

**WESTERN LAKE SUPERIOR SANITARY DISTRICT  
ORDINANCE ESTABLISHING STANDARDS  
FOR REDUCTION OF INFLOW AND INFILTRATION**

**Amended June 26, 2017**

**Article I: Authority and Purpose.**

Section 1.1 The Western Lake Superior Sanitary District (“WLSSD”) was established by the Laws of the State of Minnesota as codified in Minn. Stat. Chapter 458D. WLSSD owns and operates a network of interceptor sewers and a regional treatment facility (collectively referred to as the Treatment Works) for the collection and treatment of municipal and industrial wastewater from sources within WLSSD boundaries. To ensure the best use of the Treatment Works, WLSSD regulates and enforces its responsibilities through a series of ordinances, agreements and enforcement mechanisms. The capacity allocation system regulates the distribution of finite Treatment Works capacity among customers. This Ordinance establishes standards for the reduction of Inflow and Infiltration (“I & I”) from municipal wastewater customers through the requirement of the preparation and implementation of I&I ordinances, annual reduction plans and progress reports, elimination of I & I through Sump Pump and Sewer Service Lateral compliance programs for structures and the enforcement of penalties for failure to comply. This Ordinance will protect the health, welfare and safety of the public and the environment by requiring the reduction of I & I, minimizing the risk of overflows in the wastewater conveyance and treatment system (“WCTS”).

**Article II: Definitions.**

- Section 2.1 “*Actual Peak Flow*” means the highest one-hour wastewater flow rate measured in million gallons per day (MGD) actually discharged by a Municipal Customer within any individual clock hour (60-minute average) of any calendar day (24-hour period) based on measurement determined and recorded by WLSSD.
- Section 2.2 “*Average Dry Weather Flow*” means the flow in a sanitary sewer during periods of dry weather in which the sanitary sewer is under minimum influence of inflow and infiltration. The average daily flow in the month of January is typically used.
- Section 2.3 “*Permitted Peak Flow*” means the highest one-hour wastewater flow rate measured in million gallons per day (MGD) allowable per User within any individual clock hour (60-minute average) of any calendar day (24-hour period) as identified in the Customer’s Capacity Allocation Permit. This value is determined by averaging on a five-year basis the Average Dry Weather Flow for each municipal customer and applying the wet weather Municipal Peak Flow Standards as included in the WLSSD Comprehensive Wastewater Services Plan. For industrial customers the Permitted Peak Flow rate is based upon the remaining hydraulic capacity of the WLSSD system.

- Section 2.4 “*Capacity Allocation Permit*” means the permit issued by WLSSD and signed by a Customer which sets wastewater discharge limits for the Customer.
- Section 2.5 “*Capacity Availability Fee*” means the WLSSD fee for new connections to, and estimated expanded uses of, the WCTS.
- Section 2.6 “*Certificate of Sump Pump or Foundation Drain Disconnection I&I Compliance*” means a certificate issued by the Municipal Customer to verify that a building being sold, transferred or otherwise conveyed, or subject to any of the requirements, including a Capacity Availability Fee payment, as provided in Section 7.3 A, is not contributing Inflow and Infiltration to the WCTS.
- Section 2.7 “*Executive Director*” means the person occupying the position of Executive Director of WLSSD or the designee of the Executive Director.
- Section 2.8 “*Foundation Drain*” means an exterior drainage system installed at the footings of a building foundation that collects and diverts water to daylight or to a catch basin where it is pumped to daylight or a storm drain.
- Section 2.9 “*Inflow and Infiltration*” or “*I&I*” means *infiltration*, which is water that seeps or flows into a damaged or leaking portion of the WCTS from the surrounding soil; and *inflow*, which is unwanted water, such as rainwater or melting snow, which enters the WCTS through a direct connection. I&I describes the overall problem of rainwater and groundwater contributing to wastewater flows in the WCTS.
- Section 2.10 “*MGD*” means million gallons per day.
- Section 2.11 “*Municipal Customer*” or “*Customer*” means the cities of Duluth, Proctor, Hermantown, Cloquet, Carlton, Scanlon, Rice Lake and Wrenshall, the townships of Thomson, Midway and Twin Lakes, the Pike Lake Area Wastewater Collection System, the Duluth/North Shore Sanitary District, the Village of Oliver, Wisconsin, the Knife River-Larsmont Sanitary District, and any other governmental entity which discharges wastewater directly to the WLSSD wastewater conveyance system and is not a wastewater customer of another governmental entity.
- Section 2.12 “*New Use*” means the development or redevelopment of a property for a different residential, business or industrial use evidenced by the requirement of a building or plumbing permit issued by a Municipal Customer.

- Section 2.13 “*Sewer Connection*” means the addition of a new use to a municipal sewer system resulting in the increased discharge of wastewater into this system without extending or altering the existing public sanitary sewer infrastructure.
- Section 2.14 “*Sewer Extension*” means extending, expanding or altering sanitary sewer mains, trunks, interceptors or other sewer projects that may prepare for future expansions or services, even if no new flow is initially added. This may include increasing the size of an existing pipe or installing additional pumps or larger pumps to increase pumping capacity.
- Section 2.15 *Sewer Service Lateral* or *Service Lateral* means the privately owned pipeline connecting a structure to the publicly owned sewer main or interceptor.
- Section 2.16 “*Sump Pump*” is a pump used to remove water that has accumulated in a water collecting sump basin, commonly found in the basement of a structure.
- Section 2.17 “*Wastewater Collection and Transmission System*” (“WCTS”) means the system for wastewater collection and transmission, including all pipes, force mains, gravity sewer lines, lift stations, pumping stations, and appurtenances owned and operated by WLSSD and the municipally owned portion of the system which collects wastewater from residences and businesses and conveys it to the portion of the system operated by WLSSD.

### **Article III: Peak Flow Compliance.**

Section 3.1 Municipal Reduction. A Municipal Customer must take appropriate action to ensure that its Actual Peak Flow is reduced to a level no higher than the Permitted Peak Flow specified in the Municipal Customer’s Capacity Allocation Permit.

### **Article IV: Reporting Requirements**

Section 4.1 Any Municipal Customer with a wastewater treatment Capacity Allocation Permit must file the following reports with the Executive Director.

A. Permitted Peak Flow Exceedance Report. If a Municipal Customer has an Actual Peak Flow which exceeds the Municipal Customer’s Permitted Peak Flow as described in Article III, WLSSD will notify the Municipal Customer of the exceedance in writing quarterly each year. Within 30 days of being notified of a Permitted Peak Flow exceedance by WLSSD, the Municipal Customer must provide a written evaluation of what caused the exceedance(s), what actions will be taken to correct the exceedance(s) and when these actions will be completed. The written evaluation must provide written verification that the plans and timelines detailed in the Annual Report will eliminate further exceedances.

If the Municipal Customer has a release of wastewater to the environment from any part of the municipally owned portion of the WCTS, then the Municipal Customer must call the Minnesota Duty Officer as required by Minnesota Statute Section 115.061 as soon as possible and complete an Incident Report as described below:

Incident Report. The incident report must be submitted to WLSSD by the 10<sup>th</sup> calendar day of the month immediately subsequent to the month that the release occurred. The report must include:

1. The Duty Officer report number;
2. If the Municipal Customer has been notified by the MPCA that a release sampling report must be filed along with the Duty Officer report, then a copy of the release sampling report must be included with the Incident Report;
3. The date and time the release began and ended;
4. The location of the release; and
5. The estimated volume of the release.

B. Annual I&I Reduction Plan and Progress Report (“Annual Report”). By February 15<sup>th</sup> of each year each Municipal Customer must submit an Annual Report. This report must include an engineer’s certification and be verified by an authorized representative of the Customer. The Annual Report must contain the following information:

1. Detailed documentation of I & I identification and reduction activities carried out during the reporting year and amount of funds expended. This report should identify the roof drain and footing drain disconnections, manhole covers plugged and sealed, cross connections eliminated, service laterals lined, manholes rehabilitated or replaced, a description of sanitary sewer lines rehabilitated or replaced and other reduction activities. This report should also include the linear feet of sanitary sewer televised, smoke test results, flow monitoring information, footing drain inspection reports, and other I & I identification tasks completed. This report must also include a summary of the previous year’s budget for I & I reduction activities, comparing planned expenses to actual expenses and explaining the variance.
2. Detailed plans of I & I identification and reduction activities that the municipality will complete during the upcoming calendar year. These plans should include activities, expenditures, timelines and milestones.
3. A copy of the most recent version of the Municipal Customer’s sewer ordinance, and a summary of any proposed revisions for the next 12 months. The sewer ordinance must be in conformance with the WLSSD Model Ordinance Regulating the Use of Public and Private Sewers.

4. Copies of any information distributed to the public concerning I & I reduction.
5. A list of Permitted Peak Flow exceedances and wastewater overflows that occurred within the municipality during the previous calendar year with detailed plans and timelines to correct the exceedances and overflows.
6. A quantitative assessment of I & I reduction progress accomplished during the reporting year.
7. A summary of any new connections to the public sanitary sewer system including an updated public sanitary sewer system map.
8. A summary of key maintenance activities and standards utilized to improve or maintain the integrity of the collection system.
9. All information required in Sections 7.2 D and 7.3 D of this Ordinance.

Section 4.2 Adequacy of Submittals. WLSSD will review Submittals (Permitted Peak Flow Exceedance Report, Incident Report, and Annual Report (collectively referred to as “Submittals”)) to determine if the Customer has met all requirements of Section 4.1 above. The review will be completed within 45 days after Submittal is received by WLSSD. If notified in writing by WLSSD that the Submittal does not satisfy Section 4.1 requirements, a corrected Submittal must be filed by the Customer within 45 days of the notice.

#### **Article V: Penalties**

Section 5.1 Noncompliance. If a Customer fails to file a Submittal within the deadlines established, fails to substantially comply with the I & I reduction activities and timelines set forth in its Submittals, fails to timely comply with any of the requirements in Article VII or is not making substantial progress in reducing its Actual Peak Flow to the limits described in Article III, then the Customer is noncompliant and subject to one or more of the following penalties as determined by the Executive Director:

- A. No extension and/or connections of Customer’s sewer lines will be permitted until such time that the Customer is in compliance with the provisions of this Ordinance; or
- B. Extensions and/or connections of Customer’s sewer lines may be limited and subject to the terms or conditions set forth by the Executive Director until Customer is in compliance with the provisions of this Ordinance.
- C. A civil penalty of up to \$500 per day, beginning on the first day of noncompliance and continuing until the Customer is in compliance with the provisions of this Ordinance.

Section 5.2 Notice of Noncompliance. WLSSD will send written notice to a Customer of a finding of Noncompliance, setting forth the basis for the determination, any

penalties imposed on the Customer, and the actions the Customer must take to comply with the Ordinance.

Section 5.3 Noncompliance Resulting in a Release. If the Executive Director finds a Customer is noncompliant with this Ordinance and the Customer Permitted Peak Flow exceedance as described in Article III results in a release of wastewater to the environment, then the Executive Director may assess a civil penalty of up to \$1000 for each such Permitted Peak Flow exceedance. These penalties are in addition to the penalties set forth in Section 5.1 above. If multiple Customers located upstream of a release location contributed Actual Peak Flow exceeding that Customer's Permitted Peak Flow as described in Article III and are noncompliant, then each Customer will be assessed the full penalty.

Section 5.4 Notice and Payment. WLSSD will send written notice to a Customer of a civil penalty under Section 5.3, setting forth the date of the violation, approximate time when the violation occurred, Actual Peak Flow at the time of violation, and the amount the Actual Peak Flow exceeded the Permitted Peak Flow. Prior to the end of the calendar year, WLSSD will notify each Customer which has received a notice of violation that year of the total amount of the penalty due for that year. The penalty shall be paid no later than ninety (90) days from the date of the notice of the total penalty due. Extensions to the payment period may be granted by the Board, subject to a showing of hardship by the applicant.

#### **Article VI: Appeal**

Section 6.1. Any Municipal Customer can challenge by written notice of appeal a decision of the Executive Director made under this Ordinance. The appeal will be decided by the Board. In the notice of appeal the Customer must provide the Board with a written explanation of the reasons supporting the appeal and setting forth the requested relief. The written notice of appeal must be submitted to the Executive Director within thirty (30) days of the date of the written notice of the finding of noncompliance or the written notice of the imposition of a penalty or the written notice of any other decision by the Executive Director under this Ordinance which is adverse to the Customer. The appeal hearing will follow the process set forth in Section 3.6 of the WLSSD Solid Waste Ordinance, unless the parties mutually agree to an alternate appeal hearing process which is defined in writing and signed by both parties.

#### **Article VII: Sewer Service Lateral and Sump Pump or Foundation Drain Disconnection Compliance Programs**

Section 7.1. Written Plan. Each Municipal Customer shall provide to the Executive Director by no later than February 15, 2019 a written Plan describing how the Municipal Customer will satisfy the requirements of this Article. This plan can be submitted separately or included as part of the Annual Report reference in Section IV Part B. The written Plan must address both Sump Pump or Foundation Drain Disconnection and Sewer Service Lateral inspection and correction. The Executive Director will review the Plan and either approve or reject the Plan based on its compliance with the requirements of Article VII. If rejected, the Executive Director will notify the Municipal Customer of the deficiencies in the Plan. An

amended Plan must be submitted by the Municipal Customer within 45 days of notice of the deficiency.

Section 7.2. Sewer Service Lateral Compliance Program. Each Municipal Customer must adopt and enforce an effective Sewer Service Lateral inspection and correction program for structures connected to the WCTS which is designed to prevent any building or structure from contributing Inflow and Infiltration to the public wastewater collection system, regardless of the manner in which the I & I is entering the Sewer Service Lateral.

- A. The inspection and correction program must be based on one or more of the following:
  - 1. *Property Transactions.* A program to inspect and correct Sewer Service Laterals upon a change in real property title or property ownership with one or more buildings or structures located thereon, or upon a significant change in use of one or more buildings or structures located thereon, or upon certain modifications to the plumbing system, so that no such building or structure is contributing Inflow and Infiltration to the WCTS.
  - 2. *Annual Inspection.* A program developed by the Municipal Customer to systematically inspect and correct all Sewer Service Laterals by identifying the number and location of inspections to be done each year to verify that no building or structure is contributing Inflow and Infiltration to the WCTS.
- B. The inspection and correction program must be structured so that the compromised Sewer Service Laterals contributing Inflow and Infiltration to the WCTS within the jurisdiction of the Municipal Customer are corrected within a reasonable period of time, as determined in the discretion of the Executive Director.
- C. The inspection and correction program must include the following components:
  - 1. An annual targeted number of Sewer Service Laterals to be inspected each year and the percentage of the annual target related to the number of Sewer Service Laterals within the jurisdiction of the Municipal Customer.
  - 2. An annual targeted number of Sewer Service Laterals to be corrected or repaired each year.
  - 3. The method used to inspect the Sewer Service Laterals (televising, pressure test, etc.) and the standard to be applied to determine if a Sewer Service Lateral is compliant, including the following:
    - (a) Free of roots, grease deposits, and other solids which may impede or obstruct flow,

- (b) All joints must be watertight and all pipes shall be intact and not deformed,
  - (c) Free of any structural defects such as cracks, breaks, openings or missing portions,
  - (d) All clean-outs shall be securely sealed with a proper cap or approved overflow device at all times, and
  - (e) There shall be no non-sanitary sewer connections to the Sewer Service Lateral or any plumbing that connects thereto.
  - (f) As an alternative, the inspection of the Service Lateral can be conducted by televising the Municipal Customer main sewers during wet weather events to identify I&I from Service Laterals.
- 4. The method used by the Municipal Customer to target Sewer Service Laterals for repair (point of sale, during planned municipal road or sewer work, etc.).
  - 5. A description of the enforcement system used by the Municipal Customer to deter noncompliance.
  - 6. A description of the system used by the Municipal Customer to address repairs needed on shared or common Sewer Service Laterals.
- D. The following information shall be included in the Annual Report submitted by the Municipal Customer pursuant to Article IV:
- 1. The location by address of the Sewer Service Lateral corrections completed during the reporting period.
  - 2. An estimate of the total number of Sewer Service Laterals within the jurisdiction of the Municipal Customer.
  - 3. The address of Sewer Service Laterals inspected by the Municipal Customer during the reporting period and found to be compromised.
  - 4. The address of Sewer Service Laterals inspected by the Municipal Customer during the reporting year which were found to be in compliance with Sewer Service Lateral program requirements.

Section 7.3. **Sump Pump or Foundation Drain Disconnection Compliance Program.** Each Municipal Customer must adopt and enforce an effective inspection and correction program which must include:

- A. A requirement that the owner of any dwelling structure, commercial building structure or other building or land upon which such buildings are located which are connected to the WCTS, shall obtain a Certificate of Sump Pump or Foundation Drain Disconnection I&I Compliance from the Municipal Customer (i) prior to selling, transferring, or conveying an interest or entering into an agreement to sell, transfer or otherwise convey an interest in such property, or (ii) upon a determination that the owner of a structure with a new or existing connection to the WCTS must pay a Capacity Availability Fee as a result of a New Use or anticipated wastewater flow increase calculated in accordance with the *WLSSD Capacity Availability Fee Procedures Manual* in effect at the time of the calculation.
- B. A requirement that no owner of real estate described in subsection (A) above shall sell, transfer or otherwise convey an interest or enter into an agreement to sell, transfer or otherwise convey an interest in such property without either (i) presenting the prospective purchaser or grantee with a copy of a Certificate of Sump Pump or Foundation Drain Disconnection I&I Compliance for the subject property or (ii) entering into an agreement as provided in subsection (C) below.
- C. A requirement that property inspected and found to need a Foundation Drain disconnection but determined to have either no sump pump, a sump pump that is not in use, a sump pump that is malfunctioning or discharging into the WCTS, or a Foundation Drain or other source that is discharging I & I into the WCTS be corrected within 120 days of the transfer of the property. The Municipal Customer must have in place a process to compel the Sump Pump or Foundation Drain correction which may be either pursuant to an agreement between the parties together with the escrow of 125% of the repair costs, or pursuant to an alternate process designed to compel the correction.
- D. The following information shall be included in the Annual Report submitted by the Municipal Customer pursuant to Article IV:
1. The location by address of the structures where Sump Pumps or Foundation Drain disconnections were installed during the reporting period.
  2. The total number of Sump Pump installations or Foundation Drain disconnections certified by the Municipal Customer to be in compliance.
  3. The address of structures inspected by the Municipal Customer during the reporting period and found to require Sump Pump installation.
  4. The address of structures inspected by the Municipal Customer during the reporting period and found to require Foundation Drain disconnections other than through use of a Sump Pump.

5. The address of structures inspected by the Municipal Customer during the reporting year which were found to be in compliance with Sump Pump or Foundation Drain disconnection program requirements.

Section 7.4. Record Retention. The inspection records and all documents relating to the requirements of Article VII shall be retained by the Municipal Customer and available to the Board for a minimum of 7 years and not less than the period required by Minnesota law for public records retention for these documents.

Section 7.5 Enforcement Date. The approved Inflow and Infiltration compliance Plan for each Municipal Customer must be in effect and enforceable no later than February 15, 2020. If the Municipal Customer fails to meet the deadline in this Section, the Municipal Customer is in Noncompliance and subject to the penalties in Article V.

**Article VIII: Effective Date**

This amended Ordinance is effective January 1, 2018.

Dated: \_\_\_\_\_, 2017.

SANITARY BOARD OF THE WESTERN  
LAKE SUPERIOR SANITARY DISTRICT

By: \_\_\_\_\_  
Ruth Janke, Chair

By: \_\_\_\_\_  
David Manderfeld, Secretary