4.65E-05	8.23E-06	3.21E-04	2.55E-03	1.11E-02	x
PHENOL	9.20E-03	1.04E-07	2.27E-09	4.11E-10	1.05E-07	3.00E-09	2.15E-07	1.71E-06	7.48E-06	x
TOLUENE	1.10E-03	3.93E-05	2.81E-04	1.70E-06	6.74E-06	3.31E-06	3.32E-04	2.63E-03	1.15E-02	x
TOTAL		9.43E-03	6.66E-02	1.47E-04	4.23E-02	2.83E-04	1.19E-01	9.43E-01	4.13E+00	4.13E+00

Western Lake Superior Sanitary District

Wastewater Treatment GHG Emissions

GHG emissions are assumed to be split equally among all wastewater treatment processes.

Parameters ¹	
Design Influent Flow Rate (Q_{WW})	120 Mgal/day
	5 Mgal/hr
	18927.1 m ³ /hr
Design Biological Oxygen Demand (OD)	60.5 tons/day
	120.8 g/m ³
OD Removal Efficiency (Eff_{OD}) ¹	0.403
CF_{CO_2} (constant)	1.375 g CO ₂ /g oxygen demand
CF_{CH_4} (constant)	0.5 g CH ₄ /g oxygen demand
MCF_{WW} , Aerobic Treatment w/ Activated Sludge ²	0
MCF_S , Anaerobic Sludge Digestion ²	0.8
BG_{CH_4}	0.65
λ , Aerobic ²	0.65
TKN_i ³	56 g/m ³
EF_{N_2O}	0.0050 g N ₂ O/g TKN

Equations¹

$$CO_2 = 10^{-6} \times Q_{WW} \times OD \times Eff_{OD} \times CF_{CO_2} \times [(1 - MCF_{WW} \times BG_{CH_4})(1 - \lambda)] \quad (3-1)$$

$$CH_4 = 10^{-6} \times Q_{WW} \times OD \times Eff_{OD} \times CF_{CH_4} \times [(MCF_{WW} \times BG_{CH_4})(1 - \lambda)] \quad (3-2)$$

$$CO_2 = 10^{-6} \times Q_{WW} \times OD \times Eff_{OD} \times CF_{CO_2} \times [\lambda(1 - MCF_S \times BG_{CH_4})] \quad (3-6)$$

$$CH_4 = 10^{-6} \times Q_{WW} \times OD \times Eff_{OD} \times CF_{CH_4} \times [\lambda(MCF_S \times BG_{CH_4})] \quad (3-7)$$

$$N_2O_{WWTP} = Q_i \times TKN_i \times EF_{N_2O} \times \frac{44}{28} \times 10^{-6} \quad (3-8)$$

	Emission Rate (Mg/hr)	Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)
WWT GHGs - GP006			
Biogenic CO ₂ (eq. 3-1)	0.44	978	4,283
CH ₄ (eq. 3-2)	0.00E+00	0.00E+00	0.00E+00
N ₂ O (eq. 3-8) ⁴	0.008	18	80
Total CO ₂ e ⁵	2.58	5,692	24,929

	Emission Rate (Mg/hr)	Emission Rate (lbs/hr)	Maximum Potential Uncontrolled Emissions (tons/yr)	Control Efficiency ⁷	Maximum Controlled Emissions (tons/yr)
Anaerobic Sludge Digesters 1, 2, 3 & 4 (EU058 - EU061)					
Biogenic CO ₂ (eq. 3-6)	0.40	872	3,818	0%	3,818
CH ₄ (eq. 3-7)	0.16	343	1,504	98.000%	30.079
N ₂ O (eq. 3-8)	0.00	0	0	0%	0
Total CO ₂ e ⁵	3.27	7210.83	31583.43	--	632
CO ₂ e ⁶ per Digester	0.82	1,803	7,896	--	158

36.054143 lb/hr

¹ Removal efficiency = (Influent OD - Effluent OD - Dried sludge OD)/Influent OD = (60.5-3.962-32.16)/60.5. All are facility design limits.

² Table 3-1 of *GHG Emissions Estimation Methodology for Selected Biogenic Source Categories*, EPA (12/10)

³ Total Keldal Nitrogen content of the influent

⁴ Assumed to be generated during aeration only

⁵ CO₂e is the sum of non-biogenic-CO₂, CH₄ and N₂O emissions times their respective global warming potential as listed in Table A-1 to Subpart A of Part 98.

⁶ CO₂e is assumed to be generated equally by all four digesters

⁷ Methane control efficiency assumed to be similar to afterburner controlling VOC

Biogenic CO₂ per digester
217.91 lb/hr
954.44 tpy

CH₄ per digester
1.72 lb/hr - controlled
375.99 tpy
7.52 tpy

<= Emitted at digester boiler, micro turbines and/or flare, but generated here.

<= Controlled by digester boiler, micro turbines and/or flare for destruction. Not counted in controlled emissions. For reference only.

Western Lake Superior Sanitary District

Composting GHG Emissions (FS003)¹

Parameters	
EF _{compost}	0.44 kg CO ₂ /kg dry solids
Ef _{compost,CH4}	0.004 kg CH ₄ /kg waste treated (wet basis)
Ef _{compost,N2O}	0.0003 kg N ₂ O/kg waste treated (wet basis)
M _{compost} ²	4,082 Mg/yr, wet basis
TS _{compost} ²	0.5 kg dry solids/kg wet solids

$$E_{CO_2} = EF_{compost} \times \sum_{n=1}^N (M_{compost,n} \times TS_n) \quad (2-9)$$

$$E_{CH_4} = EF_{compost,CH_4} \times M_{compost} \quad (2-10)$$

$$E_{N_2O} = EF_{compost,N_2O} \times M_{compost} \quad (2-11)$$

Composting	Mg/yr	tpy
Biogenic CO ₂ (eq. 2-9)	898	990
CH ₄ (eq. 3-2)	16	18
N ₂ O (eq. 3-8)	1.2	1.4
Total CO₂e³	723	797

¹ Methodology, equations and emission factors from *GHG Emissions Estimation Methodology for Selected Biogenic Source Categories*, EPA (12/10)

² Based on facility data

³ CO₂e is the sum of non-biogenic-CO₂, CH₄ and N₂O emissions times their respective global warming potential as listed in Table A-1 to Subpart A of Part 98

Western Lake Superior Sanitary District

Micro Turbine (EU 055)

Maximum Capacity 0.478 MMBtu/hr

Fuel Type	Heat Value ¹	Maximum Fuel Consumption Rate	Maximum Sulfur Content ²
Digester Gas	663 Btu/scf	0.0007 MMscf/hr	0.10%

Pollutant	Emission Factor ³ (lb/MMBtu)	Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)
PM	0.012	0.0057	0.025
PM ₁₀	0.012	0.0057	0.025
PM _{2.5}	0.012	0.0057	0.025
NO _x	0.16	0.076	0.33
SO ₂	0.094	0.045	0.197
CO	0.017	0.008	0.036
VOC	0.0058	0.003	0.012
Biogenic CO ₂ ⁴	117	56	244
CH ₄ ⁴	2E-03	1E-03	5E-03
N ₂ O ⁴	2E-04	1E-04	5E-04
CO ₂ e ⁵	--	5.47E-02	2.40E-01
1,3-Butadiene	9.80E-06	4.68E-06	1.55E-06
1,4-Dichlorobenzene	2.00E-05	9.56E-06	3.17E-06
Acetaldehyde	5.30E-05	2.53E-05	8.40E-06
Arsenic	1.1E-05	5.26E-06	2.3E-05
Beryllium	3.1E-07	1.48E-07	6.5E-07
Cadmium	5.8E-07	2.77E-07	1.2E-06
Carbon Tetrachloride	2.0E-05	9.56E-06	4.2E-05
Chlorobenzene	1.6E-05	7.65E-06	3.3E-05
Chloroform	1.7E-05	8.13E-06	3.6E-05
Chromium	1.2E-06	5.74E-07	2.5E-06
Ethylene Dichloride	1.5E-05	7.17E-06	3.1E-05
Formaldehyde	1.9E-04	9.08E-05	4.0E-04
Lead	3.4E-06	1.63E-06	7.1E-06
Methylene Chloride	1.3E-05	6.21E-06	2.7E-05
Nickel	2.0E-06	9.56E-07	4.2E-06
Selenium	1.1E-05	5.26E-06	2.3E-05
Tetrachloroethylene	2.1E-05	1.00E-05	4.4E-05
Trichloroethylene	1.8E-05	8.60E-06	3.8E-05
Vinyl Chloride	3.6E-05	1.72E-05	7.5E-05
Vinylidene Chloride	1.5E-05	7.17E-06	3.1E-05
HAP Totals	--	2.26E-04	8.31E-04

¹ Digester gas heating value based 2001 Minor Amendment.

² Maximum sulfur content of digester gas. Actual values are significantly lower.

³ Emission factors from AP-42, Section 3.1 (04/00).

⁴ CO₂, CH₄ and N₂O emission factors converted from Tables C-1 and C-2 to Subpart C of Part 98. CO₂ emissions are from combustion only. Does not account for pass through of biogenic CO₂ from the digester.

⁵ CO₂e is the sum of non-biogenic-CO₂, CH₄ and N₂O emissions times their respective global warming potential as listed in Table A-1 to Subpart A of Part 98

⁶ Polycyclic Organic Material equals sum of Poly Aromatic Material and Naphthalene.

Western Lake Superior Sanitary District

Micro Turbine (EU 056)

Maximum Capacity 0.478 MMBtu/hr

Fuel Type	Heat Value ¹	Maximum Fuel Consumption Rate	Maximum Sulfur Content ²
Digester Gas	663 Btu/scf	0.0007 MMscf/hr	0.10%

Pollutant	Emission Factor ³ (lb/MMBtu)	Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)
PM	0.012	0.0057	0.025
PM ₁₀	0.012	0.0057	0.025
PM _{2.5}	0.012	0.0057	0.025
NO _x	0.16	0.076	0.33
SO ₂	0.094	0.045	0.197
CO	0.017	0.008	0.036
VOC	0.0058	0.003	0.012
Biogenic CO ₂ ⁴	117	56	244
CH ₄ ⁴	2E-03	1E-03	5E-03
N ₂ O ⁴	2E-04	1E-04	5E-04
CO ₂ e ⁵	--	5.47E-02	2.40E-01
1,3-Butadiene	9.80E-06	4.68E-06	1.55E-06
1,4-Dichlorobenzene	2.00E-05	9.56E-06	3.17E-06
Acetaldehyde	5.30E-05	2.53E-05	8.40E-06
Arsenic	1.1E-05	5.26E-06	2.3E-05
Beryllium	3.1E-07	1.48E-07	6.5E-07
Cadmium	5.8E-07	2.77E-07	1.2E-06
Carbon Tetrachloride	2.0E-05	9.56E-06	4.2E-05
Chlorobenzene	1.6E-05	7.65E-06	3.3E-05
Chloroform	1.7E-05	8.13E-06	3.6E-05
Chromium	1.2E-06	5.74E-07	2.5E-06
Ethylene Dichloride	1.5E-05	7.17E-06	3.1E-05
Formaldehyde	1.9E-04	9.08E-05	4.0E-04
Lead	3.4E-06	1.63E-06	7.1E-06
Methylene Chloride	1.3E-05	6.21E-06	2.7E-05
Nickel	2.0E-06	9.56E-07	4.2E-06
Selenium	1.1E-05	5.26E-06	2.3E-05
Tetrachloroethylene	2.1E-05	1.00E-05	4.4E-05
Trichloroethylene	1.8E-05	8.60E-06	3.8E-05
Vinyl Chloride	3.6E-05	1.72E-05	7.5E-05
Vinylidene Chloride	1.5E-05	7.17E-06	3.1E-05
HAP Totals	--	2.26E-04	8.31E-04

¹ Digester gas heating value based 2001 Minor Amendment.

² Maximum sulfur content of digester gas. Actual values are significantly lower.

³ Emission factors from AP-42, Section 3.1 (04/00).

⁴ CO₂, CH₄ and N₂O emission factors converted from Tables C-1 and C-2 to Subpart C of Part 98. CO₂ emissions are from combustion only. Does not account for pass through of biogenic CO₂ from the digester.

⁵ CO₂e is the sum of non-biogenic-CO₂, CH₄ and N₂O emissions times their respective global warming potential as listed in Table A-1 to Subpart A of Part 98

⁶ Polycyclic Organic Material equals sum of Poly Aromatic Material and Naphthalene.

Western Lake Superior Sanitary District

HHW Bulking Operations (IA EU048)

Product Reclaimed (gal) ¹	Conservative Average Density (lb/gal)	Emission Factor (lb/ton) ²	Emissions (tpy)
6,610	8	0.72	0.0095

¹ The maximum potential for HHW collection cannot be determined. However, 1993 data, the first full year of operation, provides a conservative estimate as residents were likely dropping off materials stored over several years.

² Emission factor from AP-42 Section 4.7 (01/95). This value is conservative in light of the decrease in VOC content of many HHW (e.g. paints) since 1995.

Western Lake Superior Sanitary District

Part Washers

Each part washer consists of a basin that rest on a 30 gallon closed tank of low-volatile solvent (0.011 psia at 68°F). A small pump is used circulates solvent from the take to the sink. The basin is covered when not in use. WLSSD uses the part washers infrequently as part of equipment maintenance operations.

Part Washer No. 1 (EU 024/IA)

Part Washer Capacity (gal)	Monthly Tank Turnover ¹	Conservative Average Density (lb/gal) ²	Emission Factor (lb/ton) ³	Emissions (tpy)
30	10	6.7	0.72	0.7236

Part Washer No. 2 (EU 025/IA)

Part Washer Capacity (gal)	Monthly Tank Turnover ¹	Conservative Average Density (lb/gal) ²	Emission Factor (lb/ton) ³	Emissions (tpy)
30	10	6.7	0.72	0.7236

Part Washer No. 3 (IA)

Part Washer Capacity (gal)	Monthly Tank Turnover ¹	Conservative Average Density (lb/gal) ²	Emission Factor (lb/ton) ³	Emissions (tpy)
30	10	6.7	0.72	0.7236

¹ Turnover based on conservative usage of 5 hours per month and 2 turnovers per hour.

² Maximum density of Safety-Kleen 105 Solvent per MSDS.

³ Emission factor from AP-42 Section 4.7 (01/95). Represent VOC emissions from loading.

Western Lake Superior Sanitary District

Sodium Bisulfite Storage Tanks (IAs)

Sodium bisulfite solution is stored in 2 - 528 gallons tanks. Although sodium bisulfite is not a VOC, it does slowly decompose into SO₂

SO₂ emissions are conservatively estimated by assuming that one tank of sodium bisulfite decomposes into SO₂ per year.

Although each tank has a scrubber to remove SO₂, credit is not taken for this control to increase the conservative nature of these calculations.

Tank 1

Tank Capacity (gal)	Percent of Sodium Bisulfite in Solution ¹	Maximum Density (lb/gal) ¹	Conversion Factor (SO ₂ /NaHSO ₃) ²	SO ₂ Emissions (tpy)
528	40%	11.68	0.62	0.7594051

Tank 2

Tank Capacity (gal)	Percent of Sodium Bisulfite in Solution ¹	Maximum Density (lb/gal) ¹	Conversion Factor (SO ₂ /NaHSO ₃) ²	SO ₂ Emissions (tpy)
528	40%	11.68	0.62	0.7594051

¹ Per Manufacture

² Ratio of the MW of SO₂ to NaHSO₃.

Table 2 Updated 2011 Non-combustion Related Particulate Emissions from Insignificant Sources						
Stack/Vent ID	Emission Unit ID	Emission Unit Description	PM		PM ₁₀	
			lbs/hr	tons/yr	lbs/hr	tons/yr
83	EU053	Truck Loading Facility (Transfer Station)	0.18	0.79	0.18	0.79
Totals			0.18	0.79	0.18	0.79

Notes

Emissions from the garbage handling were determined by reviewing PM emission calculations for the former Tipping Floor operation in Building 11. The Tipping Floor was used to unload garbage from garbage trucks and to sort the garbage for purposes of making refuse derived fuel. The particulate emission calculations for the Tipping Floor were calculated using indoor air testing for PM concentrations and building air flow rates. The amount of garbage handled in the new facility could be three times the amount handled in the Tipping Floor. Therefore, the old emission estimates were multiplied by 3 to determine the new emission rate. This is a conservative estimate, because garbage will not be sorted in the transfer station.

Western Lake Superior Sanitary District

Oil-fired boilers (2 identical)

Maximum Capacity (each)

0.350 MMBtu/hr

Fuel Type	Heat Value ²	Maximum Fuel Consumption Rate	Maximum Sulfur Content ³
No. 2 Fuel Oil	140 MMBtu/kgal	2.50E-03	0.05%

Pollutant	No. 2 Fuel Oil			
	Emission Factor ⁵ (lb/kgal)	Emission Rate (lbs/hr)	Maximum Potential Emissions (tons/yr)	
PM	3.3	0.008	0.04	0.023571429 lb/mmbtu
PM ₁₀	2.3	0.006	0.03	
PM _{2.5}	1.6	0.004	0.02	
NO _x	20	0.050	0.22	0.222128571 lb/mmbtu
SO ₂	7.1	0.018	0.078	
CO	5	0.013	0.05	
VOC	0.2	0.001	0.00	
CO ₂	22,780	57	249	
CH ₄	0.92	0.002	0.01	
N ₂ O	0.18	0.000	0.002	
CO ₂ e	--	57	250	
1,1,1-Trichloroethane	2.36E-04	5.9E-07	2.6E-06	
Arsenic	6E-04	1.4E-06	6.1E-06	
Benzene	2.14E-04	5.4E-07	2.3E-06	
Beryllium	4E-04	1.1E-06	4.6E-06	
Cadmium	4E-04	1.1E-06	4.6E-06	
Chromium	4E-04	1.1E-06	4.6E-06	
Cobalt	--	--	--	
Dichlorobenzene	--	--	--	
Ethyl benzene	6.36E-05	1.6E-07	7.0E-07	
Formaldehyde	0.048	0.00	0.00	
Hexane	--	--	--	
Lead	1.3E-03	3.2E-06	1.38E-05	
Manganese	8.4E-04	2.1E-06	9.2E-06	
Mercury	4.2E-04	1.1E-06	4.6E-06	
Nickel	4.2E-04	1.1E-06	4.6E-06	
POM	1.2E-03	3.0E-06	1.3E-05	
Selenium	2.1E-03	5.3E-06	2.3E-05	
Toluene	6.20E-03	1.6E-05	6.8E-05	
Xylene	1.09E-04	2.7E-07	1.2E-06	
HAP Totals	--	0.000	0.001	

PTE excluding insignificant activities & biogenic CO₂

	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	CO ₂	CH ₄	N ₂ O	CO ₂ e	HAP
GP004	2.41	2.01	1.72	30.31	12.06	15.53	6.94	8929.86	0.60	9.67E-02	8972.55	0.52
GP003	4.13	2.88	1.94	8.89	25.03	0.94	14.43	28,507	1.16	0.23	28,603	0.33
EU057	0.2825	0.2825	0.2825	0.247955	11.075	0.402129	4.1735	799		0.006481	802	6.69E-03
GP005									0.00E+00	80	24,929	
digesters									30.07946	0	632	
EU006						1.16E+00						1.16E+00
EU007						1.16E+00						1.16E+00
EU017						1.32E+00						1.32E+00
Total	6.82	5.18	3.94	39.44	48.16	20.51	25.54	38235.92	31.84	80.75	63938.13	4.49

Quantifiable PTE of insignificant activities, excluding biogenic CO₂

	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	CO ₂	CH ₄	N ₂ O	CO ₂ e	HAP
EU001						0						0
EU003						1.64E-01						1.64E-01
EU004						1.64E-01						1.64E-01
EU015						5.11E-03						5.08E-03
EU016						1.47E-01						1.47E-01
EU019						9.83E-03						9.79E-03
EU020						0						0
EU021						0						0
EU022						0						0
EU023						0						0
FS003									18	1.35	797	
EU049	0.013563	0.013563	0.013563	0.012688	0.192938	0.01575	0.041563	7.12	2.89E-04	5.78E-05	7.14	1.69E-04
EU055	0.025124	0.025124	0.025124	0.196802	0.33	0.012143	0.035592		0.004606	0.000461	2.40E-01	8.31E-04
EU056	0.025124	0.025124	0.025124	0.196802	0.334982	0.012143	0.035592	0	0.004606	0.000461	0.239512	0.000831
EU048						0.009518						

EU024						0.7236							
EU025						0.7236							
PW#3						0.7236							
NBTK1				0.759405									
NBTK2				0.759405									
oil boilers	0.07227	0.05037	0.033945	0.15549	0.438	0.00438	0.1095	498.875	0.020236	0.004047	500.5545	0.001377	
EU053	0.79	0.79	0.79										
Total	9.24E-01	9.03E-01	8.86E-01	2.08E+00	1.30E+00	2.71E+00	2.22E-01	5.06E+02	1.80E+01	1.36E+00	1.30E+03	4.93E-01	

Quantifiable PTE of all units (including insignificant activities), excluding biogenic CO₂

PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	CO ₂	CH ₄	N ₂ O	CO ₂ e	HAP
7.74	6.08	4.83	41.52	49.46	23.23	25.76	38741.91	49.87	82.11	65242.81	4.99

Facility: Western Lake Superior Sanitary District
Facility ID: 13700112
Inventory Year: 2010

Unit ID	Unit Desc	Process ID	Proc Desc	SCC	Pollutant	Emissions Calculation Method	Throughput Material	Throughput Amount	Throughput Units	Emission Factor	EF Units	Capt (%)	Cont (%)	Total Comb (%)	Emissions	Original Emissions	Emiss Units
EU006	Grit Tanks (2)	EU006PD001	Tanks	50100702	VOC	OTHER EF NCE	WASTEWATER	13,841.00	E6GAL	0.000E+0	LB/E6GAL				0.00		0 TON
EU015	Oxygenation Tanks (4)	EU015PD001	Oxygenation	50100702	VOC	USEPA EF NCE	WASTEWATER	13,841.00	E6GAL	1.500E+0	LB/E6GAL				10.38	10.38075	TON
EU017	Secondary Settling Tanks (4)	EU017PD001	Settling	50100703	VOC	USEPA EF NCE	WASTEWATER	13,841.00	E6GAL	1.500E+0	LB/E6GAL				10.38	10.38075	TON
EU050	Waste Gas Boiler	EU050PD001	Natural Gas	10300602	CO	USEPA EF NCE	NATURAL GAS	161.00	E6FT3	8.400E+1	LB/E6FT3				6.762	6.762	TON
EU050	Waste Gas Boiler	EU050PD001	Natural Gas	10300602	LEAD	USEPA EF NCE	NATURAL GAS	161.00	E6FT3	5.000E-4	LB/E6FT3				0.00004025	0.00004025	TON
EU050	Waste Gas Boiler	EU050PD001	Natural Gas	10300602	NOX	USEPA EF NCE	NATURAL GAS	161.00	E6FT3	1.000E+2	LB/E6FT3				8.05	8.05	TON
EU050	Waste Gas Boiler	EU050PD001	Natural Gas	10300602	PM	USEPA EF NCE	NATURAL GAS	161.00	E6FT3	7.600E+0	LB/E6FT3				0.6118	0.6118	TON
EU050	Waste Gas Boiler	EU050PD001	Natural Gas	10300602	PM10-PRI	USEPA EF NCE	NATURAL GAS	161.00	E6FT3	7.600E+0	LB/E6FT3				0.6118	0.6118	TON
EU050	Waste Gas Boiler	EU050PD001	Natural Gas	10300602	SO2	USEPA EF NCE	NATURAL GAS	161.00	E6FT3	6.000E-1	LB/E6FT3				0.0483	0.0483	TON
EU050	Waste Gas Boiler	EU050PD001	Natural Gas	10300602	VOC	USEPA EF NCE	NATURAL GAS	161.00	E6FT3	5.500E+0	LB/E6FT3				0.44275	0.44275	TON
EU051	Heating Boiler	EU051PD001	Natural Gas	10300603	CO	USEPA EF NCE	NATURAL GAS	13.80	E6FT3	8.400E+1	LB/E6FT3				0.5796	0.5796	TON
EU051	Heating Boiler	EU051PD001	Natural Gas	10300603	LEAD	USEPA EF NCE	NATURAL GAS	13.80	E6FT3	5.000E-4	LB/E6FT3				0.00000345	0.00000345	TON
EU051	Heating Boiler	EU051PD001	Natural Gas	10300603	NOX	USEPA EF NCE	NATURAL GAS	13.80	E6FT3	1.000E+2	LB/E6FT3				0.69	0.69	TON
EU051	Heating Boiler	EU051PD001	Natural Gas	10300603	PM	USEPA EF NCE	NATURAL GAS	13.80	E6FT3	7.600E+0	LB/E6FT3				0.05244	0.05244	TON
EU051	Heating Boiler	EU051PD001	Natural Gas	10300603	PM10-PRI	USEPA EF NCE	NATURAL GAS	13.80	E6FT3	7.600E+0	LB/E6FT3				0.05244	0.05244	TON
EU051	Heating Boiler	EU051PD001	Natural Gas	10300603	SO2	USEPA EF NCE	NATURAL GAS	13.80	E6FT3	6.000E-1	LB/E6FT3				0.00414	0.00414	TON
EU051	Heating Boiler	EU051PD001	Natural Gas	10300603	VOC	USEPA EF NCE	NATURAL GAS	13.80	E6FT3	5.500E+0	LB/E6FT3				0.03795	0.03795	TON
EU051	Heating Boiler	EU051PD002	Fuel Oil	10300501	CO	USEPA EF NCE	DISTILLATE	.96	E3GAL	5.000E+0	LB/E3GAL				0.0024	0.0024	TON
EU051	Heating Boiler	EU051PD002	Fuel Oil	10300501	LEAD	USEPA EF NCE	DISTILLATE	.96	E3GAL	9.000E-6	LB/E3GAL				4.32E-09	4.32E-09	TON
EU051	Heating Boiler	EU051PD002	Fuel Oil	10300501	NOX	USEPA EF NCE	DISTILLATE	.96	E3GAL	2.400E+1	LB/E3GAL				0.01152	0.01152	TON
EU051	Heating Boiler	EU051PD002	Fuel Oil	10300501	PM	USEPA EF NCE	DISTILLATE	.96	E3GAL	3.300E+0	LB/E3GAL				0.001584	0.001584	TON
EU051	Heating Boiler	EU051PD002	Fuel Oil	10300501	PM10-PRI	USEPA EF NCE	DISTILLATE	.96	E3GAL	2.380E+0	LB/E3GAL				0.0011424	0.0011424	TON
EU051	Heating Boiler	EU051PD002	Fuel Oil	10300501	SO2	USEPA EF NCE	DISTILLATE	.96	E3GAL	7.100E+1	LB/E3GAL				0.03408	0.03408	TON
EU051	Heating Boiler	EU051PD002	Fuel Oil	10300501	VOC	USEPA EF NCE	DISTILLATE	.96	E3GAL	3.400E-1	LB/E3GAL				0.0001632	0.0001632	TON
EU052	Heating Boiler	EU052PD001	Natural Gas	10300603	CO	USEPA EF NCE	NATURAL GAS	13.80	E6FT3	8.400E+1	LB/E6FT3				0.5796	0.5796	TON
EU052	Heating Boiler	EU052PD001	Natural Gas	10300603	LEAD	USEPA EF NCE	NATURAL GAS	13.80	E6FT3	5.000E-4	LB/E6FT3				0.00000345	0.00000345	TON
EU052	Heating Boiler	EU052PD001	Natural Gas	10300603	NOX	USEPA EF NCE	NATURAL GAS	13.80	E6FT3	1.000E+2	LB/E6FT3				0.69	0.69	TON
EU052	Heating Boiler	EU052PD001	Natural Gas	10300603	PM	USEPA EF NCE	NATURAL GAS	13.80	E6FT3	7.600E+0	LB/E6FT3				0.05244	0.05244	TON
EU052	Heating Boiler	EU052PD001	Natural Gas	10300603	PM10-PRI	USEPA EF NCE	NATURAL GAS	13.80	E6FT3	7.600E+0	LB/E6FT3				0.05244	0.05244	TON
EU052	Heating Boiler	EU052PD001	Natural Gas	10300603	SO2	USEPA EF NCE	NATURAL GAS	13.80	E6FT3	6.000E-1	LB/E6FT3				0.00414	0.00414	TON
EU052	Heating Boiler	EU052PD001	Natural Gas	10300603	VOC	USEPA EF NCE	NATURAL GAS	13.80	E6FT3	5.500E+0	LB/E6FT3				0.03795	0.03795	TON
EU054	Flare	EU054PD001	Natural Gas	10300603	CO	USEPA EF NCE	NATURAL GAS	18.80	E6FT3	8.400E+1	LB/E6FT3				0.7896	0.7896	TON
EU054	Flare	EU054PD001	Natural Gas	10300603	LEAD	USEPA EF NCE	NATURAL GAS	18.80	E6FT3	5.000E-4	LB/E6FT3				0.0000047	0.0000047	TON
EU054	Flare	EU054PD001	Natural Gas	10300603	NOX	USEPA EF NCE	NATURAL GAS	18.80	E6FT3	1.000E+2	LB/E6FT3				0.94	0.94	TON
EU054	Flare	EU054PD001	Natural Gas	10300603	PM	USEPA EF NCE	NATURAL GAS	18.80	E6FT3	7.600E+0	LB/E6FT3				0.07144	0.07144	TON
EU054	Flare	EU054PD001	Natural Gas	10300603	PM10-PRI	USEPA EF NCE	NATURAL GAS	18.80	E6FT3	7.600E+0	LB/E6FT3				0.07144	0.07144	TON
EU054	Flare	EU054PD001	Natural Gas	10300603	SO2	USEPA EF NCE	NATURAL GAS	18.80	E6FT3	6.000E-1	LB/E6FT3				0.00564	0.00564	TON
EU054	Flare	EU054PD001	Natural Gas	10300603	VOC	USEPA EF NCE	NATURAL GAS	18.80	E6FT3	5.500E+0	LB/E6FT3				0.0517	0.0517	TON
EU057	Emergency Generator	EU057PD001	Fuel Oil	20200102	CO	USEPA EF NCE	DIESEL FUEL	.96	E3GAL	1.300E+2	LB/E3GAL				0.0624	0.0624	TON
EU057	Emergency Generator	EU057PD001	Fuel Oil	20200102	NOX	USEPA EF NCE	DIESEL FUEL	.96	E3GAL	6.040E+2	LB/E3GAL				0.28992	0.28992	TON
EU057	Emergency Generator	EU057PD001	Fuel Oil	20200102	PM	USEPA EF NCE	DIESEL FUEL	.96	E3GAL	4.250E+1	LB/E3GAL				0.0204	0.0204	TON
EU057	Emergency Generator	EU057PD001	Fuel Oil	20200102	PM10-PRI	USEPA EF NCE	DIESEL FUEL	.96	E3GAL	4.250E+1	LB/E3GAL				0.0204	0.0204	TON
EU057	Emergency Generator	EU057PD001	Fuel Oil	20200102	SO2	USEPA EF NCE	DIESEL FUEL	.96	E3GAL	3.970E+1	LB/E3GAL				0.019056	0.019056	TON
EU057	Emergency Generator	EU057PD001	Fuel Oil	20200102	VOC	USEPA EF NCE	DIESEL FUEL	.96	E3GAL	4.930E+1	LB/E3GAL				0.023664	0.023664	TON
TK001	Fuel Oil	TK001PD001	Working Loss	40400414	VOC	USEPA EF NCE	DISTILLATE OIL 2	.96	E3GAL	3.000E+2	LB/E3GAL				0.0000144	0.0000144	TON
TK002	Fuel Oil	TK002PD001	Working Loss	40400414	VOC	USEPA EF NCE	DISTILLATE OIL 2	.96	E3GAL	3.000E-2	LB/E3GAL				0.0000144	0.0000144	TON
TK003	Gasoline	TK003PD001	Working Loss	40400406	VOC	USEPA EF NCE	GASOLINE	6.13	E3GAL	8.300E+0	LB/E3GAL				0.0254395	0.0254395	TON
TK004	Gasoline	TK004PD001	Working Loss	40400406	VOC	USEPA EF NCE	GASOLINE	6.13	E3GAL	8.300E+0	LB/E3GAL				0.0254395	0.0254395	TON
TK005	Diesel	TK005PD001	Working Loss	40400414	VOC	USEPA EF NCE	DISTILLATE OIL 2	39.00	E3GAL	3.000E-2	LB/E3GAL				0.000585	0.000585	TON

Total(TON)	CO	8.776
	LEAD*	0.000
	NOX*	10.671
	PM	0.810
	PM10-PRI*	0.810
	SO2*	0.115
	VOC*	21.407
	*Total Billiable	33.004

Attachment 2

Facility Description & CD-01 Forms



FACILITY DESCRIPTION: BUILDINGS (BG)

Show: Active and Pending Records

Action: PER 008

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

	ID No.	Added By (Action)	Retired By (Action)	Operator ID for Item	Length (feet)	Width (feet)	Roof Height from Ground (feet)	Description/Comment	Building Status
1	BG 001	PER 008							Active
2	BG 002	PER 008			209	159	34	Influent Building; Multi-height also 29', 43.3'	Active
3	BG 003	PER 008			331	287	10.6	Aeration Building	Active
4	BG 004	PER 008			346	3446	26.5	4 Domes, secondary clarifier	Active
5	BG 005	PER 008			265.5	265.5	18.5	4 Domes, flocculation tanks	Active
6	BG 006	PER 008			236.5	130	23.7	Multi-Media Filter building	Active
7	BG 007	PER 008			165.7	134.2		Chlorination tanks	Active
8	BG 008	PER 008			211.2	109.4	38.2	Thickeners and Office; Multi-height also 55'	Active
9	BG 009	PER 008			371.5	200	21.6	Admin & Maint; Multi-height also 19'	Active
10	BG 010	PER 008			176	120	81.4	Boiler building	Active
11	BG 011	PER 008			185	156	43.5	Sludge Dewater; Multi-height also 31.2'	Active
12	BG 012	PER 008			95	51	20	Tank car storage	Active
13	BG 013	PER 008			132	132	15	Sludge storage	Active
14	BG 014	PER 008							Active
15	BG 015	PER 008							Active
16	BG 016	PER 008			90	50	16	Household Hazardous	Active
17	BG 017	PER 008							Active
18	BG 018	PER 008							Active
19	BG 019	PER 008			198	198	41.5	4 round digesters	Active
20	BG 020	PER 008							Active
21	BG 021	PER 008							Active



FACILITY DESCRIPTION: BUILDINGS (BG)

Show: Active and Pending Records

Action: PER 008

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

	ID No.	Added By (Action)	Retired By (Action)	Operator ID for Item	Length (feet)	Width (feet)	Roof Height from Ground (feet)	Description/Comment	Building Status
22	BG 022	PER 008							Active
23	BG 023	PER 008			48	42.5	25	Disinfection building	Active



FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records
Action: PER 008
AQD Facility ID: 13700112
Facility Name: Western Lake Superior Sanitary District

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignificant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
1	EU 001	Active	PER 006		<input checked="" type="checkbox"/>		SV 001 (M) SV 002 (P) SV 003 (P) SV 004 (P)		Duluth Waste Water Influent Channel and Screw Pumps	PRC Consoer-Townse		4959	120		Mgal	Day	
2	EU 001	Retired	PER 008		<input type="checkbox"/>				Insignificant Activity	PRC Consoer-Townse		4959	120	Wastewater	Mgal	Day	
3	EU 002	Active	PER 006		<input checked="" type="checkbox"/>		SV 001 (M) SV 002 (P) SV 003 (P) SV 004 (P)		Duluth Influent Channel and Screw Pumps	Lakeside Manufacturin		4959	120		Mgal	Day	
4	EU 002	Retired	PER 008		<input type="checkbox"/>				Duplicate of EU001			4959	120		Mgal	Day	
5	EU 003	Active	PER 006		<input checked="" type="checkbox"/>		SV 007 (M) SV 008 (P)		Bar Screen Channel	PRC Consoer-Townse		4959	120		Mgal	Day	
6	EU 003	Retired	PER 008		<input type="checkbox"/>				Insignificant Activity	PRC Consoer-Townse		4959	120	Wastewater	Mgal	Day	
7	EU 004	Active	PER 006		<input checked="" type="checkbox"/>		SV 007 (M) SV 008 (P)		Bar Screen	Vulcan	B	4959	120		Mgal	Day	
8	EU 004	Retired	PER 008		<input type="checkbox"/>				Insignificant Activity	Vulcan	B	4959	120	Wastewater	Mgal	Day	
9	EU 005	Active	PER 006		<input checked="" type="checkbox"/>		SV 007 (M) SV 008 (P)		Bar Screens (2)	WLSSD		4959	120		Mgal	Day	
10	EU 005	Retired	PER 008		<input type="checkbox"/>				Part of EU004			4959	120		Mgal	Day	
11	EU 006	Active	PER 001		<input type="checkbox"/>		SV 005 (M) SV 006 (P)		Grit Tanks (2)	PRC Consoer-Townse		4959	120		Mgal	Day	
12	EU 006	Active	PER 008		<input type="checkbox"/>		SV 005 (M) SV 006 (M) SV 007 (O)	CE 020	Grit Tanks (2)	PRC Consoer-Townse		4959	120	Wastewater	Mgal	Day	
13	EU 007	Active	PER 001		<input type="checkbox"/>		SV 005 (M) SV 006 (P)		Grit Collector	Envirex		4959	120		Mgal	Day	
14	EU 007	Active	PER 008		<input type="checkbox"/>		SV 005 (M) SV 006 (M) SV 007 (O)	CE 020	Grit Collector	Envirex		4959	120	Wastewater	Mgal	Day	
15	EU 008	Active	PER 001		<input type="checkbox"/>		SV 007 (M) SV 008 (P)		Grit Classifier	Schloss Engineered Ec	129693	4959	120		Mgal	Day	
16	EU 008	Retired	PER 008		<input type="checkbox"/>				Part of EU004			4959	120	Wastewater	Mgal	Day	
17	EU 009	Active	PER 001		<input type="checkbox"/>		SV 007 (M) SV 008 (P)		Grit Cyclones	Krebbs	D10LB-844	4959	120		Mgal	Day	
18	EU 009	Retired	PER 008		<input type="checkbox"/>				Part of EU004			4959	120	Wastewater	Mgal	Day	
19	EU 010	Active	PER 001		<input type="checkbox"/>		SV 007 (M) SV 008 (P)		Screening Conveyors (2)	Peabody-Welles		4959	120		Mgal	Day	

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
1	EU 001	Active	PER 006	12/31/1975	09/30/1978					
2	EU 001	Retired	PER 008	12/31/1975	09/30/1978	09/30/1978				
3	EU 002	Active	PER 006	12/31/1975	09/30/1978					
4	EU 002	Retired	PER 008	12/31/1975	09/30/1978	09/30/1978				
5	EU 003	Active	PER 006	12/31/1975	09/30/1978					
6	EU 003	Retired	PER 008	12/31/1975	09/30/1978	09/30/1978				
7	EU 004	Active	PER 006	12/31/1975	09/30/1978					
8	EU 004	Retired	PER 008	12/31/1975	09/30/1978	09/30/1978				
9	EU 005	Active	PER 006	12/31/1975	09/30/1978					
10	EU 005	Retired	PER 008	12/31/1975	09/30/1978	09/30/1978				
11	EU 006	Active	PER 001	12/31/1975	09/30/1978					
12	EU 006	Active	PER 008	12/31/1975	09/30/1978					
13	EU 007	Active	PER 001	12/31/1975	09/30/1978					
14	EU 007	Active	PER 008	12/31/1975	09/30/1978					
15	EU 008	Active	PER 001	10/31/1992	02/28/1993					
16	EU 008	Retired	PER 008	10/31/1992	02/28/1993	09/30/1978				
17	EU 009	Active	PER 001	10/31/1992	02/28/1993					
18	EU 009	Retired	PER 008	10/31/1992	02/28/1993	09/30/1978				
19	EU 010	Active	PER 001	12/31/1975	09/30/1978					



FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records
Action: PER 008
AQD Facility ID: 13700112
Facility Name: Western Lake Superior Sanitary District

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignificant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
20	EU 010	Retired	PER 008		<input type="checkbox"/>				Part of EU004			4959	120	Wastewater	Mgal	Day	
21	EU 011	Active	PER 001		<input type="checkbox"/>		SV 007 (M) SV 008 (P)		Scum Ejector (4)	Clow		4959	120		Mgal	Day	
22	EU 011	Removed	PER 008		<input type="checkbox"/>				REMOVED Scum Ejector (4)	Clow		4959	120		Mgal	Day	
23	EU 012	Active	PER 001		<input type="checkbox"/>		SV 007 (M) SV 008 (P)		Grit Loading Hopper	WLSSD		4959	120		Mgal	Day	
24	EU 012	Retired	PER 008		<input type="checkbox"/>				Insignificant Activity - Part of EU004			4959	120	Wastewater	Mgal	Day	
25	EU 013	Active	PER 006		<input checked="" type="checkbox"/>				Oxygenation Influent Channel and grit tank influent	PRC Consoer-Townse		4959	120		Mgal	Day	
26	EU 013	Removed	PER 008		<input type="checkbox"/>				REMOVED Oxygenation Influent Channel and grit tank influent	PRC Consoer-Townse		4959	120		Mgal	Day	
27	EU 014	Active	PER 006		<input checked="" type="checkbox"/>		SV 055 (M) SV 061 (P)		Grit Tank Effluent Channel	PRC Consoer-Townse		4959	120		Mgal	Day	
28	EU 014	Removed	PER 008		<input type="checkbox"/>				REMOVED Grit Tank Effluent Channel	PRC Consoer-Townse		4959	120		Mgal	Day	
29	EU 015	Active	PER 001		<input type="checkbox"/>		SV 001 (P) SV 005 (P) SV 009 (P) SV 010 (P) SV 011 (P) SV 012 (M) SV 016 (P) SV 017 (P) SV 018 (P) SV 019 (P) SV 020 (P) SV 021 (P) SV 022 (P)		Oxygenation Tanks (4)	PRC Consoer-Townse		4959	120		Mgal	Day	
30	EU 015	Removed	PER 008		<input type="checkbox"/>		SV 009 (P) SV 010 (P) SV 011 (P) SV 012 (M) SV 016 (P) SV 017 (P) SV 018 (P) SV 019 (P) SV 020 (P) SV 021 (P) SV 022 (P)		Insignificant Activity - Oxygenation Tanks (4)	PRC Consoer-Townse		4959	120	Wastewater	Mgal	Day	

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
20	EU 010	Retired	PER 008	12/31/1975	09/30/1978	09/30/1978				
21	EU 011	Active	PER 001	12/31/1975	09/30/1978					
22	EU 011	Removed	PER 008	12/31/1975	09/30/1978	08/22/2008				
23	EU 012	Active	PER 001	12/31/1975	09/30/1978					
24	EU 012	Retired	PER 008	12/31/1975	09/30/1978	09/30/1978				
25	EU 013	Active	PER 006	12/31/1975	09/30/1978					
26	EU 013	Removed	PER 008	12/31/1975	09/30/1978	08/22/2008				
27	EU 014	Active	PER 006	12/31/1975	09/30/1978					
28	EU 014	Removed	PER 008	12/31/1975	09/30/1978	08/22/2008				
29	EU 015	Active	PER 001	12/31/1975	09/30/1978					
30	EU 015	Removed	PER 008	12/31/1975	09/30/1978	09/30/1978				



FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records
Action: PER 008
AQD Facility ID: 13700112
Facility Name: Western Lake Superior Sanitary District

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignificant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
31	EU 016	Active	PER 006		<input checked="" type="checkbox"/>		SV 023 (M) SV 024 (P) SV 025 (P) SV 026 (P)		Secondary Sed Tank Influent	PRC Consoer-Townse		4959	120		Mgal	Day	
32	EU 016	Retired	PER 008		<input type="checkbox"/>				Insignificant Activity			4959	120	Wastewater	Mgal	Day	
33	EU 017	Active	PER 001		<input type="checkbox"/>		SV 023 (M) SV 024 (P) SV 025 (P) SV 026 (P)		Secondary Settling Tanks (4)	PRC Consoer-Townse		4959	120		Mgal	Day	
34	EU 017	Active	PER 008		<input type="checkbox"/>		SV 024 (P) SV 025 (P) SV 026 (P)		Secondary Settling Tanks (4)	PRC Consoer-Townse		4959	120	Wastewater	Mgal	Day	
35	EU 018	Active	PER 006		<input checked="" type="checkbox"/>		SV 027 (M)		Mixed Liquor Channel and Tank Drainage	PRC Consoer-Townse		4959	120		Mgal	Day	
36	EU 018	Retired	PER 008		<input type="checkbox"/>				Duplicate of EU016			4959	120		Mgal	Day	
37	EU 019	Active	PER 001		<input type="checkbox"/>		SV 028 (M) SV 029 (P) SV 030 (P) SV 031 (P)		Flocculation Tanks (4)	PRC Consoer-Townse		4959	120		Mgal	Day	
38	EU 019	Retired	PER 008		<input type="checkbox"/>				Insignificant Activity			4959	120	Wastewater	Mgal	Day	
39	EU 020	Active	PER 006		<input checked="" type="checkbox"/>		SV 032 (M) SV 033 (P)		Mixed Media Filters (Final Effluent Filters)	PRC Consoer-Townse		4959	120		Mgal	Day	
40	EU 020	Retired	PER 008		<input type="checkbox"/>				Insignificant Activity			4959	120	Wastewater	Mgal	Day	
41	EU 021	Active	PER 001		<input type="checkbox"/>		SV 034 (M) SV 035 (M) SV 036 (M) SV 037 (M) SV 038 (M)		Backwash Waste Well Chlorination Area Emergency Exhaust Chlorination Area General Ventilation SO2 Room General Ventilation SO2 Room Emergency Exhaust	PRC Consoer-Townse		4959					
42	EU 021	Retired	PER 008		<input type="checkbox"/>				Insignificant Activity			4959					
43	EU 022	Active	PER 001		<input type="checkbox"/>		SV 039 (M) SV 040 (P) SV 041 (P) SV 042 (P)		Dissolved Air Floatation Thickeners	PRC Consoer-Townse		4959	120		Mgal	Day	
44	EU 022	Retired	PER 008		<input type="checkbox"/>				Insignificant Activity			4959	120	Wastewater	Mgal	Day	
45	EU 023	Active	PER 006		<input checked="" type="checkbox"/>		SV 071 (M) SV 072 (M)		Sludge Storage Tanks	PRC Consoer-Townse		4959					
46	EU 023	Retired	PER 008		<input type="checkbox"/>				Insignificant Activity			4959					

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
31	EU 016	Active	PER 006	12/31/1975	09/30/1978					
32	EU 016	Retired	PER 008	12/31/1975	09/30/1978	09/30/1978				
33	EU 017	Active	PER 001	12/31/1975	09/30/1978					
34	EU 017	Active	PER 008	12/31/1975	09/30/1978					
35	EU 018	Active	PER 006	12/31/1975	09/30/1978					
36	EU 018	Retired	PER 008	12/31/1975	09/30/1978	09/30/1978				
37	EU 019	Active	PER 001	12/31/1975	09/30/1978					
38	EU 019	Retired	PER 008	12/31/1975	09/30/1978	09/30/1978				
39	EU 020	Active	PER 006	12/31/1975	09/30/1978					
40	EU 020	Retired	PER 008	12/31/1975	09/30/1978	09/30/1978				
41	EU 021	Active	PER 001	12/31/1975	09/30/1978					
42	EU 021	Retired	PER 008	12/31/1975	09/30/1978	09/30/1978				
43	EU 022	Active	PER 001	12/31/1975	09/30/1978					
44	EU 022	Retired	PER 008	12/31/1975	09/30/1978	09/30/1978				
45	EU 023	Active	PER 006	12/31/1975	09/30/1978					
46	EU 023	Retired	PER 008	12/31/1975	09/30/1978	09/30/1978				



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Facility Name: Western Lake Superior Sanitary District

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignificant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
47	EU 024	Active	PER 006		<input checked="" type="checkbox"/>		SV 045 (M)		Safety Kleen Parts Washer	Safety Kleen		4959	30		Gal		
48	EU 024	Retired	PER 008		<input type="checkbox"/>				Insignificant Activity			4959	30	Solvents	Gal		
49	EU 025	Active	PER 006		<input checked="" type="checkbox"/>		SV 046 (M)		Safety Kleen Parts Washer	Safety Kleen		4959	30		Gal		
50	EU 025	Retired	PER 008		<input type="checkbox"/>				Insignificant Activity			4959	30	Solvents	Gal		
51	EU 026	Retired	PER 007		<input type="checkbox"/>			CE 015 CE 016	Lime Storage Silos (2)			4959	7200		Ft		
52	EU 026	Retired	PER 008		<input type="checkbox"/>				REMOVED Lime Storage Silos (2)			4959	7200		Ft		
53	EU 027	Retired	PER 007		<input type="checkbox"/>		SV 048 (M) SV 049 (P)	CE 015 CE 016	Lime Storage Silos (2)			4959	7200		Ft		
54	EU 027	Retired	PER 008		<input type="checkbox"/>				REMOVED Lime Storage Silos (2)			4959	7200		Ft		
55	EU 028	Retired	PER 007		<input type="checkbox"/>				Lime Slacker (2)			4959	2500		Lb	Hr	
56	EU 028	Retired	PER 008		<input type="checkbox"/>				REMOVED Lime Slacker (2)			4959	2500		Lb	Hr	
57	EU 029	Active	PER 001		<input type="checkbox"/>		SV 044 (M)		Liquid Polymer Storage Tank	Aquatech		4959	7700		Gal		
58	EU 029	Active	PER 008		<input type="checkbox"/>		SV 044 (M)		Liquid Polymer Storage Tank	Aquatech		4959	7700	Material	Gal		
59	EU 030	Active	PER 001		<input type="checkbox"/>		SV 043 (M)		Polymer Mixing Tanks (5)	Wallace-Tiernan		4959	1400		Gal		
60	EU 030	Removed	PER 008		<input type="checkbox"/>				REMOVED Polymer Mixing Tanks (5)	Wallace-Tiernan		4959	1400		Gal		
61	EU 031	Active	PER 001		<input type="checkbox"/>		SV 043 (M)		Polymer Mixing Tank			4959	1000		Gal		
62	EU 031	Removed	PER 008		<input type="checkbox"/>				REMOVED Polymer Mixing Tank			4959	1000		Gal		
63	EU 032	Active	PER 001		<input type="checkbox"/>		SV 050 (M)		Defoamant Storage	Aquatech		4959	16000		Gal		
64	EU 032	Removed	PER 008		<input type="checkbox"/>				REMOVED Defoamant Storage	Aquatech		4959	16000		Gal		
65	EU 033	Retired	PER 007		<input type="checkbox"/>				Ash Clarifier	WLSSD		4959	136		Gal	Min	
66	EU 033	Retired	PER 008		<input type="checkbox"/>				REMOVED Ash Clarifier	WLSSD		4959	136		Gal	Min	
67	EU 034	Retired	PER 007		<input type="checkbox"/>				Ash Press	Andritz		4959	136		Gal	Min	
68	EU 034	Retired	PER 008		<input type="checkbox"/>				REMOVED Ash Press	Andritz		4959	136		Gal	Min	
69	EU 035	Retired	PER 007		<input type="checkbox"/>				Sludge Filter Press			4959	60		Ton	Day	

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
47	EU 024	Active	PER 006	12/31/1975	09/30/1978					
48	EU 024	Retired	PER 008	12/31/1975	09/30/1978	09/30/1978				
49	EU 025	Active	PER 006	12/31/1975	09/30/1978					
50	EU 025	Retired	PER 008	12/31/1975	09/30/1978	09/30/1978				
51	EU 026	Retired	PER 007	12/31/1975	09/30/1978	12/31/2003				
52	EU 026	Retired	PER 008	12/31/1975	09/30/1978	12/31/2003				
53	EU 027	Retired	PER 007	12/31/1975	09/30/1978	12/31/2003				
54	EU 027	Retired	PER 008	12/31/1975	09/30/1978	12/31/2003				
55	EU 028	Retired	PER 007	12/31/1975	09/30/1978	12/31/2003				
56	EU 028	Retired	PER 008	12/31/1975	09/30/1978	12/31/2003				
57	EU 029	Active	PER 001	12/31/1975	09/30/1978					
58	EU 029	Active	PER 008	12/31/1975	09/30/1978					
59	EU 030	Active	PER 001	12/31/1975	09/30/1978					
60	EU 030	Removed	PER 008	12/31/1975	09/30/1978	08/28/2008				
61	EU 031	Active	PER 001	12/31/1975	09/30/1978					
62	EU 031	Removed	PER 008	12/31/1975	09/30/1978	08/22/2008				
63	EU 032	Active	PER 001	12/31/1975	09/30/1978					
64	EU 032	Removed	PER 008	12/31/1975	09/30/1978	08/22/2008				
65	EU 033	Retired	PER 007	09/30/1992	09/30/1992	12/31/2003				
66	EU 033	Retired	PER 008	09/30/1992	09/30/1992	12/31/2003				
67	EU 034	Retired	PER 007	09/30/1992	09/30/1992	12/31/2003				
68	EU 034	Retired	PER 008	09/30/1992	09/30/1992	12/31/2003				
69	EU 035	Retired	PER 007	12/31/1987	09/30/1987	12/31/2003				



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Show: Active and Pending Records
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Facility Name: Western Lake Superior Sanitary District

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignificant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
70	EU 035	Retired	PER 008		<input type="checkbox"/>				REMOVED Sludge Filter Press			4959	60		Ton	Day	
71	EU 036	Retired	PER 007		<input type="checkbox"/>				Start-up Boiler	Nebraska		4959	50		Mbtu	Hr	50
72	EU 036	Retired	PER 008		<input type="checkbox"/>				REMOVED Start-up Boiler	Nebraska		4959	50		Mbtu	Hr	50
73	EU 037	Retired	PER 007		<input type="checkbox"/>				Sand Storage and Feed System	Conveying Machinery I		4959	1500		Ft		
74	EU 037	Retired	PER 008		<input type="checkbox"/>				REMOVED Sand Storage and Feed System	Conveying Machinery I		4959	1500		Ft		
75	EU 038	Retired	PER 007		<input type="checkbox"/>		SV 055 (M) SV 061 (P)	CE 011	Dry Ash Cooler			4959	3000		Lb	Hr	
76	EU 038	Retired	PER 008		<input type="checkbox"/>				REMOVED Dry Ash Cooler			4959	3000		Lb	Hr	
77	EU 039	Retired	PER 007		<input type="checkbox"/>		SV 055 (M) SV 056 (B) SV 057 (M) SV 058 (P) SV 060 (B) SV 061 (P)	CE 011 CE 012	Dry Ash Cooler			4959	3000		Lb	Hr	
78	EU 039	Retired	PER 008		<input type="checkbox"/>				REMOVED Dry Ash Cooler			4959	3000		Lb	Hr	
79	EU 040	Retired	PER 007		<input type="checkbox"/>		SV 055 (M) SV 056 (P) SV 060 (M) SV 061 (P)	CE 011 CE 012	Dry Ash Pneumatic Conveyance	Whirl-Air Flow		4959	3000		Lb	Hr	
80	EU 040	Retired	PER 008		<input type="checkbox"/>				REMOVED Dry Ash Pneumatic Conveyance	Whirl-Air Flow		4959	3000		Lb	Hr	
81	EU 041	Retired	PER 007		<input type="checkbox"/>		SV 060 (B) SV 061 (M)	CE 012	Fluidized Bed Reactor 1	Envirotech		4959	58470		Lb	Hr	104.15
82	EU 041	Retired	PER 008		<input type="checkbox"/>				REMOVED Fluidized Bed Reactor 1	Envirotech		4959	58470		Lb	Hr	104.15
83	EU 042	Retired	PER 006		<input type="checkbox"/>		SV 055 (M) SV 056 (B)	CE 007 CE 011	Fluidized Bed Reactor 2	Envirotech		4959	28470		Lb	Hr	104.15
84	EU 042	Retired	PER 008		<input type="checkbox"/>				REMOVED Fluidized Bed Reactor 2	Envirotech		4959	28470		Lb	Hr	104.15
85	EU 043	Retired	EIS 007		<input type="checkbox"/>							4959			Ton	Hr	
86	EU 044	Retired	PER 006		<input type="checkbox"/>				Hammermill (refuse shredder)	American Pulverizer	60	4959	50		Ton	Hr	
87	EU 044	Retired	PER 008		<input type="checkbox"/>				REMOVED Hammermill (refuse shredder)	American Pulverizer	60	4959	50		Ton	Hr	
88	EU 045	Retired	PER 006		<input type="checkbox"/>				Conveyors Bldg 10	Atlas Systems Corp		4959	6.67		Ton	Hr	

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
70	EU 035	Retired	PER 008	12/31/1987	09/30/1987	12/31/2003				
71	EU 036	Retired	PER 007	12/31/1975	12/31/1977	12/31/2003				
72	EU 036	Retired	PER 008	12/31/1975	12/31/1977	12/31/2003				
73	EU 037	Retired	PER 007	12/31/1975	09/30/1978	12/31/2003				
74	EU 037	Retired	PER 008	12/31/1975	09/30/1978	12/31/2003				
75	EU 038	Retired	PER 007	12/31/1975	09/30/1978	12/31/2003				
76	EU 038	Retired	PER 008	12/31/1975	09/30/1978	12/31/2003				
77	EU 039	Retired	PER 007	12/31/1975	09/30/1978	12/31/2003				
78	EU 039	Retired	PER 008	12/31/1975	09/30/1978	12/31/2003				
79	EU 040	Retired	PER 007	12/31/1975	09/30/1978	12/31/2003				
80	EU 040	Retired	PER 008	12/31/1975	09/30/1978	12/31/2003				
81	EU 041	Retired	PER 007	12/31/1975	09/30/1981	12/31/2003				
82	EU 041	Retired	PER 008	12/31/1975	09/30/1981	12/31/2003				
83	EU 042	Retired	PER 006	12/31/1975	09/30/1981	12/31/1999				
84	EU 042	Retired	PER 008	12/31/1975	09/30/1981	12/31/1999				
85	EU 043	Retired	EIS 007			12/31/1999				
86	EU 044	Retired	PER 006	12/31/1975	09/30/1981	12/31/1999				
87	EU 044	Retired	PER 008	12/31/1975	09/30/1981	12/31/1999				
88	EU 045	Retired	PER 006	12/31/1975	09/30/1981	12/31/1999				



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	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignificant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
89	EU 045	Retired	PER 008		<input type="checkbox"/>				REMOVED Conveyors Bldg 10	Atlas Systems Corp		4959	6.67		Ton	Hr	
90	EU 046	Retired	PER 006		<input type="checkbox"/>		SV 069 (M)	CE 010	Conveyors Bldg 11	Wolf Inc		4959	50		Ton	Hr	
91	EU 046	Retired	PER 008		<input type="checkbox"/>				REMOVED Conveyors Bldg 11	Wolf Inc		4959	50		Ton	Hr	
92	EU 047	Retired	EIS 002		<input type="checkbox"/>		SV 068 (P)		Tipping Floor			4959	50		Ton	Hr	
93	EU 047	Retired	PER 008		<input type="checkbox"/>				REMOVED Tipping Floor			4959	50		Ton	Hr	
94	EU 048	Active	PER 006		<input checked="" type="checkbox"/>		SV 075 (M)		Paint Bulking Operation			4959			Gal		
95	EU 048	Retired	PER 008		<input type="checkbox"/>				Insignificant Activity			4959			Gal		
96	EU 049	Active	PER 006		<input checked="" type="checkbox"/>		SV 076 (M)		Backup Generator HHW	Generac	93A03407S	4959	15		Kw		
97	EU 049	Active	PER 008		<input type="checkbox"/>		SV 076 (M)		Backup Generator HHW	Generac	93A03407S	4959	15		Kw		
98	EU 050	Active	PER 006		<input type="checkbox"/>		SV 079 (M)		Waste Gas Boiler	Cleaver-Brooks	CBW-300	4952	300	Energy	Hp		10
99	EU 050	Active	PER 008		<input type="checkbox"/>		SV 079 (M)		Digester Gas Boiler	Cleaver-Brooks	CBW-300	4952	300	Energy	Hp		10
100	EU 051	Active	PER 006		<input type="checkbox"/>		SV 080 (M)		Heating Boiler	Cleaver-Brooks	CBL-1200	4952	1200	Energy	Hp		40
101	EU 051	Active	PER 008		<input type="checkbox"/>		SV 080 (M)		Heating Boiler	Cleaver-Brooks	CBL-1200	4952	800	Energy	Hp		30
102	EU 052	Active	PER 006		<input type="checkbox"/>		SV 081 (M)		Heating Boiler	Cleaver-Brooks	CBL-1200	4952	1200	Energy	Hp		40
103	EU 052	Active	PER 008		<input type="checkbox"/>		SV 081 (M)		Heating Boiler	Cleaver-Brooks	CBL-1200	4952	800	Energy	Hp		30
104	EU 053	Active	PER 006		<input checked="" type="checkbox"/>		SV 083 (M)		Truck Loading Facility	NA	NA	4952					
105	EU 053	Retired	PER 008		<input type="checkbox"/>				Insignificant Activity			4952					
106	EU 054	Active	PER 006		<input type="checkbox"/>		SV 082		Flare	Varec Vapor Control	244W	4952					10
107	EU 055	Active	PER 007		<input checked="" type="checkbox"/>				Micro Turbine			4952	70	Energy	Kw		0.478
108	EU 055	Retired	PER 008		<input type="checkbox"/>				Insignificant Activity - Micro Turbine			4952	70	Energy	Kw		0.478
109	EU 056	Active	PER 007		<input checked="" type="checkbox"/>				Micro Turbine			4952	70	Energy	Kw		0.478
110	EU 056	Retired	PER 008		<input type="checkbox"/>				Insignificant Activity - Micro Turbine			4952	70	Energy	Kw		0.478
111	EU 057	Active	PER 007		<input type="checkbox"/>		SV 084 (M)		Emergency Generator	TBD	TBD	4952	2	Elect Energy	Mw		19.64
112	EU 057	Active	PER 008		<input type="checkbox"/>		SV 084 (M)		Emergency Generator	Caterpillar		4952	2	Elect Energy	Mw		19.64

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89	EU 045	Retired	PER 008	12/31/1975	09/30/1981	12/31/1999				
90	EU 046	Retired	PER 006	12/31/1975	09/30/1981	12/31/1999				
91	EU 046	Retired	PER 008	12/31/1975	09/30/1981	12/31/1999				
92	EU 047	Retired	EIS 002	12/31/1975	09/30/1981	12/31/1999				
93	EU 047	Retired	PER 008	12/31/1975	09/30/1981	12/31/1999				
94	EU 048	Active	PER 006	12/31/1992	01/31/1993					
95	EU 048	Retired	PER 008	12/31/1992	01/31/1993	01/31/1993				
96	EU 049	Active	PER 006	12/31/1992	01/31/1993					
97	EU 049	Active	PER 008	12/31/1992	01/31/1993					
98	EU 050	Active	PER 006	05/01/2000	07/01/2001					
99	EU 050	Active	PER 008	05/01/2000	07/01/2001					
100	EU 051	Active	PER 006	05/01/2000	07/01/2001					
101	EU 051	Active	PER 008	05/01/2000	07/01/2001					
102	EU 052	Active	PER 006	05/01/2000	07/01/2001					
103	EU 052	Active	PER 008	05/01/2000	07/01/2001					
104	EU 053	Active	PER 006	06/01/1999	03/01/2001					
105	EU 053	Retired	PER 008	06/01/1999	03/01/2001	03/01/2001				
106	EU 054	Active	PER 006	09/01/1999	07/01/2001					
107	EU 055	Active	PER 007	11/01/2003	11/01/2003					
108	EU 055	Retired	PER 008	11/01/2003	11/01/2003	11/01/2003				
109	EU 056	Active	PER 007	11/01/2003	11/01/2003					
110	EU 056	Retired	PER 008	11/01/2003	11/01/2003	11/01/2003				
111	EU 057	Active	PER 007	04/01/2005						
112	EU 057	Active	PER 008	04/01/2005						



FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records

Action: PER 008

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignificant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
113	EU 058	Active	PER 008		<input type="checkbox"/>		SV 079 (M) SV 082 (M) SV 089 (M) SV 090 (M) SV 093 (B)	CE 018 CE 019	Digester 1			4952					
114	EU 059	Active	PER 008		<input type="checkbox"/>		SV 079 (M) SV 082 (M) SV 089 (M) SV 090 (M) SV 094 (B)	CE 018 CE 019	Digester 2			4952					
115	EU 060	Active	PER 008		<input type="checkbox"/>		SV 079 (M) SV 082 (M) SV 089 (M) SV 090 (M) SV 095 (B)	CE 018 CE 019	Digester 3			4952					
116	EU 061	Active	PER 008		<input type="checkbox"/>		SV 079 (M) SV 082 (M) SV 089 (M) SV 090 (M) SV 096 (B)	CE 018 CE 019	Digester 4			4952					

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
113	EU 058	Active	PER 008	09/01/1999	07/01/2001					
114	EU 059	Active	PER 008	09/01/1999	07/01/2001					
115	EU 060	Active	PER 008	09/01/1999	07/01/2001					
116	EU 061	Active	PER 008	09/01/1999	07/01/2001					



FACILITY DESCRIPTION: FUGITIVE SOURCES (FS)

Show: Active and Pending Records

Action: PER 008

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

	ID No.	Fugitive Source Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Pollutant(s) Emitted	Control Equip. ID No(s).	Fugitive Source Description	Year Installed	Year Removed
1	FS 001	Retired	EIS 002		<input type="checkbox"/>				Wood Chip Storage Pile		1999
2	FS 002	Removed	EIS 007		<input type="checkbox"/>				Sand Storage and Handling		2001
3	FS 003	Active	PER 001		<input type="checkbox"/>		PM		VOC - Composting		
4	FS 003	Retired	PER 008		<input type="checkbox"/>		PM		Insignificant Activity - Composting		
5	FS 004	Active	PER 006		<input checked="" type="checkbox"/>		VOC		Chlorination Tank Influent Channel		
6	FS 004	Retired	PER 008		<input type="checkbox"/>		VOC		Insignificant Activity - Disinfection Influent Channel		
7	FS 005	Active	PER 006		<input checked="" type="checkbox"/>		VOC		Chlorination Tanks		
8	FS 005	Retired	PER 008		<input type="checkbox"/>		VOC		Insignificant Activity - Disinfection Tanks		
9	FS 006	Active	PER 001		<input type="checkbox"/>		VOC		Dechlorination Tanks		
10	FS 007	Active	PER 006		<input checked="" type="checkbox"/>		VOC		Final Effluent Channel		
11	FS 007	Retired	PER 008		<input type="checkbox"/>		VOC		Insignificant Activity - Final Effluent Channel		
12	FS 008	Removed	EIS 007		<input type="checkbox"/>				Sand Screening		2001



FACILITY DESCRIPTION: CONTROL EQUIPMENT (CE)

Show: Active and Pending Records
Action: PER 008
AQD Facility ID: 13700112
Facility Name: Western Lake Superior Sanitary District

	ID No.	Control Equip. Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Control Equip. Type	Control Equipment Description	Manufacturer	Model	Pollutants Controlled	Capture Efficiency (%)	Destruction/Collection Efficiency (%)	Afterburner Combustion Parameters
1	CE 001	Active	PER 001			018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Micro-Pul	19-8-220	PM	99	99	
2	CE 001	Retired	PER 008			018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Micro-Pul	19-8-220	PM	99	99	
3	CE 003	Active	PER 001			018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Fuller Company Dracco	Dracco 76-30606-313	PM	99	99	
4	CE 003	Retired	PER 008			018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Fuller Company Dracco	Dracco 76-30606-313	PM	99	99	
5	CE 004	Retired	PER 006			007	Centrifugal Collector - High Efficiency	Emtrol Corporation	102X037				
6	CE 005	Retired	PER 006			007	Centrifugal Collector - High Efficiency	Emtrol Corporation	102X037				
7	CE 006	Retired	PER 006			007	Centrifugal Collector - High Efficiency	Emtrol Corporation	102X037				
8	CE 007	Retired	PER 006			007	Centrifugal Collector - High Efficiency	Emtrol Corporation	102X037				
9	CE 008	Retired	PER 006			008	Centrifugal Collector - Medium Efficiency	Fischer-Klosterman	KQ-465-42				
10	CE 009	Retired	PER 006			008	Centrifugal Collector - Medium Efficiency	Fischer-Klosterman	XQ-42-2				
11	CE 010	Retired	PER 006			008	Centrifugal Collector - Medium Efficiency	Fischer-Klosterman	XQ-42-2				
12	CE 011	Retired	PER 006			001	Wet Scrubber - High Efficiency w/Lime Slurry	Emtrol	W20				
13	CE 012	Retired	PER 006			001	Wet Scrubber - High Efficiency w/Lime Slurry	Emtrol	W20				
14	CE 013	Active	PER 001			018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Flex-Kleen, Research Cottrell	58BV161	PM	90	90	
15	CE 013	Retired	PER 008			018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Flex-Kleen, Research Cottrell	58BV161	PM	90	90	
16	CE 014	Active	PER 001			018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Fuller Company Draccos	Dracco 76-30606-313	PM	99	99	
17	CE 014	Retired	PER 008			018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Fuller Company Draccos	Dracco 76-30606-313	PM	99	99	
18	CE 015	Active	PER 001			018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Fuller Company Draccos	Dracco 76-30606-313	PM	99	99	
19	CE 015	Retired	PER 008			018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Fuller Company Draccos	Dracco 76-30606-313	PM	99	99	
20	CE 016	Active	PER 001			018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Fuller Company Draccos	Dracco 76-30606-313	PM	99	99	
21	CE 016	Retired	PER 008			018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Fuller Company Draccos	Dracco 76-30606-313	PM	99	99	
22	CE 017	Active	PER 006			053	Venturi Scrubber	Greenheck	13-B-ISW-10 CCW-TH-I-A30				
23	CE 017	Retired	PER 008			053	Venturi Scrubber	Greenheck	13-B-ISW-10 CCW-TH-I-A30				



FACILITY DESCRIPTION: CONTROL EQUIPMENT (CE)

Show: Active and Pending Records

Action: PER 008

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

	ID No.	Control Equip. Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Control Equip. Type	Control Equipment Description	Manufacturer	Model	Pollutants Controlled	Capture Efficiency (%)	Destruction/Collection Efficiency (%)	Afterburner Combustion Parameters
24	CE 018	Active	PER 008			023	Flaring			Methane VOC	100 100	98 98	
25	CE 019	Active	PER 008			099	Other - Combustion in EUs			Methane VOC	100 100	98 98	
26	CE 020	Active	PER 008			099	Other - Biofilter for odor control	E&A Environmental Consultants	NA				



FACILITY DESCRIPTION: STACK/VENTS (SV)

Show: Active and Pending Records
Action: PER 008
AQD Facility ID: 13700112
Facility Name: Western Lake Superior Sanitary District

	ID No.	Stack/ Vent Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Operators Description	Height of Opening From Ground (feet)	Inside Dimensions		Design Flow Rate at Top (ACFM)	Exit Gas Temperature at Top (°F)	Flow Rate/ Temperature Information Source	Discharge Direction
								Diameter or Length (feet)	Width (feet)				
1	SV 001	Active	PER 006			Duluth influent and screw pumps	35	1.5	1.5	1000	70	Manufacturer	Up, With Cap
2	SV 001	Retired	PER 008										
3	SV 002	Active	PER 006			Duluth influent and screw pumps	7	7.25	7.25	9325	70	Manufacturer	Horizontal
4	SV 002	Active	PER 008			IA Stack - Duluth influent and screw pumps	7	7.25	7.25	9325	70	Manufacturer	Horizontal
5	SV 003	Active	PER 006			Duluth influent and screw pumps	7	7.25	7.25	9325	70	Manufacturer	Horizontal
6	SV 003	Active	PER 008			IA Stack - Duluth influent and screw pumps	7	7.25	7.25	9325	70	Manufacturer	Horizontal
7	SV 004	Active	PER 006			Duluth influent and screw pumps	7	7.25	7.25	27900	70	Manufacturer	Horizontal
8	SV 004	Retired	PER 008										
9	SV 005	Active	PER 006			Grit Tanks	30	3	3	6175	70	Manufacturer	Up, With Cap
10	SV 005	Active	PER 008			Building/Room Exhaust	30	3	3	6175	70	Manufacturer	Up, With Cap
11	SV 006	Active	PER 006			Grit Tanks	30	3	3	6175	70	Manufacturer	Up, With Cap
12	SV 006	Active	PER 008			Building/Room Exhaust	30	3	3	6175	70	Manufacturer	Up, With Cap
13	SV 007	Active	PER 006			Screening rooms	45	3	3	9300	70	Manufacturer	Up, With Cap
14	SV 007	Active	PER 008			Building/Room Exhaust	45	3	3	9300	70	Manufacturer	Up, With Cap
15	SV 008	Active	PER 006			Screening rooms	45	3	3	9300	70	Manufacturer	Up, With Cap
16	SV 008	Active	PER 008			Building/Room Exhaust	45	3	3	9300	70	Manufacturer	Up, With Cap
17	SV 009	Active	PER 006			Oxygenator gallery exhaust	21.5	.33		7070	80	Estimate	Up, With Cap
18	SV 009	Active	PER 008			Oxygenation Tank 4 exhaust	21.5	.33		70	80	Estimate	Up, With Cap
19	SV 010	Active	PER 006			Oxygenator gallery exhaust	21.5	.33		70	80	Estimate	Up, With Cap
20	SV 010	Active	PER 008			Oxygenation Tank 3 exhaust	21.5	.33		70	80	Estimate	Up, With Cap
21	SV 011	Active	PER 006			Oxygenator gallery exhaust	21.5	.33		70	80	Estimate	Up, With Cap
22	SV 011	Active	PER 008			Oxygenation Tank 2 exhaust	21.5	.33		70	80	Estimate	Up, With Cap
23	SV 012	Active	PER 006			Oxygenator gallery exhaust	21.5	.33			80	Estimate	Up, With Cap
24	SV 012	Active	PER 008			Oxygenation Tank 1 exhaust	21.5	.33		70	80	Estimate	Up, With Cap
25	SV 013	Active	PER 001										
26	SV 013	Retired	PER 008										
27	SV 014	Active	PER 001										



FACILITY DESCRIPTION: STACK/VENTS (SV)

Show: Active and Pending Records

Action: PER 008

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

	ID No.	Stack/ Vent Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Operators Description	Height of Opening From Ground (feet)	Inside Dimensions		Design Flow Rate at Top (ACFM)	Exit Gas Temperature at Top (°F)	Flow Rate/ Temperature Information Source	Discharge Direction
								Diameter or Length (feet)	Width (feet)				
28	SV 014	Retired	PER 008										
29	SV 015	Active	PER 006			Oxygenation tanks/relief valve	14.5	.83			80	Estimate	Up, With Cap
30	SV 015	Active	PER 008			Oxygenation Tank 4 exhaust	14.5	.83			80	Estimate	Up, With Cap
31	SV 016	Active	PER 006			Oxygenation tanks/relief valve	14.5	.83			80	Estimate	Up, With Cap
32	SV 016	Active	PER 008			Oxygenation Tank 3 exhaust	14.5	.83			80	Estimate	Up, With Cap
33	SV 017	Active	PER 006			Oxygenation tanks/relief valve	14.5	.83			80	Estimate	Up, With Cap
34	SV 017	Active	PER 008			Oxygenation Tank 2 exhaust	14.5	.83			80	Estimate	Up, With Cap
35	SV 018	Active	PER 006			Oxygenation tanks/relief valve	14.5	.83			80	Estimate	Up, With Cap
36	SV 018	Active	PER 008			Oxygenation Tank 1 exhaust	14.5	.83			80	Estimate	Up, With Cap
37	SV 019	Active	PER 006			Oxygenation tanks/relief valve	14.5	1			80	Estimate	Up, With Cap
38	SV 019	Active	PER 008			Oxygenation Tank 4 exhaust	14.5	1			80	Estimate	Up, With Cap
39	SV 020	Active	PER 006			Oxygenation tanks/relief valve	14.5	1			80	Estimate	Up, With Cap
40	SV 020	Active	PER 008			Oxygenation Tank 3 exhaust	14.5	1			80	Estimate	Up, With Cap
41	SV 021	Active	PER 006			Oxygenation tanks/relief valve	14.5	1			80	Estimate	Up, With Cap
42	SV 021	Active	PER 008			Oxygenation Tank 2 exhaust	14.5	1			80	Estimate	Up, With Cap
43	SV 022	Active	PER 006			Oxygenation tanks/relief valve	14.5	1			80	Estimate	Up, With Cap
44	SV 022	Active	PER 008			Oxygenation Tank 1 exhaust	14.5	1			80	Estimate	Up, With Cap
45	SV 023	Active	PER 006			Secondary settling tank 1	36.7	5		63900		Manufacturer	Up, No Cap
46	SV 024	Active	PER 006			Secondary settling tank 2	36.7	5		63900		Manufacturer	Up, No Cap
47	SV 025	Active	PER 006			Secondary settling tank 3	36.7	5		63900		Manufacturer	Up, No Cap
48	SV 026	Active	PER 006			Secondary settling tank 4	36.7	5		63900		Manufacturer	Up, No Cap
49	SV 027	Active	PER 006			Mixed liquor channel	8	1				Estimate	Horizontal
50	SV 028	Active	PER 006			Flocculation Tank 1	31.3	5		26600		Manufacturer	Up, No Cap
51	SV 029	Active	PER 006			Flocculation Tank 2	31.3	5		26600		Manufacturer	Up, No Cap
52	SV 030	Active	PER 006			Flocculation Tank 3	31.3	5		26600		Manufacturer	Up, No Cap
53	SV 031	Active	PER 006			Flocculation Tank 4	31.3	5		2600		Manufacturer	Up, No Cap
54	SV 032	Active	PER 006			Mixed Media Filters	24.5	2	8	6000		Estimate	Up, With Cap



FACILITY DESCRIPTION: STACK/VENTS (SV)

Show: Active and Pending Records
Action: PER 008
AQD Facility ID: 13700112
Facility Name: Western Lake Superior Sanitary District

	ID No.	Stack/ Vent Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Operators Description	Height of Opening From Ground (feet)	Inside Dimensions		Design Flow Rate at Top (ACFM)	Exit Gas Temperature at Top (°F)	Flow Rate/ Temperature Information Source	Discharge Direction
								Diameter or Length (feet)	Width (feet)				
55	SV 033	Active	PER 006			Mixed media filters	24.5	3	6	6000		Estimate	Up, With Cap
56	SV 034	Active	PER 006			Backwash waste well		.83				Estimate	Up, No Cap
57	SV 035	Active	PER 001				24.5	3	3	8500	70	Manufacturer	Up, With Cap
58	SV 035	Active	PER 008			Room Vent	24.5	3	3	8500	70	Manufacturer	Up, With Cap
59	SV 036	Active	PER 001				24.5	1.08	1.08	950	70	Manufacturer	Up, With Cap
60	SV 036	Active	PER 008			Room Vent	24.5	1.08	1.08	950	70	Manufacturer	Up, With Cap
61	SV 037	Active	PER 001				24.5	1.33	1.5	1400	70	Manufacturer	Up, With Cap
62	SV 037	Active	PER 008			Room Vent	24.5	1.33	1.5	1400	70	Manufacturer	Up, With Cap
63	SV 038	Active	PER 001				24.5	3.83	3.83	14050	70	Manufacturer	Up, With Cap
64	SV 038	Active	PER 008			Room Vent	24.5	3.83	3.83	14050	70	Manufacturer	Up, With Cap
65	SV 039	Active	PER 006			Sludge thickener	35	3	3	5420	70	Manufacturer	Up, With Cap
66	SV 039	Retired	PER 008			Sludge thickener	35	3	3	5420	70	Manufacturer	Up, With Cap
67	SV 040	Active	PER 006			Sludge thickener	35	3	3	5420	70	Manufacturer	Up, With Cap
68	SV 040	Retired	PER 008			Sludge thickener	35	3	3	5420	70	Manufacturer	Up, With Cap
69	SV 041	Active	PER 006			Sludge thickener	35	3	3	5420	70	Manufacturer	Up, With Cap
70	SV 041	Retired	PER 008			Sludge thickener	35	3	3	5420	70	Manufacturer	Up, With Cap
71	SV 042	Active	PER 006			Sludge thickener	35	3	3	5420	70	Manufacturer	Up, With Cap
72	SV 042	Retired	PER 008			Sludge thickener	35	3	3	5420	70	Manufacturer	Up, With Cap
73	SV 043	Active	PER 006			Polymer mixing tanks	56	.67			70	Estimate	Up, With Cap
74	SV 043	Removec	PER 008			Polymer mixing tanks	56	.67			70	Estimate	Up, With Cap
75	SV 044	Active	PER 006			Polymer storage	56	.5			70	Estimate	Up, With Cap
76	SV 044	Active	PER 008			Polymer storage	10	.5			70	Estimate	Horizontal
77	SV 045	Active	PER 006			Office area	56	3	3	8150	70	Manufacturer	Up, With Cap
78	SV 045	Active	PER 008			Room exhaust	56	3	3	8150	70	Manufacturer	Up, With Cap
79	SV 046	Active	PER 006			Office area	56	3	3	8150	70	Manufacturer	Up, With Cap
80	SV 046	Active	PER 008			Room exhaust	56	3	3	8150	70	Manufacturer	Up, With Cap
81	SV 047	Retired	PER 006			Lime calciner	56	2	2	2650	70	Manufacturer	Up, With Cap



FACILITY DESCRIPTION: STACK/VENTS (SV)

Show: Active and Pending Records
Action: PER 008
AQD Facility ID: 13700112
Facility Name: Western Lake Superior Sanitary District

	ID No.	Stack/ Vent Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Operators Description	Height of Opening From Ground (feet)	Inside Dimensions		Design Flow Rate at Top (ACFM)	Exit Gas Temperature at Top (°F)	Flow Rate/ Temperature Information Source	Discharge Direction
								Diameter or Length (feet)	Width (feet)				
82	SV 048	Retired	PER 006			Lime silo	56	.83		1000	70	Estimate	Up, With Cap
83	SV 049	Retired	PER 006			Lime silo	56	.83		2000	70	Estimate	Up, With Cap
84	SV 050	Active	PER 006			Sludge dewatering	35	3.67	5	18000	70	Manufacturer	Up, With Cap
85	SV 050	Removec	PER 008			Sludge dewatering	35	3.67	5	18000	70	Manufacturer	Up, With Cap
86	SV 051	Active	PER 006			not used							
87	SV 051	Retired	PER 008			not used							
88	SV 052	Active	PER 006			Gasoline UST 1	8	.17				Estimate	Up, With Cap
89	SV 053	Active	PER 006			Gasoline UST 2	8	.17				Estimate	Up, With Cap
90	SV 054	Active	PER 006			Welding booth	19	2	3	5250	70	Manufacturer	Up, With Cap
91	SV 054	Active	PER 008			Welding booth (IA)	19	2	3	5250	70	Manufacturer	Up, With Cap
92	SV 055	Retired	PER 006			Fluidized bed reactor2	112	5		39954	250	Estimate	Up, No Cap
93	SV 056	Retired	PER 006			Fluidized bed reactor2	68	2.5			1600	Estimate	Up, No Cap
94	SV 057	Retired	PER 006			Dry ash cooler	78	.67		1200	250	Estimate	Up, No Cap
95	SV 058	Retired	PER 006			Dry ash cooler	78	.67		1200	400	Estimate	Up, No Cap
96	SV 059	Retired	PER 006			Bucket conveyor storage silo	75	.67				Estimate	Up, With Cap
97	SV 060	Retired	PER 006			Fluidized bed reactor 1	76	2.5			1600	Estimate	Up, No Cap
98	SV 061	Retired	PER 006			Fluidized bed reactor 1	112	5		39954	250	Estimate	Up, No Cap
99	SV 062	Retired	PER 006			Startup boiler	78	4		8775	400	Manufacturer	Up, No Cap
100	SV 063	Active	PER 006			Fuel oil UST	10	.17				Estimate	Up, With Cap
101	SV 064	Active	PER 006			Fuel oil UST	10	.17				Estimate	Up, With Cap
102	SV 065	Retired	PER 006			Dry ash pneumatic conveyor	56	.33	.5	1000	180	Estimate	Horizontal
103	SV 066	Retired	PER 006			Startup boiler							
104	SV 067	Active	PER 006			Truck loading facility	19.3	4.5	4.5	10000		Estimate	Up, With Cap
105	SV 067	Removec	PER 008			Truck loading facility	19.3	4.5	4.5	10000		Estimate	Up, With Cap
106	SV 068	Active	PER 006			Truck loading facility	19.3	4.5	4.5	10000		Estimate	Up, With Cap
107	SV 068	Removec	PER 008			Truck loading facility	19.3	4.5	4.5	10000		Estimate	Up, With Cap
108	SV 069	Retired	PER 006			Building 10 conveyors	5	4	2	25000		Manufacturer	Horizontal



FACILITY DESCRIPTION: STACK/VENTS (SV)

Show: Active and Pending Records

Action: PER 008

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

	ID No.	Stack/ Vent Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Operators Description	Height of Opening From Ground (feet)	Inside Dimensions		Design Flow Rate at Top (ACFM)	Exit Gas Temperature at Top (°F)	Flow Rate/ Temperature Information Source	Discharge Direction
								Diameter or Length (feet)	Width (feet)				
109	SV 070	Active	PER 006			Emergency exhaust chlor. bldg.	13.8	2.5	2.5	6300		Manufacturer	Up, With Cap
110	SV 071	Active	PER 006			Sludge storage tank							
111	SV 071	Removed	PER 008			Sludge storage tank							
112	SV 072	Active	PER 006			Sludge storage tank							
113	SV 072	Removed	PER 008			Sludge storage tank							
114	SV 073	Retired	PER 006			Hammermill	47	4				Estimate	Up, No Cap
115	SV 074	Retired	PER 006			Hammermill	47	4				Estimate	Up, No Cap
116	SV 075	Active	PER 006			HHW Paint bulking	16	.83	.83	400	70	Manufacturer	Up, With Cap
117	SV 076	Active	PER 006			Emergency generator	10	2		1500	900	Estimate	Up, With Cap
118	SV 076	Active	PER 008			HHW Emergency generator	10	2		1500	900	Estimate	Up, With Cap
119	SV 077	Active	PER 006			UST	5	.13				Estimate	Up, With Cap
120	SV 078	Active	PER 006			Odor control exhaust	2.2	1.17		2500		Manufacturer	Up, No Cap
121	SV 078	Active	PER 008			Sludge Storage	2.2	1.17		2500		Manufacturer	Up, No Cap
122	SV 079	Active	PER 006			Waste gas boiler stack	75	3					Up, With Cap
123	SV 080	Active	PER 006			Heating boiler stack	75	1.67					Up, With Cap
124	SV 081	Active	PER 006			Heating boiler stack	75	1.67					Up, With Cap
125	SV 082	Active	PER 006			Flare	16.33						Up, No Cap
126	SV 083	Active	PER 006			Truck loading facility	37					Estimate	
127	SV 083	Active	PER 008			Solid Waste Transfer	37					Estimate	
128	SV 084	Active	PER 007		091	Emergency Generator	11	0.167		17830	927	Manufacturer	Up, No Cap
129	SV 085	Active	PER 008			Oxygenation Tank 4 exhaust							
130	SV 086	Active	PER 008			Oxygenation Tank 3 exhaust							
131	SV 087	Active	PER 008			Oxygenation Tank 2 exhaust							
132	SV 088	Active	PER 008			Oxygenation Tank 1 exhaust							
133	SV 089	Active	PER 008			Microturbine 1 exhaust (IA)							
134	SV 090	Active	PER 008			Microturbine 2 exhaust (IA)							
135	SV 091	Active	PER 008			Bisulfate Scrubber (IA)							



FACILITY DESCRIPTION: STACK/VENTS (SV)

Show: Active and Pending Records

Action: PER 008

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

	ID No.	Stack/ Vent Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Operators Description	Height of Opening From Ground (feet)	Inside Dimensions		Design Flow Rate at Top (ACFM)	Exit Gas Temperature at Top (°F)	Flow Rate/ Temperature Information Source	Discharge Direction
								Diameter or Length (feet)	Width (feet)				
136	SV 092	Active	PER 008			Bisulfate Scrubber (IA)							
137	SV 093	Active	PER 008			Emergency Digester Exhaust							
138	SV 094	Active	PER 008			Emergency Digester Exhaust							
139	SV 095	Active	PER 008			Emergency Digester Exhaust							
140	SV 096	Active	PER 008			Emergency Digester Exhaust							
141	SV 097	Active	PER 008			Biofilter Bed exhaust	3.5	182	65	55000	80	Estimate	Up, With Cap



FACILITY DESCRIPTION: GROUPS (GP)

Show: Active and Pending Records

Action: PER 008

AQD Facility ID: 13700112

Facility Name: Western Lake Superior Sanitary District

	ID No.	Group Status	Added By (Action)	Retired By (Action)	Include in EI	Operator ID for Item	Group Description	Group Items
1	GP 001	Retired	PER 006		<input type="checkbox"/>		Fluidized Bed Reactor #1 and #2	CE 003, CE 004, CE 005, CE 012, EU 038, EU 039, EU 040, EU 041, EU 042, EU 045, EU 046, SV 055, SV 056, SV 060, SV 061, SV 069
2	GP 002	Retired	PER 006		<input type="checkbox"/>		Lime Storage Silos	CE 015, CE 016, EU 026, EU 027, SV 048, SV 049
3	GP 003	Active	PER 006		<input type="checkbox"/>		Heating Boilers	EU 051, EU 052
4	GP 004	Active	PER 006		<input type="checkbox"/>		Flare and Waste Gas Boiler	EU 050, EU 054
5	GP 005	Active	PER 008		<input type="checkbox"/>		Anaerobic Digesters	CE 018, CE 019, EU 050, EU 054, EU 058, EU 059, EU 060, EU 061
6	GP 006	Active	PER 008		<input type="checkbox"/>		WWT GHGs	EU 006, EU 007, EU 017



COMPLIANCE PLAN **CD-01**

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

Subject Item: Total Facility

	NC/ CA	Type	Citation	Requirement
1.0		CD	Minn. R. 7007.0800, subp. 2	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.
2.0		CD	hdr	OPERATIONAL REQUIREMENTS
3.0		CD	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	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.
4.0		CD	Minn. R. 7011.0020	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.
5.0		CD	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)	Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.
6.0		CD	Minn. R. 7007.0800, subps. 14 and 16(J)	Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.
7.0		CD	Minn. R. 7019.1000, subp. 4	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.
8.0		CD	Minn. R. 7011.0150	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.
9.0		CD	Minn. R. 7030.0010 - 7030.0080	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.
10.0		CD	Minn. R. 7007.0800, subp. 9(A)	Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).
11.0		CD	Minn. R. 7007.0800, subp. 16	The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.
12.0		CD	hdr	PERFORMANCE TESTING
13.0		CD	Minn. R. ch. 7017	Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.
14.0		CD	Minn. R. 7017.2018; Minn. R. 7017.2030, subps. 1-4, Minn. R. 7017.2035, subps. 1-2	<p>Performance Test Notifications and Submittals:</p> <p>Performance Tests are due as outlined in Table A of the permit. See Table B for additional testing requirements.</p> <p>Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test</p> <p>The Notification, Test Plan, and Test Report may be submitted in an alternative format as allowed by Minn. R. 7017.2018.</p>



COMPLIANCE PLAN **CD-01**

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

15.0		CD	Minn. R. 7017.2025, subp. 3	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.
16.0		CD	hdr	MONITORING REQUIREMENTS
17.0		CD	Minn. R. 7007.0800, subp. 4(D)	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).
18.0		CD	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.
19.0		CD	hdr	RECORDKEEPING
20.0		CD	Minn. R. 7007.0800, subp. 5(C)	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).
21.0		CD	Minn. R. 7007.0800, subp. 5(B)	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.
22.0		CD	Minn. R. 7007.1200, subp. 4	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.
23.0		CD	hdr	REPORTING/SUBMITTALS
24.0		CD	Minn. R. 7019.1000, subp. 3	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.
25.0		CD	Minn. R. 7019.1000, subp. 2	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.
26.0		CD	Minn. R. 7019.1000, subp. 1	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.



COMPLIANCE PLAN **CD-01**

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

27.0		CD	Minn. R. 7019.1000, subp. 1	Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.
28.0		S/A	Minn. R. 7007.0800, subp. 6(A)(2)	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.
29.0		CD	Minn. R. 7007.1150 - 7007.1500	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.
30.0		S/A	Minn. R. 7007.0400, subp. 2	Application for Permit Reissuance: due 180 days before expiration of Existing Permit
31.0		CD	Minn. R. 7007.1400, subp. 1(H)	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).
32.0		S/A	Minn. R. 7007.0800, subp. 6(C)	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.
33.0		CD	Minn. R. 7019.3000 - 7019.3100	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.
34.0		CD	Minn. R. 7002.0005 - 7002.0095	Emission Fees: due 60 days after receipt of an MPCA bill.



COMPLIANCE PLAN **CD-01**

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

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	OPERATING AND EMISSION LIMITS
2.0		LIMIT	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 0.05 percent by weight when burning oil.
3.0		LIMIT	40 CFR Section 60.42c(d); Minn. R. 7011.0570	Sulfur Content of Fuel: less than or equal to 0.50 percent by weight when burning oil.
4.0		LIMIT	40 CFR Section 60.43c(c); 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.
5.0		LIMIT	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)	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
6.0		CD	Minn. R. 7007.0800, subp. 2	Fuel use limited to natural gas and distillate oil.
7.0		CD	hdr	RECORDKEEPING AND REPORTING
8.0		CD	40 CFR Section 60.42c(h)(1); Minn. R. 7011.0570	Obtain fuel supplier certifications for each shipment of oil, showing the sulfur content of the fuel burned.
9.0		CD	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)	Calculate and record the heat input to each boiler each hour.
10.0		S/A	40 CFR Section 60.48c(e); Minn. R. 7011.0570	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.
11.0		CD	40 CFR Section 60.48c(f)(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.
12.0		CD	40 CFR Section 60.48c(g)(3); Minn. R. 7011.0570	Record and maintain records of the amounts of each fuel delivered each month.



COMPLIANCE PLAN **CD-01**

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

	NC/ CA	Type	Citation	Requirement
1.0		CD	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)	Total biogas flow shall not exceed 38,000 scf per hour.
2.0		CD	Minn. R. 7007.0800, subp. 4 and 5	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.



COMPLIANCE PLAN **CD-01**

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

	NC/ CA	Type	Citation	Requirement
1.0		CD	Minn. R. 7005.0100, subp. 35a	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).



COMPLIANCE PLAN **CD-01**

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

	NC/ CA	Type	Citation	Requirement
1.0		CD	Minn. R. 7005.0100, subp. 35a	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).



COMPLIANCE PLAN **CD-01**

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

	NC/ CA	Type	Citation	Requirement
1.0		LIMIT	Minn. R. 7011.2300, subp. 1	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.
2.0		LIMIT	Minn. R. 7011.2300, subp. 2	Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input
3.0		CD	hdr	OPERATING CONDITIONS
4.0		CD	Minn. R. 7005.0100, subp. 35a	Fuel type: No. 2 fuel oil only, by design.
5.0		LIMIT	Minn. R. 7005.0100, subp. 35a	Sulfur Content of Fuel: less than or equal to 0.05 percent by weight
6.0		CD	hdr	RECORDING/KEEPING REQUIREMENTS
7.0		CD	Minn. R. 7007.0800, subp. 4 & 5	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.
8.0		CD	Minn. R. 7007.0800, subps. 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.
9.0		CD	hdr	SUBPART ZZZZ REQUIREMENTS
10.0		CD	40 CFR Section 63.6595(a)(1); Minn. R. 7011.8150	Comply with the applicable emission limitations and operating requirements of Subpart ZZZZ no later than May 3, 2013.
11.0		CD	40 CFR Section 63.6603(a); 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.
12.0		CD	40 CFR Section 63.6605(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.
13.0		CD	40 CFR Section 63.6605(b); 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.
14.0		CD	40 CFR Section 63.6625(e); 40 CFR Section 63.6655(d); 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.
15.0		CD	40 CFR Section 63.6625(f); Minn. R. 7011.8150	The Permittee must install a non-resettable hour meter if one is not already installed.
16.0		CD	40 CFR Section 63.6625(h); 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.



COMPLIANCE PLAN **CD-01**

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

17.0		CD	40 CFR Section 63.6655(a); Minn. R. 7011.8150	<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>
18.0		CD	40 CFR Section 63.6655(e); 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>
19.0		CD	40 CFR Section 63.6655(f); 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>
20.0		CD	40 CFR Section 63.6660; 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>



COMPLIANCE PLAN **CD-01**

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

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	OPERATING AND EMISSION LIMITS
2.0		LIMIT	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 0.05 percent by weight when burning oil.
3.0		LIMIT	40 CFR Section 60.42c(d); Minn. R. 7011.0570	Sulfur Content of Fuel: less than or equal to 0.50 percent by weight when burning oil.
4.0		LIMIT	40 CFR Section 60.43c(c); 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.
5.0		CD	Minn. R. 7007.0800, subp. 2	Fuels limited to bio-gas and distillate oil.
6.0		CD	hdr	RECORDKEEPING AND REPORTING
7.0		CD	40 CFR Section 60.42c(h)(1); Minn. R. 7011.0570	Obtain fuel supplier certifications for each shipment of oil, showing the sulfur content of the fuel burned.
8.0		S/A	40 CFR Section 60.48c(e); Minn. R. 7011.0570	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.
9.0		CD	40 CFR Section 60.48c(f)(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.
10.0		CD	40 CFR Section 60.48c(g)(3); Minn. R. 7011.0570	Record and maintain records of the amounts of each fuel delivered each month.



COMPLIANCE PLAN **CD-01**

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

	NC/ CA	Type	Citation	Requirement
1.0		LIMIT	Minn. R. 7011.0610, subp. 1(A)(1)	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.
2.0		LIMIT	Minn. R. 7011.0610, subp. 1(A)(2)	Opacity: less than or equal to 20 percent except for one six-minute period per hour of not more than 60 percent opacity.
3.0		CD	Minn. R. 7017.2020, subp. 1	Performance Test Methods: Upon the request of the Commissioner testing shall be done in accordance with Minn. R. 7017.2001-2060.



COMPLIANCE PLAN **CD-01**

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

Subject Item: EU 057 Emergency Generator

Associated Items: SV 084 Emergency Generator

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION LIMITS
2.0		LIMIT	Minn. R. 7011.2300, subp. 1	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.
3.0		LIMIT	Minn. R. 7011.2300, subp. 2	Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input
4.0		CD	hdr	OPERATING CONDITIONS
5.0		CD	Minn. R. 7005.0100, subp. 35a	Fuel type: No. 2 fuel oil only, by design.
6.0		LIMIT	Minn. R. 7005.0100, subp. 35a	Sulfur Content of Fuel: less than or equal to 0.05 percent by weight
7.0		CD	hdr	RECORDINGKEEPING REQUIREMENTS
8.0		CD	Minn. R. 7007.0800, subp. 4 & 5	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.
9.0		CD	Minn. R. 7007.0800, subps. 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.
10.0		CD	hdr	SUBPART ZZZZ REQUIREMENTS
11.0		CD	40 CFR Section 63.6595(a)(1); Minn. R. 7011.8150	Comply with the applicable emission limitations and operating requirements of Subpart ZZZZ no later than May 3, 2013.
12.0		CD	40 CFR Section 63.6603(a); 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.
13.0		CD	40 CFR Section 63.6605(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.
14.0		CD	40 CFR Section 63.6605(b); 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.
15.0		CD	40 CFR Section 63.6625(e); 40 CFR Section 63.6655(d); 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.
16.0		CD	40 CFR Section 63.6625(f); Minn. R. 7011.8150	The Permittee must install a non-resettable hour meter if one is not already installed.
17.0		CD	40 CFR Section 63.6625(h); 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.



COMPLIANCE PLAN **CD-01**

Facility Name: Western Lake Superior Sanitary District

Permit Number: 13700112 - 008

18.0		CD	40 CFR Section 63.6655(a); Minn. R. 7011.8150	<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>
19.0		CD	40 CFR Section 63.6655(e); Minn. R. 7011.8150	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.
20.0		CD	40 CFR Section 63.6655(f); Minn. R. 7011.8150	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.
21.0		CD	40 CFR Section 63.6660; 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>

Attachment 3

Biogenic CO₂ Deferral Policy Memo

DATE: November 3, 2011

TO: Affected Air Permit Applicants

FROM: Jeff J. Smith
Division Director
Industrial Division

PHONE: 651-757-2735

SUBJECT: **Program Management Decision Memorandum: Implementation of U.S. Environmental Protection Agency's Deferral for Carbon Dioxide Emissions From Bioenergy and Other Biogenic Sources Under the Prevention of Significant Deterioration and Title V Programs****PURPOSE**

The purpose of this memorandum is to provide guidance to owners and operators of sources with biogenic Carbon Dioxide (CO₂) emissions, as defined by federal rule, who submit permit applications that include greenhouse gases. This guidance will apply from the date of this memorandum until the Minnesota Pollution Control Agency (MPCA) has promulgated a final permanent rule to implement the U.S. Environmental Protection Agency's (EPA) requirements for permitting greenhouse gases. The MPCA promulgated a temporary rule for permitting greenhouse gases on January 24, 2011. Temporary rules are effective for a period of two years. The MPCA must therefore undertake additional rulemaking to make the temporary rules permanent. The permanent rule will address biogenic CO₂ emissions in addition to permit requirements for other greenhouse gas emission sources.

BACKGROUND

On June 3, 2010, the EPA published the final Prevention of Significant Deterioration (PSD) and Title V Greenhouse Gas (GHG) Tailoring Rule (75 FR 31514). This new rule set permit applicability thresholds for GHG emissions for new and existing industrial facilities. New sources and modifications to existing sources were regulated as of January 2, 2011, and existing sources were regulated as of July 1, 2011. The Tailoring Rule did not provide any exemptions from the permit applicability thresholds for sources of biogenic CO₂ emissions.

Based on comments received and a petition on the subject of biogenic CO₂ emissions, the EPA decided that further analysis of permitting requirements for biogenic CO₂ emissions. Consequently, the EPA decided to defer including biogenic CO₂ emissions in permitting while it studied the question further. Biogenic CO₂ emissions will be excluded when determining whether a stationary source meets the PSD and Title V applicability thresholds. This deferral lasts until July 21, 2014. The EPA elaborates on its deferral, published on July 20, 2011 (76 FR 43492):

This action defers for a period of three (3) years [from the date of publication] the consideration of CO₂ emissions from bioenergy and other biogenic sources (hereinafter referred to as "biogenic CO₂ emissions") when determining whether a stationary source meets the PSD and Title V applicability thresholds, including those for the application of BACT. Stationary sources that combust biomass (or otherwise emit biogenic CO₂ emissions) and construct or modify during the deferral period will avoid the application of PSD to the biogenic CO₂ emissions resulting from those actions. This deferral applies only to biogenic CO₂ emissions and does not affect non-GHG pollutants or other GHGs (e.g., methane (CH₄) and nitrous oxide (N₂O)) emitted from the combustion of biomass fuel. Also, this deferral only pertains to biogenic CO₂ emissions in the PSD and Title V

programs and does not pertain to any other EPA programs such as the GHG Reporting Program.

APPLICABILITY

According to the EPA (76 FR 43493), the following types of sources may now exclude biogenic CO₂ from permit applicability determinations.

Biogenic CO₂ emissions are defined as emissions of CO₂ from a stationary source directly resulting from the combustion or decomposition of biologically-based materials other than fossil fuels and mineral sources of carbon. Examples of “biogenic CO₂ emissions” include, but are not limited to:

- CO₂ generated from the biological decomposition of waste in landfills, wastewater treatment or manure management processes.
- CO₂ from the combustion of biogas collected from biological decomposition of waste in landfills, wastewater treatment or manure management processes.
- CO₂ from fermentation during ethanol production or other industrial fermentation processes.
- CO₂ from combustion of the biological fraction of municipal solid waste or biosolids.
- CO₂ from combustion of the biological fraction of tire-derived fuel.
- CO₂ derived from combustion of biological material, including all types of wood and wood waste, forest residue, and agricultural material.

The main impact is on the calculations of the potential to emit and actual emissions of GHGs. As noted in the quotation under the “Background” section, CO₂ emissions are excluded from potential to emit calculations under the deferral, but methane and nitrous oxide must continue to be included in the calculations. Also, this does not affect any other EPA programs that pertain to stationary sources, such as New Source Performance Standards (NSPS) or the GHG Reporting Program.

MPCA GUIDANCE

The MPCA will implement the EPA rules for biogenic sources for PSD and Title V purposes through permanent rulemaking. This rulemaking is in process and expected to be completed in late 2012.

The MPCA’s temporary rules do not exclude biogenic CO₂. In the interim period until permanent rules are promulgated, the MPCA will implement as a policy the EPA’s regulations for permit applicants, as delineated in 40 CFR § 51.166(b)(48)(ii)(a); 40 CFR § 52.21(b)(49)(ii)(a); 40 CFR § 70.2 – the definition of subject to regulation, paragraph (2); and 40 CFR 40 CFR § 71.2 – the definition of subject to regulation, paragraph (2). These revised regulations revise the definition of subject to regulation to include the following (76 FR 43507):

...prior to July 21, 2014, the mass of the greenhouse gas carbon dioxide shall not include carbon dioxide emissions resulting from the combustion or decomposition of nonfossilized and biodegradable organic material originating from plants, animals, or micro-organisms (including products, by-products, residues and waste from agriculture, forestry and related industries as well as the nonfossilized and biodegradable organic fractions of industrial and municipal wastes, including gases and liquids recovered from the decomposition of non-fossilized and biodegradable organic material).