

PROPOSED FOR PUBLIC HEARING AND COMMENT

Rules and Regulations

For the control and elimination of the discharge of storm water or groundwater through illicit connections to the City Sanitary Sewer System.

Section 1. Purpose

The City Sanitary Sewer System is designed to accommodate wastewater flows and is not designed to carry and treat storm water or groundwater. However, storm water and groundwater (often referred to as Inflow and Infiltration or I/I) reach the sanitary sewer system under wet weather conditions in such volume to cause the system to surcharge and overflow untreated wastewater (known as a Sanitary Sewer Overflow or SSO) to the river in violation of state law. The City has entered a consent order with the Michigan Department of Environmental Quality to undertake a major SSO control program. Paragraph 3.7 of that order requires the City to adopt Rules and Regulations to:

“... ban the construction and connection of potential public and private I/I sources to the City’s sewerage system that are not strictly approved by the City and other applicable local, state or federal permitting authorities, including, but not limited to footing drains, rooftop drains and sump pumps; the Rules and Regulations shall list policies and standards for the elimination of existing illicit I/I sources; and the Rules and Regulations shall list an enforcement procedure that the City shall undertake if new illicit connections are discovered.”

The purpose of these rules is to more clearly set forth City Code provisions that prohibit illicit I/I connections to its sanitary sewer system and provide notice as to the procedures the City will undertake to enforce the ordinance provisions. The intent is to strictly enforce the ordinance provisions to assure no new illicit connections or discharges are made to the sanitary sewer system. The City recognizes that certain connections, such as older gravity footing drain connections, though illicit today, were permitted prior to the 1970s. In such cases the City will first work with such property owners to assist them in complying with the current ordinance.

Section 2. Authority and City Code References

The Authority for these Rules and Regulations is provided under Section 34-101 and Section 34-203(a) of the Owosso City Code (see Appendix 1).

These Rules and Regulations are to implement existing sections of Article IV of Chapter 34 of the Owosso City Code, which are reprinted under Appendix 2.

Section 3. New connections to the City Sanitary Sewer System

New connections to the City sanitary sewer system shall only be made following application for such service on the forms provided by the City and payment of the appropriate connection charges and inspection fees and deposit or performance bond.

New service connections, if permitted, in floodplain areas or low-lying areas where the sewer system is subject to surcharging, shall not provide gravity service to drains or fixtures below the 100-year floodplain elevation, and shall be maintained watertight below such elevation.

In addition to all the plumbing code standards and provisions, new building sewer pipe shall be watertight, schedule 40, deep socket PVC with properly prepared and glued

joints, or SDR 26 PVC pipe with o-ring joints. The service piping is to be installed so as to minimize the number of pipe joints and fittings. Cleanouts shall have a watertight plug that shall be designed and protected from damage. PVC plugs with a raised operating nut are not acceptable for exterior use unless protected by a City approved casting or enclosure.

There shall be **NO** connections to the building sanitary sewer from any roof drains, area drains, footing or foundation drains, or sump pumps serving footing or foundation drains.

There shall be no use of the building sewer for dewatering operations during building construction. Any piping connected to the City Sanitary Sewer System shall be plugged or sealed to prevent storm or groundwater intrusion during construction.

No pipe or connection shall be buried unless first visually inspected and approved by an authorized City inspector. Pipe shall be properly bedded in sand or peastone throughout and particularly in the area of pipe fittings. Bedding and backfill in City right-of-way areas shall conform to the City Engineer's Rules for work in the City Right-of-Way.

If such pipe is buried prior to inspection, the City may require it be exposed for inspection or otherwise tested or inspected at the contractor or owner's expense to assure watertight integrity throughout. In addition, the contractor or owner's deposit may be forfeit for failure to call for inspection.

If a new service is to have a basement with footing drains, the footing drain sump pump must have an acceptable outlet. An acceptable outlet is a direct connection to a City storm sewer, or a discharge reaching a natural outlet or drainage-way, or swale without impacting another property owner. Surface discharges of sump pump footing drain water to City right-of-ways are not acceptable if they would create nuisance conditions, such as ice freezing on sidewalks or roadways in the winter.

Section 4.0 Elimination of Existing Illicit I/I Connections

Removal of existing storm water and groundwater sources originating on private property is a necessary component of the City's compliance program to reduce and eventually eliminate Sanitary Sewer Overflows.

The primary "illicit" sources of concern: include roof drains, area drains, footing or foundation drains either by gravity or sump pump connections. Other private sector sources, such as leaky joints in building service piping that should be watertight, are of concern but are not considered "illicit" and are thus not addressed under these rules.

Footing or foundation drains were permitted to be connected to the sanitary sewer by gravity prior to the adoption of the current City Ordinance, and plumbing code revisions, banning such connections (i.e. prior too the 1970s). In addition correction of such connections can be a major undertaking. Such connections are thus a special class of now "illicit" connections. The City is still evaluating how to best address those connections and thus is suspending any enforcement of removal of gravity footing drain connection until 2007. In the interim the City strongly encourages such removal and will work with property owners to accomplish this source removal through a demonstration project with the City paying a significant portion of the cost for the separation.

Roof and area drains can contribute significant peak flows to the sanitary sewer system, particularly under intense rainfall conditions. These sources will typically be identified during smoke testing and other inspections. Correction is typically straight forward and

not a significant cost for most residential structures and should be accomplished in a fairly short time frame.

For older commercial buildings with interior roof drains connected to the sanitary, separation may be more complex and more costly. In addition those buildings may also require an extension of an acceptable storm outlet. Separation will be required but the time frame for separation may take into account the availability of an adequate storm outlet and the scope of the separation effort. If separation is to take more than 30 days, then the property owner may be subject to additional sewer usage charges for that storm water based on estimated flow from the surface area drained, the average rainfall, and standard sewer usage rate time a 10 fold peaking factor. At current sewer usage charges this equates to \$42 per 1000 sq. ft per month.

Sump pumps discharging clear groundwater from footing drains to the sanitary sewer are a significant portion of the overall SSO problem. A typical sump pump operating just 1 hour out of the day will discharge about 3000 gallons of water to the sanitary sewer or about 10 times as much as typically discharged by a family of 3 in a day.

Many sump pumps have been illegally connected to the City sanitary sewer system because the property did not have an otherwise acceptable outlet for that sump pump discharge water. To assure the elimination of footing drain sump pump connections from the sanitary is permanent, the City enforcement of sump pump separation will begin when the City determines there is an adequate storm or natural outlet for that sump pump discharge. In many cases this will be when the City extends a storm outlet to the property line.

Section 5.0 Enforcement Procedures for Elimination of “Illicit Connections”

Upon finding and verifying an illicit sump pump, roof, or area drain connection to the City sanitary sewer system, the City shall initiate the separation process with a certified letter (Letter of Violation) to the property owner responsible for that illicit connection. The letter will detail the illicit connection, inform the property owner of the violation of the City Code, and advise the property owner on how to proceed to eliminate the illicit connection, and to notify the City for an inspection at the time of separation.

If there is an adequate outlet, separation shall generally be required in 30 days. If excavation is required, the time frame may be extended to avoid winter excavation in frozen ground conditions. There will be a provision to allow a property owner to request additional time for separation, but only upon demonstration of unusual conditions and agreement to a compliance schedule acceptable to the City.

If there is not an adequate outlet, the City shall determine what is necessary to provide an adequate outlet and schedule that work in prioritization with other SSO program efforts. Once the City makes an adequate outlet available at the property line, a follow-up letter will be delivered to the property owner notifying the property owner to complete the separation within the upcoming 30 days.

If compliance is not achieved within the time frame provided for in the Letter of Violation process, then the City would initiate further enforcement action. The property owner would be served with a Notice of Violation and Order of Determination setting forth the required separation and reasonable time frame for completion. The property owner would be informed of potential penalties for violation of the ordinance and Order of Determination. (Currently penalties are for a misdemeanor offense or up to \$500 per day per violation or 90 days in jail. Please note that the City is considering using Civil Infraction penalties to assist with this enforcement effort. The City has a Civil Infraction

Bureau, but an ordinance update would be required to make these violations subject to Civil Infraction penalties).

APPENDIX 1

Sec. 34-101. Management.

The sewage works of the city is under the management of the public services director or his or her designated representative who may implement this article by making such rules, regulations, determinations and requirements as he or she deems necessary and advisable for the safe, efficient, and proper operation of the sewage works subject, however, to the rights, powers and duties with respect thereto which are reserved by law to the council.

(Ord. No. 433, § 1(2.40), 6-3-85)

Sec. 34-203. Rules and regulations.

(a) With approval of the council and for the purpose of preventing, discontinuing or correcting any violations of this article, the public services director may adopt and establish rules and regulations for the enforcement of this article.

APPENDIX 2

Sec. 34-125. Storm drains.

(a) Stormwater and all other uncontaminated drainage shall be discharged to storm drains or to natural outlets as approved by the public services director and other regulating agencies. Industrial or commercial process water, cooling water or other discharges may be discharged to a storm drain or natural outlet only under a NPDES permit.

(b) Whenever a separate building sewer is required to accommodate surface runoff or groundwater and provided a storm drain is available contiguous to the property requiring the separate building drain, the building drain shall be connected directly to the storm drain. All separate building drains to accommodate surface runoff and groundwater discharge shall be constructed in accordance with the provisions of this article.

(Ord. No. 433, § 1(2.46), 6-3-85)

Sec. 34-146. Abandoned building sewers.

(a) Prior to the demolition of any building or facility containing a building sewer connection to a public sewer, the building sewer connection shall be abandoned and plugged in accordance with procedures and specifications set forth by the public services director.

(b) Abandoned building sewers may be used in connection with new buildings only when they are found, on examination and test by the public services director, to meet all requirements of this article.

(Ord. No. 433, § 1(2.52), 6-3-85)

Sec. 34-147. Building sewer standards.

(a) The size, slope, alignment, materials of construction of a building sewer and the methods to be used in excavating, connecting to the public sewer, placing of the pipe, jointing, testing, and backfilling the trench, shall all conform to the requirements of the building and plumbing code or other applicable rules and regulations of the city. In the absence of code provisions or in application thereof, the materials and procedures set forth in appropriate specifications of the A.S.T.M. and W.P.C.F. Manual of Practice 9 shall apply.

(b) The building sanitary sewer and connection to the public sewer shall be reasonably gas tight and water tight to prevent infiltration or inflow of surface or ground water and exfiltration of sewage. The public services director shall establish standards and testing

requirements for infiltration/exfiltration in accordance with good engineering practice. The director may require such tests on any building sewer prior to approval and commencement of service. (Ord. No. 433, § 1(2.53), 6-3-85)

Sec. 34-148. Grade.

Whenever possible, the building sewer shall be brought to the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewer sanitary sewage as carried by such building drain shall be lifted by an approved means and discharged to the building sewer. (Ord. No. 433, § 1(2.54), 6-3-85)

Sec. 34-149. Supervision.

The applicant for a building sewer connection or abandonment permit shall notify the public services director when the building sewer connection to or abandonment from the public sewer is ready for inspection. All connections and abandonments shall be made under the supervision of the director. (Ord. No. 433, § 1(2.55), 6-3-85)

Sec. 34-168. General discharge prohibitions.

No person shall discharge or cause to be discharged any pollutant, waste or wastewater which will pass through or cause interference with the operation or performance of the wastewater system. No person shall discharge or cause to be discharged, directly or indirectly to the wastewater system, any of the following:

- (1)
- (6) Any storm water, surface or subsurface drainage or roof runoff, except that contaminated surface drainage from limited areas may be discharged to the sanitary sewer by written permission of the public services director. Such discharge shall be subject to sewer use charges as determined by the director.

Sec. 34-206. Right of entry.

The public services director and other duly authorized employees of the city bearing proper credentials and identification shall be permitted to enter all properties for the purposes of inspection, observation, measurement, sampling and testing pertinent to discharges to storm drains, public sewers, natural outlets, watercourses and wastewater facilities in accordance with the provisions of this article. Such entry shall normally be made during regular business hours, but in an emergency at any time. The public services director shall have access to control manholes or monitoring facilities installed pursuant to section 34-171(5) at any time. The city shall have the right to set up on the user's property such devices as are necessary to conduct sampling, inspection, compliance monitoring and/or metering operations. (Ord. No. 433, § 1(2.75), 6-3-85)

Sec. 34-221. Violations.

(a) Any person found to be violating any provision of this article shall be served by the public services director with a 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.

(b) A violation of the provisions of this article shall be considered a public nuisance per se and any action authorized or permitted by law for the abatement of public nuisances may

be instituted by the city in regard to such violation.

(c) Whenever a person has violated any provision of this article, the city may take any legal action necessary to recover damages sustained by the city as a result thereof. Such damages shall include, but are not limited to, lost revenues from the federal or state government and any fines or other penalties which are the result of the violation.
(Ord. No. 433, § 1(2.79), 6-3-85)