

South Lyons Township Sanitary District
PRIVATE SECTOR PROGRAM
July 2019

In recognition of the fact that a large portion of excessive wet weather flow in sanitary sewer systems comes from the privately-owned sector of the sanitary sewer system, the South Lyons Township Sanitary District has developed a Private Sector Program (PSP). This PSP is intended to prohibit new illegal clear water connections to the sanitary sewer system, compel property owners with illegal clear water connections or sources of excessive infiltration to eliminate them, establish a public information program to enhance awareness of the risks posed by illegal clear water connections, and establish a long-term program under which illegal connections that are costly to correct may be removed over time.

The components of the South Lyons Township Sanitary District (SLTSD or the District) PSP are described below:

1. Staffing:

The PSP will be overseen by the SLTSD Superintendent. The Superintendent will be trained in how to conduct internal and external private property inspections for sources of infiltration and inflow. The Superintendent will receive training on how I/I sources can be identified using smoke testing and dyed water testing, how to document findings from private property inspections. Smoke testing and dyed water testing of multiple private properties for I/I studies may be outsourced to The District's Consulting Engineer, at the direction of the Board. The Superintendent has the authority to determine when a private property should be inspected. On average, the Superintendent of Public Works will spend eight (8) hours per month on reducing I/I.

2. Local Authority:

The Village has adopted the following ordinances allowing inspections of private property for illegal connections to the sanitary sewer system. See *Exhibit A*

- CHAPTER 1: PERMITS, DESIGN, USE AND OPERATION OF SANITARY SEWERS
ARTICLE V: Powers and Authority of Inspectors
 - Section 1 Authorizes inspections of private properties.
 - Section 3 Authorizes entry into private property for the purposes of, but not limited to, inspection, observation, measurement, sampling, repair and maintenance of any portion of the sewage works lying within said easement.
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- CHAPTER 2: EXTRANROUS FLOWS
 - Section 6 The District may, at any time, make visual outside inspections of all properties within the District, with specific attention to downspouts, roof drains and other visible or outside connections. The District may, at any time, enter into the premises and make or assist in the making of additional inspections of the premises to ascertain if illegal connections are present. See *Exhibit A*

3. Inspection Program:

The District will inspect properties as needed for illegal connections to the sanitary sewer system when District Superintendent needs to enter a home to address complaints related to flooding, sewers, water service, or utilities.

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A private property is determined to be non-compliant if it has any of the following:

1. Low Cost – High Priority
 - a. A directly connected downspout
 - b. A poorly disconnected downspout that allows substantial leakage of storm water into the sanitary sewer
 - c. A cleanout or sanitary manhole missing a cover
 - d. A cleanout or sanitary manhole with a cover that allows water inside
 - e. A storm water sump pump that discharges to the sanitary sewer

If a private property has none of the above defects, but has any of the following, it shall be considered non-compliant:

2. High Costs - High Priority
 - a. A foundation drain that discharges directly or indirectly to the sanitary sewer
 - b. An area drain
 - c. Window well drains
 - d. Driveway drains
 - e. A sanitary sump that also serves as a sump for groundwater, when no other sump for groundwater is present
 - f. A leaky sewer lateral

The District's goal is to inspect all properties with basements once every 20 years.

A sample property inspection report form is attached. See *Exhibit B*

4. Non-Compliance Correction:

When a property is found to have Low-Cost – High Priority defects, the District will send a letter to the property owner within two weeks of the inspection describing the non-compliant condition(s), that it is to be corrected within 90 days, a response to the District is required within fourteen 14 days notifying when they plan to have it corrected, and they are required to notify the District when the non-compliant conditions are corrected. The District will send inspectors to the private property within ten (10) working days to inspect the correction.

When properties are found to have High Cost – High Priority defects, the District will send a letter to the property owner within two weeks of the inspection describing the non-compliant condition(s), that it is to be corrected and a response to the District is required within 14 days notifying when they plan will have it corrected, and they are required to notify the District when the non-compliant conditions are corrected. The letter will encourage the property owner to correct the condition. The letter will also inform the property owner that in the event of substantial improvement to the property, or sale of the property the illegal conditions must be corrected.

Upon being notified of the illegal connection being corrected, the Superintendent will visit the private property within ten (10) working days to inspect the correction.

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5. Long Term Program to Address High Cost I/I Sources:

The District will maintain records of each property that is found to have high-cost I/I sources during inspections. This list will include all properties found to have high-cost I/I sources during the first five years of the IICP. The type of the I/I source or sources (footing drain, area drain, driveway drain, window well drain, sump pits collecting groundwater that discharge to the sanitary sewer, leaky lateral) will be recorded with the date of the inspection.

The District's ordinances requiring correction of illegal I/I source in conjunction with substantial improvements to properties will result in removal of such sources over time. Similarly, the District's ordinance requiring replacement or lining of laterals in conjunction with tear downs will also reduce I/I in the system over time. When some or all a property's high-cost I/I sources are corrected, the District will update the list to include the dates of the correction work.

The list of properties with high-cost I/I sources will be updated versions as changes are made to the properties. Before an existing account will be transferred to a new property owner it will be responsibility of the District office staff to consult the list of properties with high-cost I/I sources. If the property is on that list a letter will be mailed to the new property owner within 30 days notifying the owner of the presence of high-cost I/I sources and requiring the defect to be repaired before the property can be occupied

6. Enforcement:

If the non-compliant conditions are not addressed within ninety (90) days, other than when a violation notice is issued after September 1, in which case the non-compliant condition must be addressed in 120 days, a violation notice will be issued to the property owner which requires the condition to be corrected in fourteen (14) days and requires payment of a penalty. The violation notice will state that in the event of continued non-compliance, if the conditions are not addressed within 14 days, a second violation notice will be issued. The District may elect to initiate a suit against non-compliant property owners or place a lien on the property.

The lien will not be removed until the illegal connection is corrected. If/when the District begins a program of directly funding some private property improvements, enforcement measures for non-compliance will be reviewed at that time.

7. Funding:

All private property improvement expenses shall be borne by the private property owner. Should grant or loan funding become available from regional, state or federal agencies, the District will investigate those potential sources to supplement the PSP.

8. Public Information:

The District has a brochure titled A Quick Guide to Homeowners Infiltration and Inflow Sources and post information on its website on the following topics; Sources of Clear Water from Private Property, Why Property Owners Should be Concerned, Actions Property Owners Can Take to Correct the Problems

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This brochure will be included with letters sent to property owners in areas experiencing SSOs and BBs, as well as letters notifying property owners that they have illegal connections to the sanitary sewer. The brochures will be available at Public Works, Village Hall and handed out at public meetings as appropriate. See *Exhibit C*.

Exhibits:

Exhibit A - Select Village Ordinances Regarding the Public Sewer System

Exhibit B - Sample Inspection Checklist

Exhibit C - Village I/I Brochure

SOUTH LYONS TOWNSHIP SANITARY DISTRICT



Updated: July 22, 2016

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**CHAPTER 1: PERMITS, DESIGN, USE AND OPERATION OF SANITARY
SEWERS**

An Ordinance Regulating the Use of Public and Private Sewers and Drains, the Establishment of Permitting Procedures and Fee Collection on, the Installation and Connection of Building Sewers, the Discharge of Waters and Wastes into the Public Sewer System, and the Provision for Penalties for Violation of Requirements. (Ordinance No. 1996-4, as amended by Ordinance No. 2006-04 and Ordinance No. 2005-2).

ARTICLE I: General Provisions

Section 1. It shall be unlawful for any person or entity to place, deposit, or permit to be deposited in an unsanitary manner on public or private property within any area under the jurisdiction of the South Lyons Township Sanitary District, any human or animal waste, food processing waste, manufacturing waste, or other such objectionable material that should otherwise be discharged into a sanitary facility for proper treatment and disposal.

Section 2. The owner of all buildings or properties used for human occupancy, employment, recreation, or other purposes situated within the South Lyons Township Sanitary District and abutting on any right-of-way in which there is now located, or may in the future be located, a public sanitary sewer of the South Lyons Township Sanitary District, is hereby required at his expense to install suitable sanitary facilities therein, and to properly connect such facilities directly with the public sewer, in accordance with the provisions of this Ordinance, within ninety (90) days after date of official notice to so connect.

Section 3. It shall be unlawful to discharge any sewage or other polluted waters to any natural drainage outlet or surface water conveyance system within the South Lyons Township Sanitary District.

Section 4. All disposal made by any person into the sanitary sewer system shall be considered as unlawful, unless those discharges are in compliance with Federal Standards, promulgated pursuant to the Federal Water Pollution Control Act, as amended; the standards of the State of Illinois; the standards of the Metropolitan Water Reclamation District of Greater Chicago; and the standards of the South Lyons Township Sanitary District.

ARTICLE II: Building Sewers and Connections

Section 1. No unauthorized person shall uncover, make any connections with, or opening into, use, alter, or disturb public sewer or appurtenance thereof without first obtaining a written permit from the South Lyons Township Sanitary District. The written permit conditions requirements are as specified in the permit documentation, (Reference attached Appendix B), or as otherwise stipulated by the Board of Trustees of the District.

Section 2. Except as otherwise herein set forth under this or other District Ordinances, all sewer construction within buildings with connections to the sanitary sewer system of the South Lyons

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and the Metropolitan Water Reclamation District of Greater Chicago. The owner shall bear the expense of all required measurements, analyses, and reporting. At such times as deemed necessary, the South Lyons Township Sanitary District and the Metropolitan Water Reclamation District of Greater Chicago reserve the right to take measurements and samples for analysis by an outside laboratory service.

Section 10. All measurements, test, and analyses of the characteristics of waters and wastes to which reference is made in this ordinance shall be determined in accordance with the latest edition of IEPA Division of Laboratories, Manual of Laboratory Methods, and shall be determined at the control manhole provided, or upon suitable samples taken at said control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected. Sampling shall be carried out by customarily accepted methods to reflect the effect of constituents upon the sewage works and to determine the existence of hazards to life, limb, and property.

The particular analyses involved will determine whether a twenty-four (24) hour composite of all outfalls of a premise is appropriate or whether a grab sample or samples should be taken. Normally, but not always, BOD and suspended solids analyses are obtained from 24-hour composites of all outfalls, whereas pH's are determined from periodic grab samples.

Section 11. No statement contained in this Article shall be construed as preventing any special agreement or arrangement between the South Lyons Township Sanitary District and the Metropolitan Water Reclamation District of Greater Chicago, and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the South Lyons Township Sanitary District and the Metropolitan Water Reclamation District of Greater Chicago for conveyance and treatment, subject to special fee payment therefore by the industrial concern, provided such payments are in accordance with Federal and State guidelines for such charges.

ARTICLE IV: Protection of Sewage Works from Damage

Section 1. No unauthorized person or business entity shall maliciously, willfully, or negligently break, damage, destroy, or tamper with any structure, appurtenance, or equipment which is a part of the sewage collection or treatment works.

Section 2. Any person(s) violating this Article shall be subject to arrest and prosecution to the full extent allowed by law. The cost for repair or replacement of damaged sewer facilities shall be recovered from the person(s) or entity determined to be responsible.

ARTICLE V: Powers and Authority of Inspectors.

Section 1. The Board of Trustees of the South Lyons Township Sanitary District and the Metropolitan Water Reclamation District of Greater Chicago, and other duly authorized employees or agents of the South Lyons Township Sanitary District and Metropolitan Water Reclamation District of Greater Chicago, the Illinois Environmental Protection Agency, and the

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United States Environmental Protection Agency, bearing proper credentials and identification, shall be permitted to enter all properties for the purposes of inspection, observation, measurement, sampling and testing in accordance with the provisions of this Ordinance.

Section 2. While performing the necessary work on private properties referred to in Article V, Section 1 above, the Board of Trustees or duly authorized employee or agent of the South Lyons Township Sanitary District and the Metropolitan Water Reclamation District of Greater Chicago, the Illinois Environmental Protection Agency, and the U.S. Environmental Protection Agency shall observe all safety rules applicable to the premises established by the company.

Section 3. The Board of Trustees and other duly authorized employees of the South Lyons Township Sanitary District bearing proper credentials and identification shall be permitted to enter all private properties through which the South Lyons Township Sanitary District holds a duly negotiated easement for the purposes of, but not limited to, inspection, observation, measurement, sampling, repair and maintenance of any portion of the sewage works lying within said easement. All entry and subsequent work, if any, on said easement shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved.

ARTICLE VI: Penalties

Section 1. Any person found to be violating any provision of this Ordinance, except Article IV, shall be served by the South Lyons Township Sanitary District with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations. The South Lyons Township Sanitary District may revoke any permit for sewage disposal as a result of any violation of any provision of this Ordinance.

Section 2. Any person who shall continue any violation beyond the time limit provided for in Article VI, Section 1, shall be guilty of a misdemeanor, and on conviction thereof shall be fined in the amount not exceeding \$1,000 dollars for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

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Exhibit 2- Property Inspection Form



SLTSD

South Lyons Township Sanitary District

South Lyons Township Sanitary District

Inspection #: _____ Inspection Date: _____
Address: _____ Inspected by: _____

GENERAL

1. Property Type: _____
2. Sanitary Plumbing Type: _____
3. Foundation Type: _____
4. Has the property experienced a sewer backup? _____
5. Has the property experience stormwater flooding? _____

EXTERNAL

6. Are there underground downspouts with no visible discharge location? _____
7. Does the property have outside drains? _____
 7a. If outside drains exist, record the number of each type:
 Area _____ Driveway _____ Patio _____
 Stairwell _____ Window Well _____

INTERNAL

8. Basement Dimensions: _____ x _____
9. Basement Grade: _____

EJECTOR PUMP:

10. Does the property have an ejector pump? _____
11. Is the ejector pit sealed? _____
12. Where does the ejector pump discharge? _____
13. Cover Type: _____
14. Check Valve _____

CLEARWATER SUMP

15. Does the property have a clearwater sump? _____
16. Where does the clearwater sump discharge? _____
17. Are there any visible sanitary utilities entering the clearwater sump, i.e. is it a combination sump? _____
18. Identify the type of drains entering the sump pit:

<input type="checkbox"/> Floor Drain	<input type="checkbox"/> Footing Drain	<input type="checkbox"/> Laundry Drain
<input type="checkbox"/> Bathroom	<input type="checkbox"/> Shower	
19. Is the bottom of the sump pit sealed? _____
20. Cover Type: _____
21. Check Valve: _____

INSIDE PIPING AND FLOOR DRAINS

22. Is there a direct connection between sanitary and clearwater piping? _____
23. Are there observable diverters? _____
24. Are there floor drains? _____
25. Is there a suspected footing tile connection? _____

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South Lyons Township Sanitary District

DYE TEST

26. Were dye tests performed? _____

26. List dye tests performed:

_____	Positive?	_____
_____	Positive?	_____
_____	Positive?	_____

COMMENTS: _____

NOTIFICATION CHECKLIST:

Letter: _____
1st Pass: _____
2nd Pass: _____
Final Notice: _____

Exhibit C - District I/I Brochure



**Metropolitan Water
Reclamation District
of Greater Chicago**

A Quick Guide for Homeowners

Infiltration and Inflow

Don't Flood Yourself! How to help prevent I&I

- ✓ Repair or replace broken or missing cleanout caps.
- ✓ Disconnect downspouts discharging to the sanitary sewer. Redirect their flow to a pervious area, storm sewer, or rain barrel. Rain Barrels are available at www.mwrd.org.
- ✓ Cover window wells to prevent rain and snow from entering window well drains.
- ✓ If your home has a stormwater sump pump, make sure it does not discharge to the sanitary sewer. A licensed plumber can check it and make any necessary modifications.
- ✓ Disconnect driveway drains from the sanitary sewer and direct their flow into a pervious area, to the storm sewer, or to your foundation drain as long as your foundation drain is not connected to the sanitary sewer system.
- ✓ Have your home's service lateral inspected and repair, rehabilitate, or have it replaced.
- ✓ Plan your landscaping to avoid root intrusion into sanitary sewer pipes.
- ✓ Check with your municipality about cost-sharing programs to help fund I&I reduction.

I&I: A Quick Guide for Homeowners

This pamphlet is an introduction to infiltration and inflow (I&I) which can cause flooding, sewer backups and overflows in sanitary sewer systems. Homeowners can use this guide to learn about ways to reduce I&I.

For more detailed information and other helpful resources, please visit mwrd.org or contact the MWRD at 312.751.3260.



SLTSD
South Lyons Township Sanitary District

South Lyons Township Sanitary District

Contact Information:

Name: Ryan Christensen
Title: Superintendent
Phone #: (847) 404-5949



**Metropolitan Water Reclamation
District of Greater Chicago**

Board of Commissioners

Karl K. Steele <i>President</i>	Cameron Davis
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	Debra Shore
	Mariyana T. Spyropoulos

mwrd.org 312.751.6633



For More Information

please visit mwrd.org or contact the MWRD at 312.751.3260

What is Infiltration and Inflow?

Infiltration and inflow (I&I) is clear water that enters into the sanitary sewer system that is not meant to be there. Separate sanitary sewer and stormwater drainage systems are designed to have sanitary sewage directed into one system and stormwater into the other.

Negative Impacts of I&I

I&I reduces capacity in sewers intended for sanitary sewage. When I&I enters the sanitary sewer, basement backups may occur which can cause extensive property damage. I&I can also cause sewage to flow out of manholes onto the ground, referred to as sanitary sewer overflows (SSOs).

Since basement backups and SSOs contain untreated sewage, they introduce risks to human health and can cause environmental pollution. Under state law, SSOs are illegal. I&I can overburden the Metropolitan Water Reclamation District of Greater Chicago's (MWRD's) wastewater reclamation plants which may result in untreated wastewater being discharged into the environment.

MWRD's I&I Control Program

All agencies that own separate sanitary sewer systems within the MWRD must comply with the MWRD's I&I Control Program. These agencies must complete short term requirements and develop a long term operation and maintenance program.

As part of the short term requirements, agencies must assess the condition of the public sanitary sewer system and begin repairing major I&I sources. Under the long term operation and maintenance program,

agencies must establish a systematic inspection, rehabilitation and replacement program for public sewers and continuously make efforts to reduce I&I flows that originate from private property.

What Homeowners Can Expect

A large amount of I&I comes from privately owned portions of a sanitary sewer system. As such, agency representatives may need to

access private property to check for sources of I&I and to verify that identified sources have been properly corrected.

For example, as part of the short term requirements, agencies must inspect for major I&I sources from private property such as downspouts discharging to the sanitary sewer, broken or missing cleanout caps and uncovered window wells.

Under the long term operation and maintenance program, agencies must have a program to conduct internal and external private property inspections for I&I sources.

TYPICAL SOURCES OF INFILTRATION AND INFLOW

