CITY OF EAST ST. LOUIS, IL

POLLUTION PREVENTION PLAN

FOR COMBINED SEWER

Prepared for:

City of East St. Louis

301 River Park Drive

East St. Louis, IL 62201

Prepared by:

Thompson Civil LLC

December 2022

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1.0 INTRODUCTION

This pollution Prevention Plan describes control measures and procedures used to reduce the amount of contaminants entering the City of East St. Louis sewer system. This plan has been developed per Special Condition C of the City's latest National Pollution Discharge Elimination System (NPDES) Permit No. IL0033472 dated September 11, 2019, and administrative approval by the Illinois Environmental Protection Agency (IEPA).

The City of East St. Louis's existing wastewater collection system is comprised of both separate sanitary sewers and combined sewers. The separate sanitary sewer system services an approximate tributary area of 1,820 acres located primarily in the Eastern portion of the City limits from approximately 47th Street to 89th Street and the area east of 89th Street known as Loisel Hills. The separate sanitary system is also downstream of sewers that enter the City from Cahokia Heights in the vicinity of 83rd Street and Ridge Avenue. It is not known how much area this tie-in serves. The combined sewer system serves an approximate tributary area of 5,500 acres located in large part in the area between approximately 47th Street west to the Mississippi River.

Some aspects of this plan involve operational procedures that are addressed in more detail in the Operational Plan for Combined Sewers. In order to avoid repetition, these items are referenced in this plan. These two documents are intended to be used in concert to address the items required by the NPDES permit.

2.0 EXISTING CONTROL MEASURES

2.1 Street and Catch Basin Cleaning

The City of East St. Louis operates a street sweeper used primarily to keep trash and debris from entering the sewer systems. In the separate sewered areas, sweeping eliminates trash and debris from being discharged into the storm drainage ditches and ultimately the Mississippi River. In the combined sewered areas, the sweeping keeps debris from being conveyed to the American Bottoms Wastewater Treatment Facility.

The street sweeper does not follow a maintenance schedule for routine street sweeping. This equipment is utilized on an as-needed basis. During certain periods, such as heavy leaf accumulation in the fall, additional cleaning is performed in the combined sewer areas. When there is a City function planned, the sweeper concentrates on cleaning the streets in that area for the event.

The City operates two Vactron sewer vacuum/jetting trucks used primarily to clean storm inlets and catch basins. One of the vacuum trucks is the primary unit and the

other is a back-up. The cleaning of structures in the combined sewered areas keeps trash from being conveyed to the ABWWTF. Cleaning structures in the separate sewered areas keeps trash and debris from entering waters of the State.

2.2 Sanitary Sewer Cleaning

The sewer vacuum/jetting equipment is often being utilized on emergency operations but, when available, this equipment frequents areas with known drainage issues. These areas are identified by the number of complaints or issues that are being experienced by the residents of the City. As complaints rise in an area, the maintenance in that area is stepped up to determine the issue and get it addressed.

This equipment is used regularly to jet sewer lines that show a decrease in capacity due to sediment build up. This activity restores the hydraulic capacity and improves the scouring velocity andself-cleaning process of the sewer pipes.

Regular cleaning and maintenance of these sewers reduces the accumulation of solids which can be flushed out during peak wet weather flow conditions. This is an important pollution prevention measure, since there are approximately 1820 acres served by separate sanitary sewers that discharge into the combined sewer system further downstream.

The same sewer vacuuming/jetting equipment mentioned previously is also used to jet and clean the sanitary sewers throughout the City. The equipment is used regularly on emergency cleanings, but when available, this equipment is utilized in known problem areas.

2.3 Public Education Efforts

St. Clair County Health Department publishes a recycling directory available to the public through the office and recommend residents of the County to use www.earth911.com for the most up to date recycling opportunities in the County.

St. Clair County has prepared an educational resource through its Pollution Prevention Plan called “Go Green”. It is a K-8 school curriculum with a list of environmental subjects, lesson plans and projects geared toward elementary school aged children. This program has not yet been adopted by the school district.

2.4 Solid Waste Collection and Recycling

Effective solid waste collection and recycling are pollution prevention measures that reduce the amount of solid waste entering the sewer systems, especially from stormwater runoff. The solid waste collection within the City is contracted to a private

waste hauling company. The contract provides collection of unlimited volumes of normal household waste. Larger bulk refuse items (such as furniture) are also required to be picked up on request.

In the central business district and more commercial areas, such as along State Street, in the combined sewer areas, the City has placed trash receptacles and the trash is collected and disposed of by the Public Works Department. Metro Transit, a division of Bi-State Development, has placed trash receptacles at all the bus shelters and collects any refuse that is deposited in these units.

The St. Clair County Health Department, in conjunction with the IEPA, host municipal tire clean up days and household hazardous waste collections when funds are available through the State.

2.5 Miscellaneous Measures

This section discusses some additional measures that are used to address the collection and disposal of debris and trash that enters the City's storm sewer collection and conveyance system, or other general pollution prevention measure implemented by the City.

- Parkside Pump Station bar screen. This facility is a stormwater pump station which pumps stormwater to the Harding Ditch. It is outfitted with a bar screen upstream of the dewatering and stormwater pumps. This screen collects and traps a large portion of the trash that enters the collection system that is tributary to the pump station. The screen has to be cleaned manually by Public Works employees. This is done regularly but as this pump station pumps stormwater that is collected over approximately 200 acres, trash can accumulate quickly.
- Illegal Dumping Ordinance. The City has an ordinance banning dumping. There are signs posted throughout the City stating this and the associated fine. This has been an issue within the City as enforcement becomes difficult as manpower has decreased.
- Sediment Control. At construction sites throughout the city, sediment control is required to keep erosion for carrying sediment off the construction site. This is done by implementing sediment controls such as silt fence, inlet protection, ditch checks or a similar system.
- Fuel Storage. The city has an underground fuel storage tank at the Public Works facility for filling City vehicles.

2.6 Sewer Use Ordinance

The existing sewer use ordinance has provisions prohibiting discharge of storm sewer flows into the sanitary sewer system. These ordinance provisions and policies serve as pollution prevention measures by prohibiting new inflow sources to the sanitary sewers, requiring new construction tributary to combined sewers to provide stormwater detention, and requiring separate connections for sanitary and storm flows to facilitate future sewer separation.

3.0 FUTURE CONTROL MEASURES

Additional pollution prevention control measures are implemented on an ongoing basis in conjunction with new construction and sewer system improvements. These measures include construction of new sewers and rehabilitation of existing sewer.

3.1 New Sewer Construction

When a new development is proposed in the City, an evaluation of the existing infrastructure in conjunction with the proposed improvements is conducted. This often leads to removal of the aged infrastructure or replacement of the system. In areas with combined sewers, the City requires the development to have separate storm and sanitary systems. If a new discharge or detention system can't be part of the development, then the sewers are separated to the limit of the development even if the sewers discharge into the same combined system downstream. This allows future sewer separation projects to be implemented in conjunction with later infrastructure improvements. As sections of the combined sewer system are separated, there is a corresponding reduction in the peak flows, resulting in a reduction in combined sewer overflows.

3.2 Sewer System Rehabilitation

The Public Works Department has a strict policy when it comes to sewer repairs. When a repair to the existing system is required, point repairs are not permitted. .All repairs are completed by replacement of the effected sewer line from manhole to manhole. This allows the old, deteriorated, and disjointed pipes that typically consist of vitrified clay tile to be replaced with PVC or HDPE sewer pipe. The materials are often watermain quality pipe. There is currently no schedule in place for complete replacement of the clay sewers. It is being completed on an as-needed basis.